

2009-04-26

Peer Victimization and Psychosocial Outcomes in Adolescents: Role of Social Support and Disclosure

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UNIVERSITY OF MIAMI

PEER VICTIMIZATION AND PSYCHOSOCIAL OUTCOMES IN ADOLESCENTS:
ROLE OF SOCIAL SUPPORT AND DISCLOSURE

By

Lisa D. Bailey

A DISSERTATION

Submitted to the Faculty
of the University of Miami
in partial fulfillment of the requirements for
the degree of Doctor of Philosophy

Coral Gables, Florida

December 2008

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ROLE OF SOCIAL SUPPORT AND DISCLOSURE

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Peer Victimization and Psychosocial Outcomes in
Adolescents: The Role of Social Support and
Disclosure.

(Ph.D., Psychology)
(December 2008)

Abstract of a dissertation at the University of Miami.

Dissertation supervised by Professor Annette M. La Greca.
No. of pages in text. (112)

During adolescence, peer relationships become increasingly important in various aspects of development, such as self-esteem and emotional adjustment. Unfortunately, a number of adolescents experience peer victimization, placing them at increased risk of emotional and behavioral problems. Research has consistently demonstrated the link between peer victimization and poor outcomes. However, exploration of the mechanisms underlying this link, including potential buffers of negative outcomes, is needed. The current study examined social support as a moderator of the relationship between peer victimization and maladjustment in order to assess whether social support from adults and peers protects adolescents from developing emotional and/or behavioral problems. The current study also examined disclosure of victimization to explore the role of a specific type of enacted social support in the link between peer victimization and poor outcomes. Adolescents ($N = 633$) in grades 10 through 12 completed a background questionnaire, the Revised Peer Experiences Questionnaire, the Child and Adolescent Social Support Scale, the Social Anxiety Scale for Adolescents, and the Youth Self-Report. Regression analyses were used to evaluate social support as a moderator of the relationship between peer victimization and internalizing and externalizing behaviors and to explore the role of disclosure. Overall, peer victimization predicted higher levels of

social anxiety, anxiety/depression, and aggressive and delinquent behaviors. Strength and direction of moderation effects varied according to the type of peer victimization and source of social support and type of disclosure. The results of this study further our understanding of mechanisms underlying the link between peer victimization and maladjustment and can be used to inform prevention and intervention efforts.

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Chapter 1: Introduction

The development of close friendships and positive peer relations becomes of paramount importance during adolescence. Friends are important providers of social support and also influence a number of areas of adolescent development, such as self-esteem (Paterson, Pryor, & Field, 1995) and identity (Harter, Stocker, & Robinson, 1996). Previous research demonstrates that close friendships are crucial to adolescents' social and emotional adjustment and even to task performance and school achievement (Clark & Ayers, 1992; Hartup, 1998; La Greca & Prinstein, 1999). Friendships also help adolescents develop important relationship skills like empathy and intimacy (Clark & Ayers, 1992; Hirsch & DuBois, 1989; Way & Pahl, 2001). In addition, feeling like a part of the larger peer culture or group has been found to be related to psychosocial adjustment and has implications for behavioral and emotional well-being (Brown & Lohr, 1987; Way & Pahl, 2001).

However, there is a downside to the increasing importance of peer relationships during adolescence. Research has shown that adolescents who have difficulty developing positive peer relationships often suffer from loneliness and exhibit symptoms of depression, suggesting that having friends is a protective factor against maladjustment (Clark & Ayers, 1992). Many children and adolescents experience peer rejection and are victims of physical and/or relational aggression from their peers (Elias & Zins, 2003; Holt & Espelage, 2003). In light of the research demonstrating the potential negative outcomes for those with difficult peer relations (Coleman & Byrd, 2003; Compas, Howell, Phares, Williams, & Giunta, 1989; La Greca & Harrison, 2005), a substantial number of adolescents are at risk for maladjustment due to poor treatment by peers.

The goal of the current study was to gain a better understanding of the link between peer victimization and maladjustment by exploring potential moderators of the relationship between peer victimization and adolescents' internalizing and externalizing problems. Specifically, this study examined the role of perceived social support from parents, teachers, peers, and close friends as potential buffers in the link between peer victimization and poor psychosocial outcomes, using the perspective of the life stress literature as a framework for the study. In addition, this study explored the role that disclosure of victimization to peers and adults may play in moderating the effects of peer victimization.

Peer Victimization

Peer victimization is becoming increasingly problematic in our schools. One only has to turn on the news to see the most extreme effects of peer victimization, such as school shootings, stabbings, and other forms of retaliation from both bullies and victims alike. When discussing these types of incidents, those who know victims or perpetrators often mention relational attacks as factors that prompted such incidents (Crick, Casas, & Nelson, 2002). However, peer victimization has more subtle effects that have consequences that can last well into adulthood (Olweus, 1993). The current study added to our understanding of the factors that may play a role in moderating the effects of peer victimization on adolescent adjustment.

Peer victimization is defined as “actions taken by one or more youths with the intention of inflicting physical or psychological injury or pain on another youth” (Vernberg, Jacobs, & Hershberger, 1999, p. 386). Peer victimization can be overt, relational, or reputational. Overt victimization involves bringing harm to another through

physical acts (e.g., punching, hitting, scratching, pinching, verbal threats). Relational victimization is defined as “willful attempts to damage another youth’s self-esteem, social status, or close relationships through social exclusion, negative gossip, or friendship manipulation” (Coleman & Byrd, 2003, p. 301). Reputational victimization has been introduced in the literature more recently and can be defined as “attempts to damage the victim’s social reputation within the peer group hierarchy” (De los Reyes & Prinstein, 2004, p. 326). Relational and reputational victimization have been found to be conceptually distinct types of victimization in that reputational victimization is aimed at damaging one’s standing in the peer group as a whole, while relational victimization is directed at one’s standing in a particular friendship group or clique (Prinstein & Cillessen, 2003). During adolescence, relational victimization is more common than overt victimization, although boys report higher levels of overt victimization than girls do (La Greca, Davila, & Siegel, in press). The current study examined how all three types of peer victimization are related to psychosocial adjustment and the factors that may moderate this relationship.

Several studies have found high rates of victimization among adolescents (Bond, Carlin, Thomas, Rubin, & Patton, 2001; Holt & Espelage, 2003). For instance, research has found that 88% of students in junior high and high school have reported observing victimization, while 77% have reported being victimized themselves (Holt & Espelage, 2003). Other studies estimate that approximately 70% of students have been subjected to at least one incident of peer victimization at some point in time (Elias & Zins, 2003). Those who are victimized once are at greater risk of being victimized again and it is common for adolescents to be victimized in more than one way (Holt & Espelage, 2003).

Such victimization can be considered a chronic life stressor. The current study examined peer victimization from the lens of the life stress literature.

Peer victimization as a life stressor. Stress has been defined as “environmental events or chronic conditions that objectively threaten the physical and/or psychological health or well-being of individuals of a particular age in a particular society” (Grant et al., 2003, p. 449). Several researchers point to the utility of examining peer victimization as a life stressor (e.g., Baldry & Farrington, 2005; Newman, Holden & Delville, 2005; Rigby, 1998). Newman et al. (2005) make a case that it may be useful to view peer victimization as a chronic stressor and the associated outcomes as the result of experiencing trauma. Rigby (1998) described peer victimization as occurring in stressful situations, in which individuals have aversive peer experiences and are deprived of social support from peers. In addition, he noted that victims often cannot predict when they will be victimized or when victimization will cease and that they have difficulty escaping their victimizers, all of which can lead to poor physical and mental reactions to stress (Rigby, 1998). In line with this research, the current study viewed peer victimization as a life stressor.

Theoretical and empirical work have both suggested a link between life stress and psychosocial maladjustment (Compas et al., 1989; Grant et al., 2003; Johnson, 1986; Prelow & Guarnaccia, 1997). Life stress has been related to both internalizing and externalizing problems (Compas et al., 1989), such as depression, anxiety, academic problems, drug use, suicide risk, eating disorders, poor self-esteem, external locus of control, and delinquency (Johnson, 1986). In a review of the life stress research conducted with children and adolescents, Grant et al. (2003) note that research has

established this link, but they call for research that will determine the specific stressors that are most damaging to children and adolescents. Current evidence suggests that peer victimization may be one such stressor.

Peer victimization, like other life stressors, has been shown to be associated with a number of negative outcomes. In a review of the literature produced over a period of twenty years, Hawker and Boulton (2000) found that peer victimization in children and early adolescents (generally ages 8 – 13) is most strongly related to depression and then to loneliness, low self esteem and anxiety. The current study extended the findings of past research to better understand the link between peer victimization and negative outcomes by treating peer victimization as a life stressor. Consistent with previous research, the current study focused on the effect of peer victimization on internalizing problems, including social anxiety, general anxiety, and depressive symptoms. The current study also examined the link between being victimized and developing externalizing behaviors, including aggression and delinquency.

Psychosocial consequences of victimization. A key goal of the current study was to extend current research on peer victimization by focusing on peer victimization among older adolescents (i.e., high school students). Much of the literature on peer victimization does not take into account adolescents, instead centering on younger children and early adolescents (Hawker & Boulton, 2000). Adolescents are of particular concern because peer victimization may disrupt the natural tasks of this developmental period, including identity development and increasing independence. In fact, there has been some suggestion that peer victimization during adolescence may be more damaging than early or later victimization (Newman et al., 2005).

Research has mainly focused on examining links between peer victimization and various forms of psychopathology, but has not invested as much time examining buffers against these negative outcomes (Hawker & Boulton, 2000). To date, little systematic research has been conducted examining how adolescents cope with victimization (Vernberg, Ewell, Freeman, & Abwender, 1995) and how this might affect outcomes. Thus, another goal of the current study was to examine how social support, and utilization of social support, influences the relationship between victimization and maladjustment. Before turning to a discussion of the potential role of social support in buffering the effects of peer victimization, it is important to have a better understanding of the negative effects of peer victimization on psychosocial adjustment.

As does any life stressor, peer victimization has important consequences for psychological adjustment and social development. As stated previously, studies have demonstrated that those who are victimized are at greater risk of a host of negative outcomes, including depression, low self-esteem, loneliness, anxiety, emotional dysregulation, social rejection, poor academic achievement, dropping out of school, running away from home, suicidal ideation and behavior, delinquency, alcohol and substance use, somatic complaints, insomnia, and post-traumatic stress (Bond et al., 2001; Boulton, Trueman, Chau, Whitehand, & Amayta, 1999; Browning, Cohen, & Warman, 2003; Coleman & Byrd, 2003; Goldbaum, Craig, Pepler, & Connolly, 2003; Mynard, Joseph, & Alexander, 2000; Vaillancourt, Hymel, & McDougall, 2003). The current study examined both internalizing and externalizing problems, including anxiety, social anxiety, depression, aggressive behaviors, and delinquency. Depression and anxiety have been consistently identified as outcomes of peer victimization (Hawker &

Boulton, 2000) and aggressive and delinquent behaviors may contribute to greater difficulties for those who engage in such behaviors, including further isolation from peers.

However, not all adolescents are adversely affected by being victimized. Therefore, it is important to understand the buffers that prevent negative outcomes for this subset of victims. This information can be used to help strengthen those buffers to prevent future maladjustment in victimized adolescents.

The current study examined the linkages between peer victimization and poor psychosocial adjustment in adolescents. This study extended current understanding of peer victimization by examining potential moderators of the effect of peer victimization on adolescents' psychosocial outcomes. The potential moderators considered in the current study were social support and disclosure of victimization. Both will be discussed in detail below, along with pertinent control variables (gender and ethnicity).

Social Support

Although peer victimization often leads to negative consequences, this may not be the case for all adolescents. Therefore, a major goal of the current study was to investigate protective factors, namely social support, that may moderate the impact of peer victimization. Specifically, social support is expected to act as a buffer between peer victimization and internalizing and externalizing behaviors. As such, greater effects of peer victimization are expected for adolescents who report low levels of social support.

The current study uses Malecki and Demaray's (2002) definition in which social support is viewed as "an individual's perceptions of general support or specific supportive behaviors (available or enacted upon) from people in their social network,

which enhances their functioning and/or may buffer them from adverse outcomes” (p. 2). Adolescents can receive social support from a number of different people in their lives. The most commonly studied include peers (friends and classmates), parents, and teachers. The current study was concerned with support from each of these sources.

Social support as a moderator of the relationship between peer victimization and maladjustment. The current study followed the theoretical model of the relationship of stress to child and adolescent psychopathology proposed by Grant et al. (2003). This model calls for a consideration of moderators of the relationship between stressors and maladjustment. In describing their model, they suggest that social support may be one important moderator to consider (Grant et al., 2003).

Some research has found that social support can serve as a buffer for those experiencing high levels of stress (moderating or buffering effect; Cohen & Park, 1992; Quittner, 1992), while others have found that social support is related to a range of better outcomes, regardless of stress level (main effect; Quittner, 1992). The current study examined both the main effects and buffering effects of social support in adolescents experiencing the specific stressor, peer victimization.

A few studies have examined the potential moderating effects of aspects of social support on the link between peer victimization and maladjustment. However, these studies have generally used indirect measures of social support. For instance, in their retrospective study of college students who had been victimized before and/or during high school, Newman et al. (2005) used feelings of isolation as an indicator of social support. They found that for students who had been chronically victimized as adolescents, perceived isolation (low support) more strongly moderated the association

between victimization and stress in college than for nonvictimized or seldom victimized individuals (Newman et al., 2005). Although Newman et al. (2005) provide some evidence for social support as a moderator of the link between peer victimization and maladjustment, they used a proxy for social support, namely social isolation. In addition, they used retrospective reports of college students, which may have resulted in distorted recollections of victimization experiences that occurred several years earlier.

More evidence for social support as a potential moderating factor comes from the finding that having positive peer relationships can decrease feelings of loneliness and increase self-esteem and social self-competence among victims (Goldbaum et al., 2003; Storch, Brassard, & Masia-Warner, 2003; Storch & Masia-Warner, 2004). Storch et al. (2003) and Storch and Masia-Warner (2004) proposed that victims who have positive experiences with peers may have more opportunities to develop social skills that allow them to cope more effectively with being victimized.

For instance, Storch et al. (2003) examined peer victimization in a group of ninth and tenth graders. They found that feelings of social anxiety and loneliness were especially likely for those who were both relationally and overtly victimized. Victimization in their study was related to social avoidance and a fear of negative evaluation, as well as to physiological symptoms. Interestingly, they also found that victims who received prosocial behaviors from their peers also reported moderately lower levels of loneliness (Storch et al., 2003). However, they did not include a direct measure of social support, instead using prosocial behaviors as an indicator of social support.

From the existing literature, there appears to be some suggestion that social support may play a moderating role in the link between peer victimization and

psychosocial adjustment, but this has not been studied with adolescents using a direct measure of social support. The current study addressed this gap by using a measure that taps into adolescents' perceptions of social support from a variety of sources (parents, teachers, close friends, and classmates) and evaluating the main and moderating effects of social support in the link between peer victimization and maladjustment.

In terms of social support from peers, most research has focused on the benefits of supportive friends. As stated earlier, having friends is extremely important because peers become more and more central to adolescents' lives. As such, friendships may be especially important for those who are victimized and often serve a protective function for victims. Friendships may be especially helpful in buffering a peer-related stressor.

Although some research describes victims as being very isolated (Newman et al., 2005; Olweus, 1993) and not having friendships (Olweus, 1993), many victims do have friends, though their friendship groups are generally smaller than those of their non-victimized counterparts (Browning et al., 2003). Friends of victims have been found to serve a protective function in several ways. For instance, having friends who will offer support in the face of peer aggression makes becoming a victim less likely (Browning et al., 2003). In addition, friends that are more socially competent may help teach victims important social skills that make them less of a target (Browning et al., 2003). Bullies may be reluctant to attack those with friends because of the potential for retaliation (Boulton et al., 1999; Goldbaum et al., 2003; Storch et al., 2003; Storch & Masia-Warner, 2004). Another explanation may be that those who have been victimized can talk to their friends and discuss ways to prevent further bullying (Goldbaum et al., 2003). Each of these functions can be viewed as specific types of social support provided by adolescents'

friends. Overall, peers can provide protection from victimization. The current study examined whether support from friends can also help buffer the negative effects for those who are victimized. Adolescents who perceived higher levels of support from their friends and classmates, in the face of victimization experiences, were expected to have better outcomes than those who perceived low levels of support from their friends and classmates.

In addition to peer support, as suggested by La Greca et al. (in press), the current study examined the role of family factors in the link between peer victimization and internalizing and externalizing behaviors. There is a lack of literature on the role of family factors in peer victimization. Much of the existing literature has focused on the characteristics of the families of victims (e.g., Coleman & Byrd, 2003; Crick et al., 2002). However, it has been suggested that those who come from very supportive family environments in which parents demonstrate love and affection to their children may be less likely to suffer from peer victimization. Even if they do have victimization experiences, they may tend to have better outcomes (Crick et al., 2002; Coleman & Byrd, 2003). To date, research has not examined this idea. The role of perceived family support, specifically support from parents, was examined in the current study. Adolescents who perceived higher levels of support from their parents, in the face of victimization experiences, were expected to have better outcomes than those who perceive low levels of support from their parents.

The current study also evaluated the role of support from teachers. Teachers may be important when examining peer victimization, as most victimization events occur in school. Teachers' attitudes and behavior have been found to be important in determining

the extent to which peer victimization will occur in the school (Olweus, 1995). This finding, in combination with the finding that teachers are often unaware of the extent to which victimization occurs in the classroom is important to consider (Vaillancourt et al., 2003; Vernberg, 1995). If teachers are more aware of peer victimization, they may be better able to intervene and provide support for victimized adolescents. Adolescents who perceived higher levels of support from their teachers, in the face of victimization experiences, were expected to have better outcomes than those who perceive low levels of support from their teachers.

Disclosure as enacted social support. Another goal of the current study was to explore the effects of disclosure of victimization on outcomes related to peer victimization. Disclosure occurs when an adolescent tells someone about being victimized. It is not considered disclosure if the potentially supportive individual hears about the victimization event from another person or witnesses the event first-hand. In this study, disclosure was conceptualized as a specific enactment of social support. In other words, it was viewed as a measure of adolescents' help-seeking behavior. It was expected that adolescents who were low in social support would be less likely to disclose victimization events.

It should be noted that there may be obstacles to disclosure among adolescents. Peer victimization may be a unique stressor in that it may be viewed as potentially detrimental to tell others about victimization due to fear of further victimization, shame, or embarrassment (Thoits, 1986). In this way, peer victimization may be similar to domestic violence, in which individuals have been found to be hesitant to seek support due to shame and embarrassment about their situation (Levendosky et al., 2004) or

because they believe authority figures will not be able to help them (Wolf, Ly, Hobart, & Kernic, 2003). It has also been suggested that individuals experiencing stress may have difficulty with close relationships, which may make it difficult to seek support (Coyne & DeLongis, 1986).

Adolescents may also be less likely to disclose to others if the people in their social networks do not believe that they really need help. Despite a substantial body of literature to the contrary, peer victimization is still often considered to be a normative part of development that adolescents must learn to deal with on their own (Ross, 1996). As such, adolescents are often blamed for being victimized or their reported distress may be minimized by those they look to for support (Ross, 1996). This may lead to lower levels of disclosure of peer victimization.

With the above issues in mind, the current study examined disclosure in three different ways. Specifically, the current study first examined the percentage of adolescents who reported peer victimization to peers, family, teachers, and other significant people in their lives, and did so for each type of peer victimization (overt, relational, reputational). Second, this study examined the relationship between adolescents' disclosure of peer victimization (to peers, family, and teachers) and their perceived level of social support from these respective sources. Third, in an exploratory manner, this study also evaluated whether disclosure functioned in the same manner as social support in moderating the relationship between peer victimization and psychosocial outcomes.

In terms of adolescents' disclosure of peer victimization, the current study hypothesized that a large percentage of victimized adolescents may not disclose their

victimization to anyone. This expectation is in line with Vernberg et al.'s (1995) findings in a study of early adolescents who had recently relocated. They asked these adolescents who they told about peer victimization events. They found that 29-51% of adolescents in their sample (depending on the type of peer victimization) did not disclose to anyone. In addition, Vernberg et al. (1995) found that the adolescents were more likely to disclose to friends, siblings, and same-age peers than to parents and teachers. In fact, 38-60% disclosed to peers, while fewer than 20% disclosed to parents or teachers. Other studies have also found that, although reluctant to talk to adults at all, adolescents are more likely to disclose to parents than to teachers (e.g., Whitney & Smith, 1993). Findings such as these may help explain why parents are largely unaware of the extent to which adolescents are victimized.

Vernberg et al.'s (1995) findings are also important for understanding school officials' difficulty identifying victims. Because so many of the negative outcomes associated with peer victimization concern school performance or completion and because most victimization events occur at school, the school system, especially teachers, plays a crucial role in efforts to identify and decrease the occurrence of peer victimization. Unfortunately, studies have shown that teachers are not very good at identifying bullies, accurately recognizing fewer than half (Vaillancourt et al., 2003; Vernberg et al., 1995). Not surprisingly, school officials often have difficulty creating and reinforcing rules that prohibit victimization. Part of the difficulty identifying peer victimization may stem from adolescents' reticence about discussing being victims. Vernberg et al. (1995) have called for a more thorough examination of the type of support provided when adolescents disclose victimization experiences. The current study

extended Vernberg et al.'s (1995) findings by specifically examining how disclosure of victimization relates to social support and also by exploring the potential moderating effect of disclosure on outcomes related to peer victimization, namely internalizing and externalizing behaviors.

Other Considerations

Gender differences. The current study also evaluated the role of gender. Specifically, this study examined whether there are gender differences in peer victimization or the psychosocial outcomes. Current evidence for gender differences depends on the type of victimization being studied. For overt victimization, boys have consistently been found to report higher levels than girls (De los Reyes & Prinstein, 2004; La Greca & Harrison, 2005; Prinstein, Boergers, & Vernberg, 2001; Prinstein & Cillessen, 2003). However, findings for relational and reputational victimization have been mixed, with several studies finding no gender differences in reports of these types of victimization (La Greca & Harrison, 2005; Mynard et al., 2000; Prinstein & Cillessen, 2003; Storch et al., 2003). In terms of internalizing and externalizing behaviors, gender differences have been found, with girls tending toward higher levels of internalizing behaviors and boys tending toward higher levels of externalizing behaviors. Due to these findings, gender was used as a control variable in all regression analyses.

Ethnic differences. The current study also examined ethnicity as a potential control variable in the main study analyses. At this time, the evidence for ethnic differences in peer victimization and related outcomes is unclear. However, some studies of peer victimization in children have found lower levels of victimization in African-American samples and similar rates in Hispanic and Caucasian samples (Storch &

Ledley, 2005). These studies have also found that victimization was more detrimental to African-American and Hispanic children than for those of other ethnic groups (Storch & Ledley, 2005). However, most research has not found consistent evidence for ethnic differences in peer victimization.

In light of the limited and mixed evidence for ethnic differences in peer victimization, the current study did not directly examine ethnic differences in peer victimization or psychosocial outcomes, but included ethnicity as a control variable in the main analyses.

Hypotheses

Based on the preceding literature, it is apparent that there are gaps in the research on adolescent peer victimization. Therefore, the present study examined several questions, as delineated below. These questions are summarized in Figures 1.1 and 1.2.

1. How does peer victimization relate to adolescents' reports of internalizing and externalizing behaviors? Like previous research, the current study focused on the psychosocial outcomes for victims of peer victimization and examined multiple aspects of this question. In line with prior research, a substantial number of adolescents were expected to report experiencing some form of peer victimization. To establish the relationship between peer victimization and maladjustment, adolescents' responses were examined to determine whether the frequency and type (overt, relational, reputational) of victimization was related to adolescents' reports of internalizing and externalizing behaviors. It was expected that adolescents who experienced more victimization would report higher levels of internalizing and externalizing behaviors.

2. Does social support moderate the relationship between peer victimization and internalizing and externalizing behaviors?
 - a. As shown in Figure 1.1, a main effect of social support on adolescents' reports of internalizing and externalizing behaviors was expected. Specifically, it was expected that adolescents who viewed their relationships with parents, teachers, and peers (classmates and close friends) as more supportive would report fewer internalizing and externalizing symptoms, while those who perceived low levels of social support would report higher levels of these symptoms.
 - b. Social support was expected to have a moderating effect on the relationship between peer victimization and internalizing and externalizing symptoms. Specifically, as seen in Figure 1.1, a buffering effect of social support was tested in which it was expected that social support would be more beneficial for adolescents who experience more peer victimization than for individuals who are less frequently victimized.
3. Who do adolescents tell about their victimization experiences and how does this relate to the expression of internalizing and externalizing behaviors?
 - a. The current study examined who adolescents tell about victimization experiences. Descriptive data for adolescents' disclosure to different sources was examined. In line with past research, it was expected that many victimized participants would report that they had not told anyone about being victimized.
 - b. In line with the view of disclosure of peer victimization as enacted social

support, this study also examined the association between adolescents' disclosure of victimization and their perceived level of social support. Specifically, it was expected that adolescents with higher perceived social support would be more likely to disclose instances of peer victimization to individuals they perceive as most supportive.

- c. The current study also examined how disclosure relates to adolescents' reports of internalizing and externalizing behaviors. Specifically, exploratory analyses were conducted to determine the role of disclosure in the link between peer victimization and maladjustment, both as a main effect and as a potential moderating variable (see Figure 1.2). However, no specific hypotheses about this question were proposed.

Chapter 2: Methods

Participants

Participants were 633 students in grades 10 through 12 from 3 public high schools in a large metropolitan area in the Southeast. Schools were targeted in order to obtain an adequate sample size of girls and boys and an adequate ethnic distribution. See Table 2.1 for the demographics of the sample by wave of data collection. The ethnic distribution of the sample was similar to that of the surrounding county, with Hispanic/Latino adolescents as the largest ethnic group.

Data was collected at two time points. The first wave of data collection was in Spring 2007 and data were collected from two schools. 186 students (64.5% girls, *Mage* = 16.28) from grades 9 – 12 participated in Wave 1 of data collection. The second wave of data collection was in Spring 2008 and data were collected from two schools, one of which was used for data collection in Wave 1. 580 students (58.8% girls, *Mage* = 17.13) from grades 9 – 12 participated in Wave 1 of data collection. Once all data was collected from both waves of data collection, 55 were excluded from the study because they completed packets incorrectly or they withdrew their participation after completing only a portion of the questionnaires. As ethnicity, gender, and age were components of each analysis, participants who did not indicate these demographics ($n = 35$) were excluded from the study. As only 25 9th graders completed packets, they were excluded from the study and all analyses only included 10th – 12th grade students. Thus, the resulting sample consisted of 633 adolescents (60.0% girls). Between Wave 1 and Wave 2, there were no differences on any demographic or study variables, with two exceptions, overt and reputational victimization.

Procedure

Approval for this study was obtained from the University of Miami's Institutional Review Board, Miami-Dade County Public Schools, and the principals at participating high schools. Data for this study was obtained as Phase 1 of a prospective study of adolescent social relationships. As such, consent forms were sent to parents from the school requesting permission to assess their children at two time points and all participants had active parental consent. In addition, those who returned a signed parental consent form gave their assent before participating in the study. Students over the age of 18 did not require parental consent, so were given a consent form to provide their own consent before participating in the study. Data was collected in two waves, the first in Spring 2007 and the second in Spring 2008. Assent forms were altered from Wave 1 to Wave 2 to reflect changes in the larger study. See Appendix A for all consent and assent forms.

At Wave 1 of data collection, 500 students (grades 9 – 12) were initially recruited from two schools. Of the consent forms that were returned 200 (40%) were permitted to participate. Of the students with permission to participate, 95% completed questionnaires. The most common reason students with signed consent forms did not participate was absence from school/class on the day of data collection.

At Wave 2 of data collection, 1500 students (grades 10 – 12) were initially recruited from two schools. Of the consent forms that were returned 637 (42%) were permitted to participate; of those, 91% completed questionnaires. The most common reason students with signed consent forms did not participate was again absence from school/class on the day of data collection.

Participants were asked to complete a packet of questionnaires that were completed in their classrooms in groups of 20 – 30 students. At least one teacher was present for each administration. In addition, the graduate student project coordinator(s) and research assistants were present to give directions, answer questions, and monitor participants' progress. The length of packets differed from Wave 1 to Wave 2, with packets in Wave 2 being longer.

Measures

The following measures were administered to participants. See appendices for all materials.

Background Questionnaire (Appendix B). The background questionnaire asked for general demographic information about participants. Participants provided demographic information by answering questions about their age, gender, grade, ethnicity, and family characteristics. Age, gender, grade, and ethnicity were used in the analyses. The labels used for the ethnic groups of interest in this study were Hispanic/Latino; Black, which included African-Americans and Caribbean-Americans; White, which included non-Hispanic Caucasians; Asians; and Mixed/Other, which included those of mixed heritage and any other ethnic groups not included in the first four categories.

Revised Peer Experiences Questionnaire (PEQ; Prinstein, Boergers, & Vernberg, 2001; Appendix C). This measure assessed adolescents' peer victimization and was modified for use in the current study. The original measure included 18 questions that assess common positive and negative interactions that adolescents have with their peers. Adolescents rated the frequency of occurrence of each event on a Likert scale ranging

from 1 (never) to 5 (a few times a week). The PEQ consists of three victimization subscales that measure overt (physical) victimization (OV; e.g., “A teen hit, kicked, or pushed me in a mean way.”), relational victimization (RV; e.g., “Some teens left me out of an activity or conversation that I really wanted to be included in.”), reputational victimization (RepV; e.g., “A teen tried to damage my social reputation by spreading rumors about me.”), and one subscale that measures receipt of prosocial behavior (e.g., “Another teen stuck up for me when I was being picked on or excluded.”). The victimization subscales were used in the current study. The overt and reputational victimization scales are derived from the sum of three items (range = 3-15). The relational victimization scale is derived from the sum of seven items (range = 7-35).

Strong internal consistency has been found for the peer victimization subscales (Cronbach’s alphas = .78-.84) (de los Reyes & Prinstein, 2004). The original version demonstrated significant correlations with parent and peer reports of victimization (r 's = .34-.40, p 's < .001) and strong six-month test-retest reliability (r 's = .48-.52) (Prinstein et al., 2001). The measure has been used with diverse samples (e.g., La Greca & Harrison, 2005) and has been found to have good psychometric properties in these samples. Reliability analyses for the current study were satisfactory, with alphas ranging from .75 to .81.

For the current study, data for all three peer victimization variables was significantly positively skewed (skewness statistics: Standard error = 0.097, OV = 2.53, RV = 1.48, RepV = 1.27). To address skewness and move the distribution of data close to normal, log transformations were performed on the overt, relational, and reputational victimization variables. This improved, but did not completely correct skewness

(skewness statistics of log transformation: Standard error = 0.097, OV = 1.33, RV = 1.48, RepV = 1.27). Log transformations of peer victimization variables were used in all analyses.

In order to assess disclosure, the modified version used for this study included an additional question about who they told about each event. Options were parents, teachers, siblings, significant others, or another person (participants filled in the blank), and no one. However, for consistency in analyses and interpretation, only disclosure to parents, teachers, friends, and no one were used in regression analyses. Scores were calculated for type of disclosure (to parents, teachers, friends, and no one) by summing the number of times adolescents reported telling the particular person about victimization experiences then dividing that number by the number of victimization experiences reported, thus resulting in a proportion. These proportions were used in all analyses involving disclosure. Descriptive statistics were calculated for all disclosure variables. Reliability analyses for this study were satisfactory, with alphas ranging from .61 to .87.

Data for three of the four types of disclosure was positively skewed (skewness statistics: Standard error = 0.098, Parent Disclosure = 1.58, Teacher Disclosure = 4.84, Disclosure to No One = 1.58). Disclosure to a friend was not skewed (Skewness statistics: Standard error = 0.098, Friend Disclosure = -0.08). As the disclosure variables are proportions, log transformations cannot be used. Arcsine transformations were performed instead. However, these transformations did not improve skewness, instead making it more pronounced. Dummy coding was considered next. However, as not all the variables required a transformation in order to address skewness, dummy coding changed the metric of some variables (disclosure to parents, teachers, and no one) and not

others (disclosure to friends). These differences in the metric do not make theoretical or practical sense and would have made interpretation of disclosure results complicated. As such, no transformations of disclosure variables were used. Raw data was used for all analyses involving disclosure. Disclosure data was centered to address the issue of multicollinearity (Holmbeck, 1997).

Child and Adolescent Social Support Scale (CASSS; Malecki, Demaray, & Elliott, 2004; Appendix D). This 60-item measure assessed children's and adolescent's perceived social support. It was designed for use with students in grades 3 through 12. The measure consists of five 12-item subscales that measure support from Parents, Teachers, Classmates, Close Friend, and the School. Each item assesses a particular type of support (emotional, informational, appraisal, instrumental) from each source. For each subscale, participants rated how often each item occurs using a Likert scale ranging from 1 (never) to 6 (always). Scores could range from 12 to 72 for each subscale with higher scores reflecting greater social support. For purposes of the current study, only four of the five subscales were used (Parents, Teachers, Classmates, Close Friend).

Strong internal consistency for the CASSS has been found with high school students (Grades 9 – 12) for the total scores (Total Support $\alpha = .97$, Total Importance $\alpha = .98$) and for the subscales (alphas = .90 - .95). This measure has been used with predominantly Hispanic samples. Reliability analyses for the current study were satisfactory, with alphas ranging from .92 to .93 for the subscales.

Data for parent and classmate support was negatively skewed (skewness statistics: Standard error = 0.097, Parent = -0.39, Classmate = -1.07). Data for teacher and friend support were normally distributed (skewness statistics: Standard error = 0.097, Teacher =

-0.00, Friend = -0.19). As such, log transformations were performed on the parent and classmate support variables. However, these transformations worsened or, at best, did not change the skewness of the variables (skewness statistics: Standard error = 0.97, Parent = -1.22, Classmate = -1.04). Therefore, the raw data was used for all analyses involving social support. Variables were centered to address the issue of multicollinearity (Holmbeck, 1997).

Outcome Measures

Social Anxiety Scale for Adolescents (SAS-A; La Greca & Lopez, 1998; Appendix E). This 22-item questionnaire measures adolescents' level of social anxiety related to peer interactions. For each item, adolescents rated how often they feel the item is true for them using a Likert scale ranging from 1 (not at all) to 5 (all the time). The SAS-A consists of three subscales, fear of negative evaluation (FNE), social avoidance and distress in new situations (SAD-New), and general social avoidance and distress (SAD-General), which are derived from the sum of the corresponding items. The FNE subscale includes 8 items assessing fears of being negatively evaluated by peers. The SAD-New subscale includes 6 items assessing social avoidance and distress when in new situations or around unknown peers. The SAD-General subscale includes 4 items measuring generalized social distress. The remaining 4 items are filler items. Scores for the subscales range as follows: FNE = 8 to 40, SAD-New = 6 to 30, and SAD-General = 4 to 20 and 18 to 90 for the total score. The total score was used as the outcome measure in regression analyses.

Strong internal consistency has been found for the subscales (FNE alphas = .91 and .94, SAD-New alphas = .87 and .87, SAD-General = .78 and .80 in school and

clinical populations, respectively). Test-retest reliability is also satisfactory for this measure (FNE r 's = .78 and .75, SAD-New r 's = .72 and .75, SAD-General r 's = .54 and .47 for 2 months and 6 months, respectively). This measure has also been used with diverse samples and has demonstrated good psychometric properties. Reliability analyses for the current study were satisfactory, with alphas ranging from .79 to .92 for the subscales and .77 for the total social anxiety score.

Youth Self-Report (YSR; Achenbach, 1991; Appendix F). The YSR was used to assess adolescents' general anxiety/depression and aggressive and delinquent behaviors. The YSR was derived from the Child Behavior Checklist/4-18 and is intended for use with adolescents age 12 to 18. It is divided into two parts. The first part consists of 20 competence items that ask adolescents to report their participation in a variety of activities, such as sports, hobbies, clubs, and chores. This part also asks about friendships, family relationships, and academic performance. The second part consists of 112 items that divide into nine subscales (withdrawn, somatic complaints, anxious/depressed, social problems, thought problems, attention problems, delinquent behavior, and aggressive behavior, other problems). The current study used the aggressive behavior, delinquent behavior, anxious/depressed, withdrawn, and other problems subscales. The withdrawn and other problems subscales were only used in SEM analyses (See Appendix G).

Participants rated each item on a Likert scale ranging from 0 (not true) to 2 (very true or often true). Subscales were then derived from the sum of corresponding items. Reliability for the subscales of the YSR has been found to be satisfactory (Cronbach's alphas \geq .62). The YSR has been used with diverse samples. Reliability analyses for the

current study were satisfactory, with alphas ranging from .72 to .87 for the subscales, with the exception of for the other problems subscale (alpha = .41).

Chapter 3: Results

Planned data analyses called for testing of model fit (see Figures 3.1 through 3.4) using Structural Equation Modeling with follow-up analyses using regression. However, accurate analyses could not be completed as the measurement models and, therefore, subsequent tests of the full model could not be made to fit the data. The measurement model for internalizing behaviors included social anxiety, anxiety/depression, and withdrawal. The measurement model for externalizing behaviors included aggressive behaviors, delinquent behaviors, and the other problems variable from the Youth Self-Report. Both measurement models encountered similar problems. For internalizing behaviors, the model could be identified, but did not fit the data when no correlations between items were set as part of the model. However, since many of the measures were correlated, particularly as they were obtained from the same measure, necessary correlations were added to the model. When this was done the model could not be identified as there were not enough degrees of freedom. For externalizing behaviors, the model could not be identified, with or without the necessary theoretical correlations added. For a more detailed discussion of the SEM models, please see Appendix G. Because the measurement models could not be identified and SEM procedures could not be used, hypotheses were tested using hierarchical linear regression procedures and appropriate post hoc analyses.

Overview of Analyses

First, means and standard deviations were examined for all study variables. Potential gender and ethnic differences in study variables were also examined, as well as potential differences across the two waves of data collection. Descriptive data is

presented on adolescents' disclosure of peer victimization experiences. Next, zero-order correlations were computed for the study variables, in part to determine whether there were problems with multicollinearity. Next, hierarchical linear regression analyses were used to evaluate study hypotheses pertaining to peer victimization as a predictor of adjustment outcomes, with social support as a moderating variable. Finally, hierarchical linear regression analyses were used to evaluate the relationship between social support and disclosure of victimization to various significant figures in adolescents' lives and then to evaluate the potential role of disclosure in the relationship between peer victimization and outcomes.

Descriptive Analyses and Correlations

A number of demographic variables have been found to be related to peer victimization, social support, and internalizing and externalizing behaviors. See Tables 1 to 3 for means and standard deviations of pertinent study variables. In addition, analyses were conducted to determine the relationship between the demographic variables in this study and the predictors and outcomes of interest in order to determine which variables should be controlled in regression analyses. ANOVA analyses were used to examine wave of data collection, gender, grade, school, and ethnic differences in study variables. Of the 18 variables tested (demographics, predictors, outcomes), significant differences across the two waves of data collection included overt and reputational victimization and disclosure to no one. Therefore, wave of data collection was used as a control variable in regression analyses. School differences in overt and relational victimization were found, such that adolescents at schools 2 and 3 reported more victimization than students at school 1. School differences were also found in disclosure, such that adolescents at

school 3 were more likely to disclose to a friend than adolescents at school 2, but less likely than students at school 2 to not disclose to anyone. Differences were also found for gender and ethnicity. Please see Tables 2 and 3 for results of the ANOVA analyses for gender and ethnicity. Due to differences in predictors and outcomes, school, gender, and ethnicity were used as control variables, along with wave of data collection, in all regression analyses. Significant differences were found for grade only for disclosure of victimization, with 12th graders more likely not to disclose than 10th grades were. As such, grade was only used as a control variable in regression analyses involving disclosure.

Zero-order correlations showed relationships between the predictor and outcome variables. See Table 3.3 for correlations among all study variables. All types of peer victimization were significantly positively related to total social anxiety, anxiety/depression, and aggression and delinquent behavior. All types of social support were significantly negatively related to the outcome variables, with the exception of close friend support, which was significantly negatively related to all outcomes except aggressive behaviors. Correlations for disclosure were more variable. Disclosure to parents was significantly positively related to social anxiety and anxiety/depression, and significantly negatively related to delinquent behavior. Disclosure to teachers was significantly positively related to social anxiety. Disclosure to friends was significantly positively related to social anxiety, anxiety/depression, and aggressive behavior. Not disclosing to anyone was significantly positively related to anxiety/depression, aggressive behavior, and delinquent behavior.

Zero-order correlations were also computed to examine relationships among predictor variables. All types of peer victimization were significantly negatively correlated with all types of social support, with the exception of the nonsignificant correlation between overt victimization and close friend support. All types of peer victimization were significantly positively related to all types of disclosure, with the exception of the nonsignificant correlation between overt victimization and disclosure to another person (not a parent, teacher, friend, sibling, or significant other). In terms of social support and disclosure, parent support was significantly positively related to disclosure to parents and teachers and significantly negatively related to disclosure to friends and to no one. Teacher support was significantly negatively correlated with disclosure to friends. Classmate support was significantly negatively related to not disclosing to anyone. Close friend support was significantly negatively related to disclosure to no one. See Table 3.3 for correlations among all study variables.

Description of Regression Analyses

Hypotheses 1 and 2, respectively, predicted that there would be an association between peer victimization and internalizing and externalizing behaviors and that social support would moderate this relationship. These hypotheses were tested using hierarchical linear regression analyses in which moderation was tested using interaction terms that were the products of the peer victimization and social support main effects. Regression and post hoc analyses for significant interactions were conducted using procedures recommended by Holmbeck (1997, 2002). The procedures call for separating the moderator into two groups (high = +1 SD, low = -1 SD) and analyzing the regression equation including the predictor, appropriate level of the moderator (high or low), and the

interaction between the predictor and the level of the moderator (Holmbeck, 1997, 2002). Separate regression analyses were conducted for each outcome variable to determine the relationship between peer victimization and each type of internalizing and externalizing behavior and the moderating effects of social support for each. For each outcome variable tested, the same regression analysis was used to test hypotheses 1 and 2. For all analyses, demographic variables were entered on Step 1, peer victimization subscales were entered on Step 2, social support subscales were entered on Step 3, and interaction terms to test for moderation were entered on Step 4. See Tables 5 – 8 for the regression models used to test the relationships to each outcome variable.

Hypothesis 1: How does peer victimization relate to adolescents' reports of internalizing and externalizing behaviors? See Table 3.1 for means and standard deviations of adolescents' reports of peer victimization. It was predicted that adolescents' reports of higher levels of peer victimization would predict higher levels of internalizing and externalizing problems. For internalizing problems, social anxiety and anxiety/depression were used as outcomes in separate regression analyses. As seen in Step 2 of Table 3.4, the shared variance among the peer victimization variables predicted social anxiety. Further examination of Step 2 (Table 3.4) shows unique effects for overt and relational victimization, such that higher overt victimization predicted lower social anxiety and higher relational victimization predicted higher social anxiety. In addition, Black and Asian ethnicity consistently predicted higher levels of reported social anxiety in comparison to Hispanic ethnicity (Step 4, Table 3.4).

For anxiety/depression, the shared variance among peer victimization variables was predictive of this outcome (Step 2, Table 3.5). Upon further examination, higher

relational and reputational victimization predicted higher anxiety/depression (Step 2, Table 3.5). Female gender was also a consistent predictor of higher anxiety/depression (Step 4, Table 3.5). Upon examination of all three types of peer victimization, relational victimization most consistently contributed unique variance to the prediction of internalizing problems. In addition, some demographic characteristics were also important in the unique prediction of internalizing problems.

For externalizing problems, outcomes assessed were aggressive and delinquent behaviors. The shared variance among the peer victimization variables predicted aggressive behaviors (Step 2, Table 3.6). As seen in Step 2 (Table 3.6), relational and reputational victimization were uniquely predictive of aggressive behaviors, with higher relational and reputational victimization predicting more aggressive behaviors (Step 2, Table 3.6). In addition, male gender consistently predicted more aggressive behaviors while Asian ethnicity consistently predicted fewer aggressive behaviors (Step 4, Table 3.6).

For delinquent behaviors, the peer victimization variables as a whole were again significant predictors (Step 2, Table 3.7). Closer examination of Step 2 (Table 3.7) revealed unique effects of overt and reputational victimization, wherein higher overt and reputational victimization predicted more delinquent behaviors (Step 2, Table 3.7). Male gender consistently predicted more delinquent behaviors while Asian ethnicity consistently predicted fewer delinquent behaviors (Step 4, Table 3.7). Across the three types of peer victimization, reputational victimization most consistently contributed unique variance to the prediction of externalizing problems. Gender and ethnicity also consistently added unique variance to the prediction of externalizing behaviors.

Hypothesis 2: Does social support moderate the relationship between peer victimization and internalizing and externalizing behaviors? See Table 3.1 or 3.2 for means and standard deviations of adolescents' reports of social support. As shown in Figure 1.1, social support was expected to have a direct effect on adolescents' reports of internalizing and externalizing behaviors. In addition, social support was expected to moderate the relationship between peer victimization and internalizing and externalizing problems. To test the first part of the hypothesis, the social support main effects were entered as Step 3 of the regression analyses (see Tables 5-8). Internalizing behaviors were tested first. Taken together, the social support variables predicted total social anxiety (Step 3, Table 3.4). Support from classmates was a unique predictor of social anxiety, with greater classmate support predicting lower social anxiety (Step 3, Table 3.4). Social support also predicted anxiety/depression, with parent and classmate support adding unique variance (Step 3, Table 3.5). Higher parent and classmate support uniquely predicted lower anxiety/depression (Step 3, Table 3.5). Overall, classmate support was the strongest unique predictor of internalizing problems.

Social support also predicted externalizing problems (Step 3, Tables 7 and 8). For aggressive behaviors, parent and teacher support added unique variance to the model. Greater parent and teacher support uniquely predicted fewer aggressive behaviors (Step 3, Table 3.6). Parent and teacher support also added unique variance to the prediction of delinquent behaviors in that they both uniquely predicted fewer delinquent behaviors (Step 3, Table 3.7). Of note, support from classmates and close friends did not add unique variance to the prediction of externalizing behaviors.

Moderating Effects of Social Support. To examine the moderating effects of social support on the relationship between peer victimization and internalizing and externalizing problems, a fourth step containing the interaction terms was entered into the regression analyses. For internalizing problems, no moderating effects of social support were found for total social anxiety (Step 4, Table 3.4) or for anxiety/depression (Step 4 Table 3.5).

For externalizing problems, moderating effects of social support were found for aggressive, but not delinquent behaviors (Step 4, Tables 7 & 8). For aggressive behaviors, only the interaction between overt victimization and parent support added unique variance to the prediction of this outcome (Step 4, Table 3.7). Post hoc probing found that higher overt victimization was predictive of increased delinquent behaviors at both higher ($t(621) = 3.62, p < .01$), and lower ($t(621) = 6.62, p < .01$) levels of parent support, which is more suggestive of a mediating effect than of a moderating effect.

Hypothesis 3: Who do adolescents tell about their victimization experiences and how does this relate to the expression of internalizing and externalizing behaviors? It was expected that many victimized adolescents would not tell anyone about their victimization experiences. Contrary to expectations, the majority of victimized adolescents reported that they had told at least one person about being victimized. This was the case for each type of victimization. See Table 3.8 for descriptive statistics for number and percentage of adolescents who told someone about being victimized.

The first part of Hypothesis 3 predicted that there would be a relationship between social support and disclosure of victimization, such that adolescents with higher perceived social support would be more likely to disclose instances of peer victimization

to individuals they perceive as most supportive. The second part of this hypothesis was exploratory in nature, with the purpose of exploring the role of disclosure in the link between peer victimization and maladjustment. Hierarchical linear regression was used to examine potential moderating effects of disclosure on the link between peer victimization and internalizing and externalizing behaviors. Moderation was tested using interaction terms that were the products of peer victimization and disclosure main effects. As in the previous analyses, regression and post hoc analyses for significant interactions were conducted using procedures recommended by Holmbeck (1997, 2002). Separate regression analyses were conducted for each outcome variable to determine the moderating effects of social support. For all analyses, demographic variables were entered on Step 1, peer victimization subscales were entered on Step 2, disclosure subscales were entered on Step 3, and interaction terms to test for moderation were entered on Step 4. See Tables 13 – 16 for the regression models used to test the relationships to each outcome variable.

Social Support as a Predictor of Disclosure. The sample used for regression analyses was smaller than the total sample ($n = 618$), due to fewer adolescents accurately completing the questions for disclosure. As in the previous regression analyses, certain demographic characteristics (gender, grade, ethnicity, school, wave of data collection) were used as control variables due to their relationships with predictors and outcomes. In general, perceived social support was a good predictor of adolescents' disclosure of peer victimization (Step 2, Tables 10-12), suggesting that disclosure may in fact be functioning as a form of enacted social support, at least for some types of disclosure. Parent support, after partialling out the variance associated with the demographic

variables, was a unique predictor of disclosure of victimization to parents, with higher parent support predicting greater disclosure to parents (Step 2, Table 3.9). Teacher support was a unique predictor of disclosure of victimization to teachers, with greater teacher support predicting higher disclosure of victimization to teachers (Step 2, Table 3.10). Results differed for friend support. Support from a close friend did not predict disclosure of victimization to a friend (Step 2, Table 3.11).

Disclosure as a Predictor of Internalizing and Externalizing Problems. To examine whether disclosure of victimization predicted internalizing and externalizing behaviors, the disclosure main effects (disclosure to parents, teachers, friends, no one) were entered as Step 3 of the regression analyses (see Tables 3.12-3.15). The variables that were used as measures of internalizing and externalizing behavior in previous analyses were again used here (social anxiety, anxiety/depression, aggressive behaviors, and delinquent behaviors). Internalizing behaviors were tested first. Disclosure of victimization to the various sources did not predict social anxiety (Step 3, Table 3.12), but did predict anxiety/depression (Step 3, Table 3.13). Examination of the contribution of each type of disclosure showed that disclosure to a friend had a unique effect in the prediction of anxiety/depression, in that more disclosure to friends uniquely predicted lower anxiety/depression (Step 3, Table 3.13).

In terms of externalizing problems, disclosure of victimization to the various sources did not predict aggressive behaviors, but did predict delinquent behaviors (Step 2, Tables 3.14 & 3.15, respectively). Disclosure to parents uniquely predicted delinquent behaviors, above and beyond the contribution of disclosure to other sources. Disclosure to a parent uniquely predicted fewer delinquent behaviors (Step 3, Table 3.15).

Moderating Effects of Disclosure. To examine the potential moderating effects of disclosure on the relationship between peer victimization and internalizing and externalizing problems, a fourth step containing the interaction terms was entered into the regression analyses. As in previous analyses, social anxiety, anxiety/depression, aggressive behaviors, and delinquent behaviors were again used as indicators of internalizing and externalizing problems.

For internalizing problems, no moderating effects were found for social anxiety (Step 4, Table 3.12), but potential moderating effects of disclosure were found for anxiety/depression (Step 4, Table 3.13). For anxiety/depression, the overall step was significant (Step 4, Table 3.13). Upon closer examination, the interactions between overt victimization and disclosure to a friend and reputational victimization and not disclosing to anyone were significant unique predictors of anxiety/depression (Step 4, Table 3.13). Post hoc analyses demonstrated that anxiety/depression is elevated at higher levels of overt victimization when disclosure to a friend is lower ($t(604) = 6.76, p < .01$), but not when it is higher ($t(604) = 0.92, p > .10$). Anxiety/depression was higher at higher levels of reputational victimization when disclosure to no one is higher ($t(604) = 7.30, p < .01$), and when disclosure to no one is lower ($t(604) = 2.66, p < .01$), which is more suggestive of a mediating effect than of a moderating effect. No moderating effects of disclosure were found for either aggressive or delinquent behaviors, as neither the overall steps nor the individual interaction terms were significant (Step 4, Tables 3.14 & 3.15).

Chapter 4: Discussion

Adolescence is a time of increased importance of peers. Positive peer relationships help adolescents with crucial aspects of development, including self-esteem, identity development, and emotional well being (Harter et al., 1996; Paterson et al., 1995). Adolescents who are unable to develop positive relationships with peers are at risk of maladjustment (e.g., La Greca & Prinstein, 1999). Those who are victimized by peers are at very high risk of poor emotional and behavioral outcomes, with effects potentially seen throughout adolescence and into adulthood (Olweus, 1993). The link between peer victimization and maladjustment has been well established in the literature. However, despite discussion of the need to examine mechanisms underlying this link, little research has been devoted to such exploration (Hawker & Boulton, 2000; Vernberg et al., 1995). The current study extended the literature on peer victimization by examining social support and disclosure of peer victimization as potential buffers against both internalizing and externalizing behaviors.

This study provided evidence suggesting that social support from both adults and peers can, at least in some cases, serve to protect adolescents from developing externalizing problems in the face of victimization by peers. Results of this study also suggest that disclosing peer victimization can buffer the effects of peer victimization on internalizing behaviors. The findings of this study help increase understanding of peer victimization and its associated outcomes, while also suggesting areas of future exploration.

Peer victimization as a predictor of internalizing and externalizing problems.

The first goal of the current study was to examine the link between three types of peer

victimization (overt, relational, and reputational) on internalizing (social anxiety and anxiety/depression) and externalizing (aggressive and delinquent behaviors) problems. As in previous research (Johnson, 1986; Compas et al., 1989; Grant et al., 2003), the current study demonstrated that peer victimization has similar effects on psychosocial adjustment as other life stressors. Consistent with previous literature (e.g., Coleman & Byrd, 2005; Hawker & Boulton, 2000; La Greca & Harrison, 2005), the current study found that victimized adolescents reported more problems. In addition, consistent with Holt and Espelage (2003), many adolescents in this study reported being victimized at least once over the course of one year, with most reporting more than one victimization experience. As such, a high number of adolescents in this study were at risk of poor outcome.

Across types of victimization, relational and reputational victimization had strong unique predictive power for both internalizing and externalizing problems, suggesting that intentional damage to adolescents' peer relationships, whether close friendships or relationships with the larger peer group, is associated with more problems. This is not unexpected given the findings that adolescents with poor peer relationships are at increased risk of poor outcomes (Clark & Ayers, 1992; Coleman & Byrd, 2003). By nature, relational and reputational victimization intentionally isolate adolescents from their peers. Newman et al. (2005) found that individuals who reported feeling isolated during adolescence also reported higher levels of stress as college students.

Upon closer examination of the results, relational victimization was the strongest unique predictor of internalizing behaviors, as higher levels of relational victimization uniquely predicted social anxiety and anxiety/depression. This pattern of results suggests

that damage to one's closest friendships is strongly associated with internalizing problems. As seen in this study, adolescents reported the most social support from close friends. Relational victimization may leave victims feeling isolated from their closest friends. At the same time, it removes a major source of companionship and support. When their close relationships are damaged through relational victimization, adolescents may experience increased internal distress, leading to increased internalizing symptoms.

Reputational victimization was the strongest unique predictor of externalizing behaviors, as high levels uniquely predicted aggressive and delinquent behaviors. As such, it appears that while damage to one's closest friendships is more consistently related to increased internal distress, damage to one's standing in the larger social group is more consistently related to behaviors that aggress against that group. Intuitively, it follows that adolescents who are victimized by peers would be more likely to lash out against others. However, as this study was not longitudinal in nature, it is impossible to determine whether adolescents are reputationally victimized because of their externalizing behaviors or whether they develop externalizing behaviors in reaction to being victimized. In any case, in line with prior research (e.g., Browning et al., 2003; Vernberg et al., 1999), the current study suggests that reputationally victimized adolescents, who may feel less of a connection with the larger peer group, appear to feel a greater inclination than those who are not reputationally victimized to aggress against their peers.

The findings for overt victimization were more variable. Adolescents who were overtly victimized reported increased delinquent behaviors, but decreased social anxiety. These results raise the question of the type of adolescents who experience each type of

victimization. It may be that adolescents who engage in delinquent behaviors also find themselves in situations wherein they are more likely to be overtly victimized or they may choose friends who are more likely to be aggressive in relationships. Overtly victimized adolescents may also be more prone to externalizing than to internalizing problems. This finding may also be related to males in this study reporting more overt victimization and externalizing behaviors than did females. This was consistent with prior research that has found both overt victimization and externalizing behaviors to be more common in males than in females (e.g., Storch et al., 2003; Vernberg et al., 1999).

Conversely, socially anxious adolescents may tend to avoid situations that would increase their feelings of anxiety, which may allow them to avoid situations that pose a greater risk of overt victimization. Another possible explanation may be that as overt victimization is not an attack on one's relationships, it may have more of an effect on the tendency to act out than on feelings of social anxiety, although this suggestion is contrary to previous findings that overt victimization was related to higher levels of social anxiety (e.g., Storch et al, 2003). As the current study was correlational, not longitudinal, it was not possible to test these explanations. However, the pattern of results suggests that any, or all, of these explanations may be operating for overtly victimized adolescents.

It should also be kept in mind that although certain types of peer victimization had unique predictive effects for certain outcomes, when taken together, all three types were predictive of a higher level of both internalizing and externalizing problems. As such, interventions should focus on all three types of victimization in order to decrease the likelihood that adolescents will experience peer victimization of any kind, thereby protecting them from suffering the negative outcomes associated with being victimized.

Social support as a predictor of internalizing and externalizing problems. As expected, the current study found direct effects of social support on both internalizing and externalizing problems. Parent support had particular strength in uniquely predicting both types of problems, suggesting that parents continue to play an important role during adolescence, despite the increased influence of peers. This is in line with suggestions by Crick et al. (2002) and Coleman and Byrd (2003), who posited that supportive families may be buffers against peer victimization itself, as well as from more negative outcomes for those who are victimized. Teacher support was also important for the prediction of aggressive behaviors. Taken together, the findings suggest that adult support can be helpful for adolescents' healthy emotional and behavioral adjustment. It could also be that emotionally and behaviorally healthy adolescents tend to have more supportive relationships with the adults in their lives. This notion should be examined more systematically through longitudinal studies.

In terms of support from peers, results of were surprising in that classmate support emerged as a strong unique predictor of decreased social anxiety and anxiety/depression, while support from close friends had no unique effects on outcomes above and beyond that shared with other types of support. These results appear contrary to the body of literature citing the importance of friend support in protecting adolescents from peer victimization and that has suggested the potential protective function of friend support (e.g., Browning et al., 2003; Newman et al., 2005). These findings should not be interpreted to mean that support from friends is not important. In the current study, adolescents reported a high level of social support from their close friends, regardless of their level of peer victimization. In addition, the current study only asked adolescents

about support from their closest friend, not from their group of friends as a whole. Research suggesting the importance of friend support has been more likely to consider the total friendship group (e.g., Browning et al., 2003; Goldbaum et al., 2003). It is likely that adolescents require support from more than just one close friend to aid in their emotional well being.

The unique effects of classmate support highlight the importance of feeling supported by and like a member of the general peer group. Research has demonstrated that individuals who feel like part of a group or community tend to be more psychologically healthy than those who feel isolated or disconnected from others or who want to be part of the group (Brown & Lohr, 1987). In addition, as social anxiety includes worries that other people will not be accepting, feeling supported by the peer group should decrease feelings of social anxiety. Alternatively, it may be that adolescents who are anxious or who are a less integral part of the larger peer group tend to be the most readily rejected, isolated, or victimized (e.g., Goldbaum et al., 2003). Future longitudinal studies will be able to examine this question more fully.

Moderating effects of social support. As expected, social support was found to have moderating effects on the link between peer victimization and maladjustment. However, all types of social support did not moderate the relationship between peer victimization and maladjustment in the same way. For instance, social support did not moderate the relationship between victimization and internalizing problems, suggesting that while social support has a direct effect on internalizing symptoms, it does not necessarily buffer the effects of peer victimization. According to these findings, adolescents who are victimized by peers experience an increase in social anxiety and

anxiety/depression and having social support from either adults or peers does not appear to protect them from these effects. As such, intervention/prevention efforts need to focus on decreasing peer victimization as well as on decreasing social anxiety in victimized adolescents. There may be other factors that buffer the effects of peer victimization on internalizing problems. These factors should be examined and strengthened in victimized adolescents in order to prevent psychosocial maladjustment.

Results demonstrated some effects of social support on the link between peer victimization and aggressive behaviors. Higher overt victimization predicted increased aggressive behaviors at higher and lower levels of parent support. However, the relationship was weaker for lower levels of parent support, suggesting more of a mediating effect. These results suggest that support from parents may not completely protect victimized adolescents from exhibiting aggressive behaviors. However, consistent with suggestions made by Crick et al. (2002) and Coleman and Byrd (2003), parent support may protect victimized adolescents from engaging in more severe or more frequent aggressive behaviors. No moderating effects were found for delinquent behaviors.

Overall, parent support was the only buffer against maladjustment for victimized adolescents and this type of support was only partially protective. As such, it appears that social support generally does not protect victimized adolescents from developing internalizing and externalizing problems. This is inconsistent with the life stress literature that has found protective effects of social support in the face of other types of life stress (Cohen & Park, 1992; Quittner, 1992). Perhaps adolescents who are victimized do not benefit from a general level of social support from adults and peers. They may

need support that directly addresses the victimization experience. The current study only examined a general level of social support. Future research should examine social support about victimization experiences as a potential buffer from maladjustment.

Social support and disclosure of victimization. In line with past research (Vernberg et al., 1995), it was expected that adolescents would report low rates of disclosure of victimization experiences. That expectation was not supported, as most victimized adolescents reported telling at least one person about at least one victimization experience, with relational victimization having the lowest rate of disclosure. Surprisingly, adolescents did disclose peer victimization to adults (parents and teachers). This is contrary to literature that has found adults to be largely unaware or dismissive of adolescents' peer victimization experiences (e.g., Ross, 1996). It may be that due to the tragic events so often in the news, adults are becoming more attuned to the detrimental effects of peer victimization on adolescents' development and adjustment. As such, adults may be sending messages to adolescents that they are open to hearing about and helping when adolescents are victimized, which may make it easier for adolescents to seek support when having difficulty with peers.

As disclosure was conceptualized as a type of enacted social support, this study also examined the relationship between social support and disclosure of victimization. In line with expectations, social support from parents and teachers predicted disclosure of victimization experiences to parents and teachers, respectively. However, the relationship was weaker for close friend support and disclosure to a close friend. Overall, with the exception of relational victimization, social support from a close friend did not make it more likely that adolescents would tell their close friends about victimization

experiences. It may be that adolescents feel that their close friends will be helpful to them when others try to damage their friendships, but may feel that close friends will not be as helpful when they are being physically victimized or when their social standing is being damaged. Adolescents may also be resistant to taking the chance that their close friend will also become a victim if they disclose victimization experiences to them. However, this was not tested in this exploratory portion of the current study and these suggestions are proposed based on the pattern of results. Factors related to the intentions underlying adolescents' disclosure, or lack thereof, of victimization should be explored further in future research.

Disclosure as a predictor of internalizing and externalizing problems. The current study also examined how disclosure of victimization relates to maladjustment. However, no specific hypotheses were proposed due to the lack of clarity about benefits and drawbacks of disclosure. Disclosure was found to predict some indicators of internalizing and externalizing behaviors, namely, anxiety/depression and delinquent behaviors. Specifically, adolescents who disclosed victimization to a friend reported decreased anxiety/depression and those who disclosed to a parent reported decreased delinquent behaviors. Of note, no negative relationships were found between disclosure and internalizing or externalizing behaviors. As such, it appears that the direct effects of disclosure on psychosocial adjustment in this sample were positive, tending to be associated with better adjustment.

Moderating effects of disclosure on peer victimization. The moderating effects of disclosure were less straightforward. Disclosure did not moderate the relationship between victimization and social anxiety. In keeping with the view of disclosure as a

type of enacted social support, this finding was consistent with this study's finding that social support did not moderate the relationship between victimization and social anxiety. Disclosure also did not moderate the relationship between peer victimization and externalizing problems, despite the direct effect of parent support on decreased delinquent behaviors. It is unclear why disclosure did not have stronger moderating effects. It may be that disclosure did not result in support around the disclosed victimization experience (see Ross, 1996).

Moderating effects were found for anxiety/depression. Disclosure of victimization to a friend moderated the relationship between overt victimization and anxiety/depression in such a way that, for highly victimized adolescents, overt victimization predicted more anxiety/depression when disclosure to a friend was lower. Overt victimization did not predict anxiety/depression when disclosure to a friend was higher. These results suggest that not disclosing to anyone had effects on the relationship between reputational victimization and anxiety/depression. It appears that less disclosure of reputational victimization to any source is related to increased anxiety/depression. As such, it appears that, at least for reputational victimization, it may be beneficial to disclose to someone instead of trying to manage alone. However, in this case, disclosure may have more of a mediational effect, as there was still an increase in anxiety/depression when adolescents disclosure to any source, although the magnitude of the effect was not as large as when adolescents told no one about being victimized. Overall, it appears that, for victimized adolescents, disclosure of some types of victimization can be protective against developing internalizing symptoms.

Taken together, the results for disclosure suggest that it can serve as a buffer between some types of peer victimization and maladjustment, but not others. Promisingly, results did not suggest that disclosure was harmful to adolescents' adjustment in the face of peer victimization. This suggests that, at least in the current study, disclosure of peer victimization did not result in the potential negative outcomes that are seen with other forms of abuse, like domestic violence (Levendosky et al., 2004). In addition, at least for some types of peer victimization, it appears that for a large proportion of adolescents, the need to disclose victimization outweighed the potential for negative reactions or retaliation (Thoits, 1986). Also, as some adolescents did tell adults about being victimized, it appears that at least some adolescents did feel that adults would take their disclosure seriously and that they maybe of some help to them. This finding was contrary to findings in both the peer victimization (Ross, 1996) and domestic violence (Wolf, et al., 2003) literatures that authority figures are often unsympathetic to reports of abuse/victimization.

More research is needed to better understand the effects of disclosure on outcomes related to peer victimization. Vernberg et al., (1995) suggested that future research should examine the reactions and support provided when adolescents disclose peer victimization. This would help to not only understand the role of disclosure, but also to describe the mechanisms underlying the effects of disclosure. The moderating effect of disclosure should also be examined more systematically to determine whether and when disclosure is most beneficial for victimized adolescents.

Limitations and Future Directions. Although the current study provides useful information for the study of peer victimization in adolescence, some limitations need to

be taken into account when interpreting the results. Most limitations are associated with data collection. Time constraints were placed on the length and number of data collection sessions. Each school allowed data to be collected from each student during one session. Session length was determined by the length of a class period. As such, there were some adolescents whose results were dropped from the study because they were unable to complete the necessary questionnaires in the time allotted. As data was collected at only one time point, these adolescents could not finish their questionnaires at another time. Also due to time constraints, the number of questions that could be asked was limited, particularly as the current study was part of a larger study on adolescent social relationships. Therefore, follow-up questions (e.g., purpose of disclosure; support garnered as a result of disclosure) could not be included.

Another limitation of the current study was the manner of data collection. All information was gathered through self-report measures. As such, it is impossible to be completely certain adolescents understood every question or were accurate in their responses. However, as analyses demonstrated good reliability of predictors and outcomes, it appears that adolescents answered questions appropriately. As all data was provided through self-report, there are no observer reports of study variables. However, as adolescents are most accurate in reporting on their own internal distress, the best method available was used to assess their experiences, particularly social support and internalizing behaviors. For victimization, because adolescents do not disclose every event, because much victimization is done in secret, and because adults tend to underestimate rates of peer victimization (Vaillancourt et al., 2003), observer ratings are likely to give inaccurate representations of the amount of victimization that adolescents

experience. The main concern with using only self-report questionnaires is the accuracy of reports of externalizing problems, as adolescents may tend to minimize these behaviors.

Future research should also look at moderators of peer victimization over time. As the current study was a first look at these issues, many of the questions were exploratory and the study was not longitudinal. Future research should incorporate longitudinal analyses in order to begin to examine causal relationships of moderators like social support and disclosure

In building on previous research in the life stressors literature, the current study was one of the first to use a direct method of social support rather than a proxy (e.g., Newman et al., 2005). However, this measure was of general social support from various sources. The measure did not assess the extent of adolescents' support-seeking behaviors or the level or type of social support in the face of stressors, which may affect the link between peer victimization and maladjustment differently than general social support. Future research may benefit from the use of a social support measure containing items that assess the supportiveness of other people when adolescents are facing stressors. Again, due to time constraints, it was impossible to ask follow-up questions about levels of support when adolescents are stressed.

Conclusions. Despite its limitations, the current study provides important additional information about the link between peer victimization and psychosocial maladjustment. All types of peer victimization have consistently been linked to poor psychosocial outcome (Bond et al., 2001; Boulton et al., 1999; Browning et al., 2003; Coleman & Byrd, 2003; Goldbaum et al., 2003; Mynard et al., 2000; Vaillancourt et al.,

2003). However, research has just begun to examine potential mediating and moderating factors in this link. The current study provides information about the benefit of supportive relationships and disclosure of victimization experiences in preventing or diminishing the maladaptive effects of peer victimization.

Results of the current study showed some buffering effects of social support and disclosure for certain types of peer victimization. This is important for gaining a better understanding of the mechanisms underlying the link between peer victimization and psychosocial maladjustment. Also, efforts to prevent peer victimization and its negative outcomes can benefit from knowledge about the factors that decrease the likelihood of negative outcomes in the face of peer victimization. In addition to prevention of peer victimization, efforts can be aimed at strengthening buffers and teaching adolescents skills to adaptively cope with peer victimization.

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Tables and Figures

Figure 1.1. *Social support as a moderator of the relationship between peer victimization and internalizing and externalizing behaviors (regression model).*

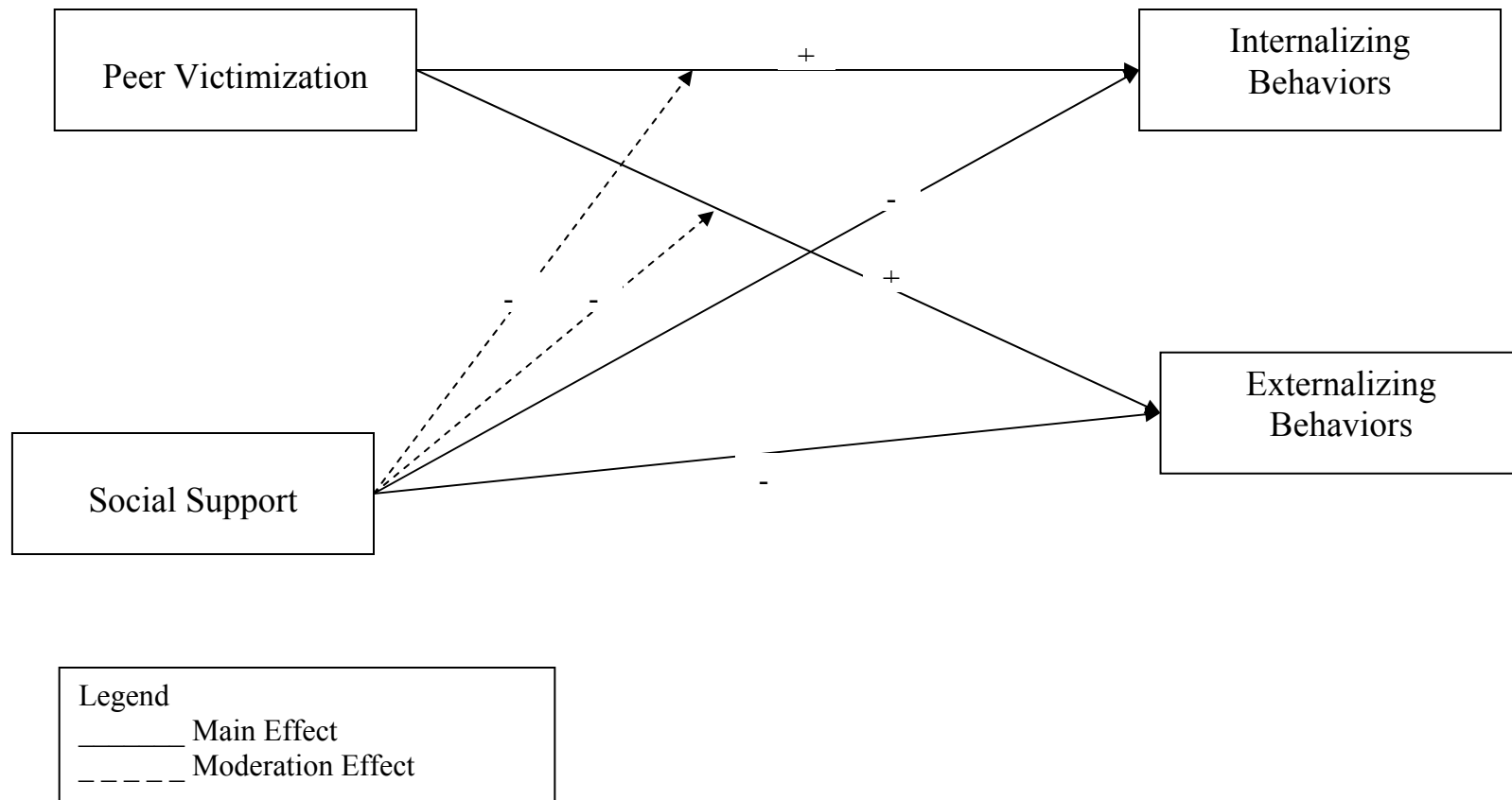


Figure 1.2. *Disclosure as a moderator of the relationship between peer victimization and internalizing and externalizing behaviors (regression model).*

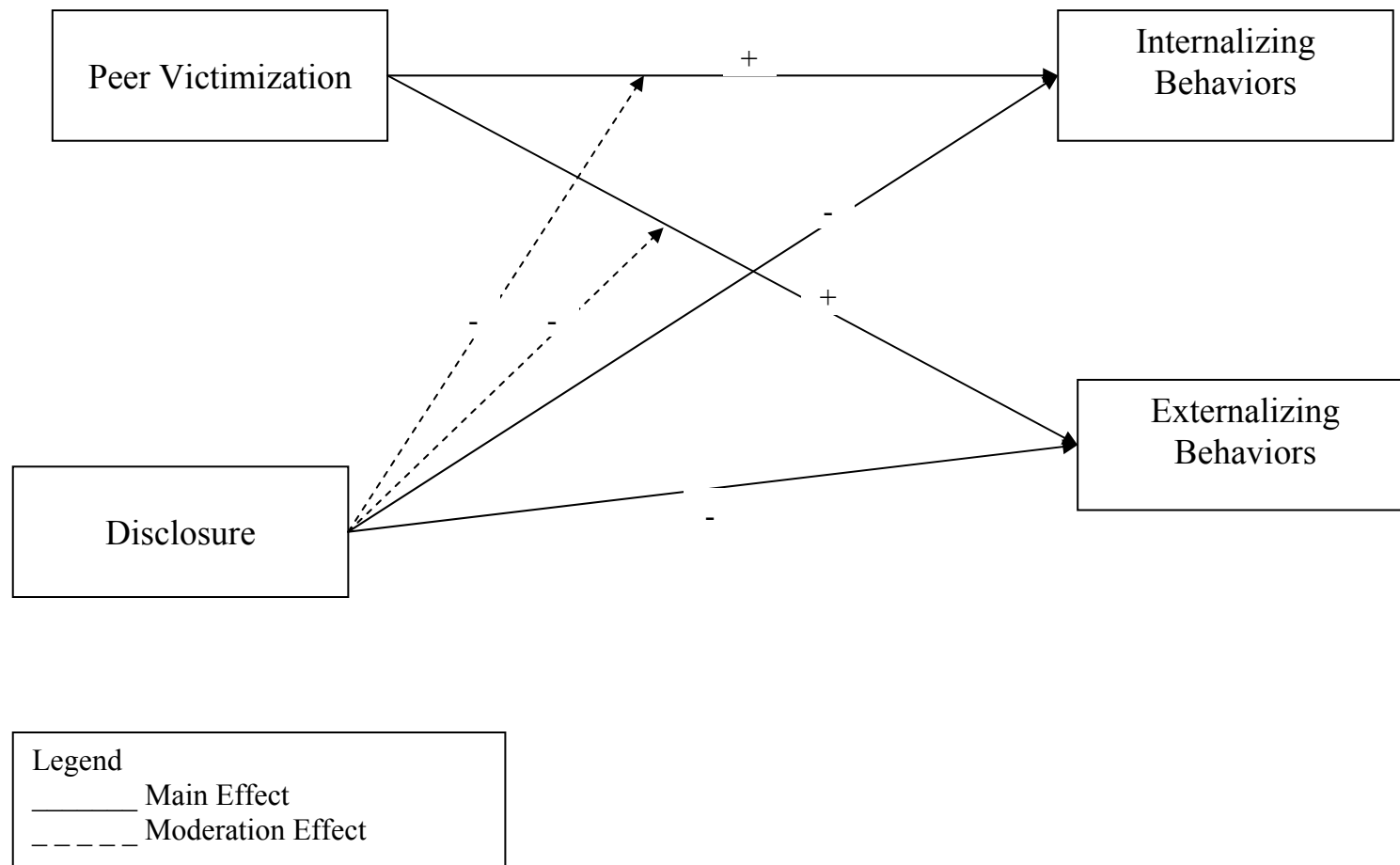
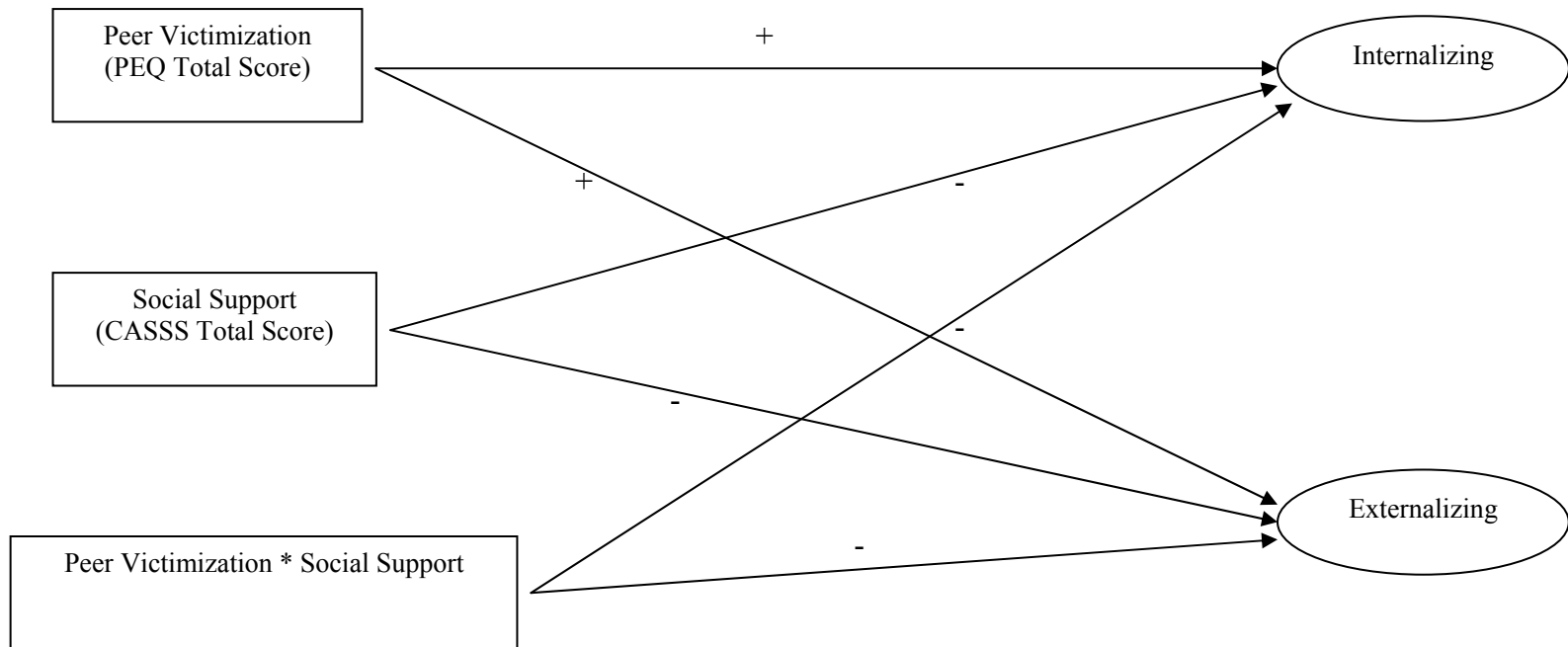
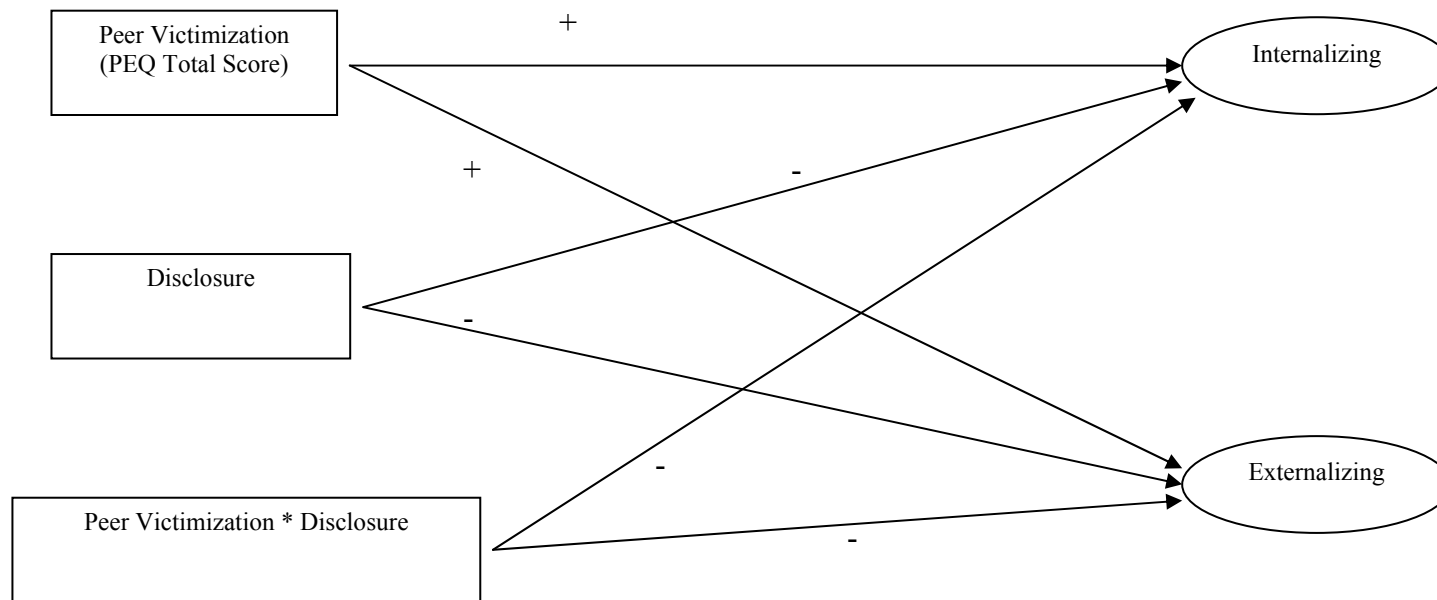


Figure 3.1. *Social support as a moderator of the relationship between peer victimization and internalizing and externalizing behaviors (SEM model).*



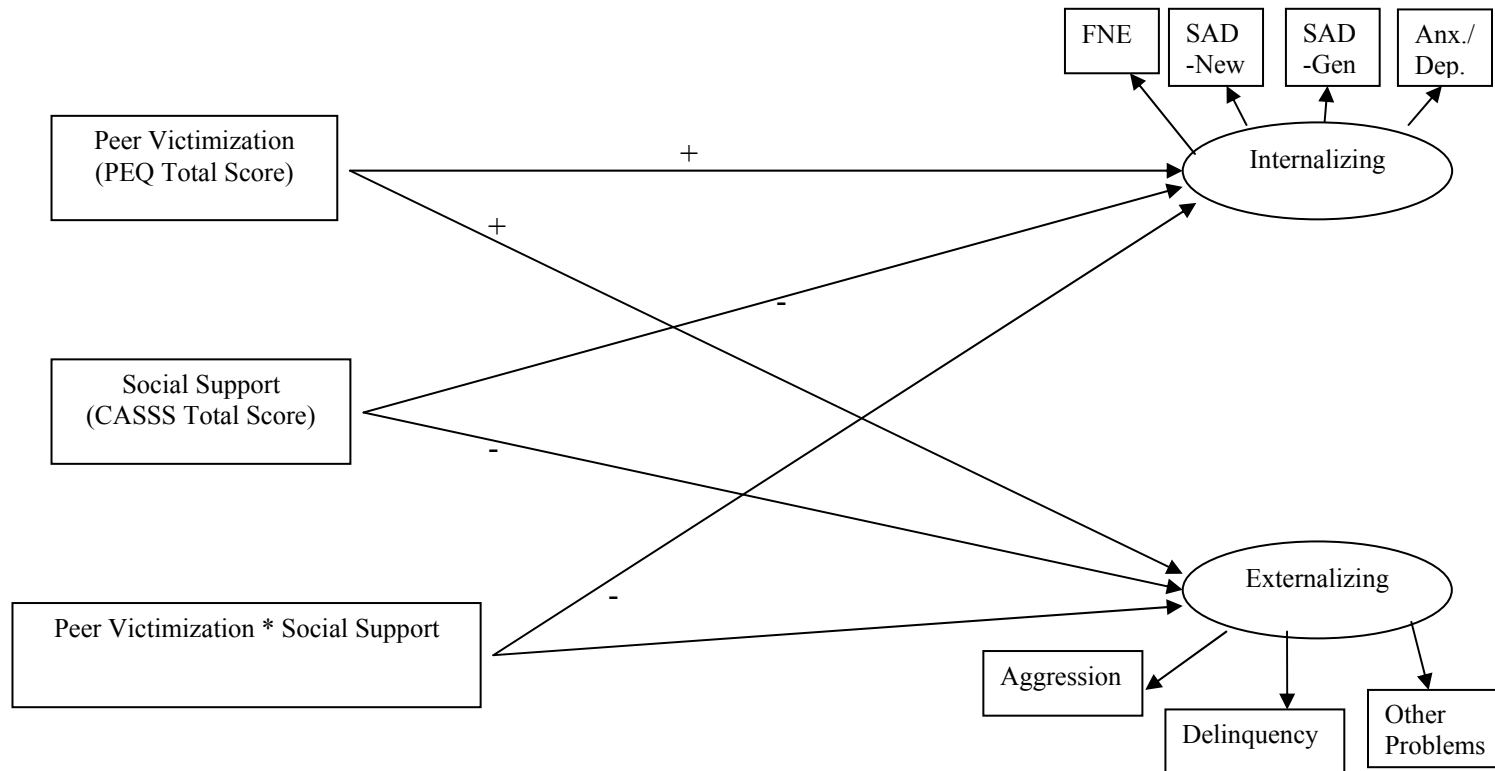
FNE: Fear of Negative Evaluation
SAD-New: Social Avoidance & Distress in New Situations
SAD-Gen: General Social Avoidance & Distress

Figure 3.2. *Disclosure as a moderator of the relationship between peer victimization and internalizing and externalizing behaviors (SEM model).*



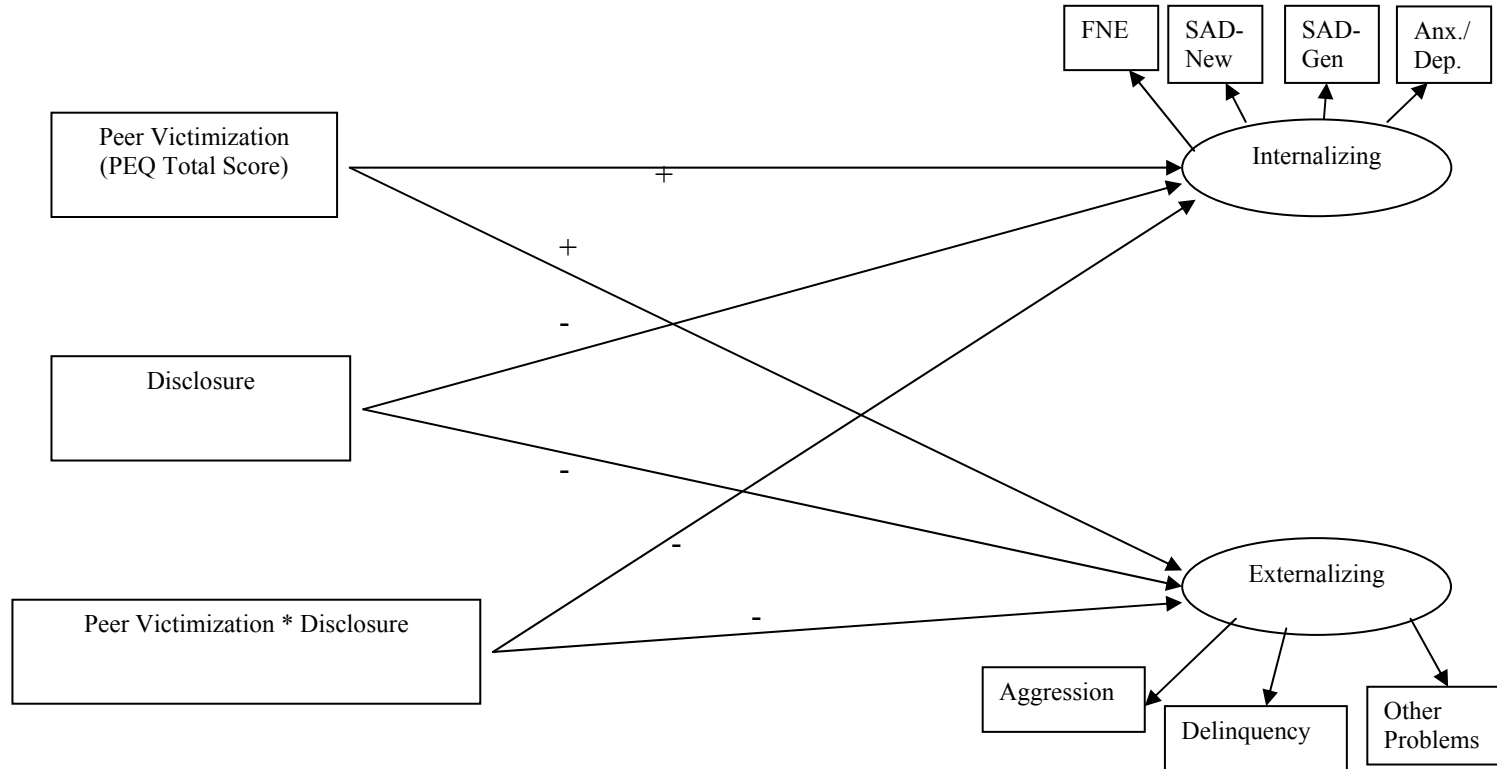
FNE: Fear of Negative Evaluation
SAD-New: Social Avoidance & Distress in New Situations
SAD-Gen: General Social Avoidance & Distress

Figure 3.3. *Social support as a moderator of the relationship between peer victimization and internalizing and externalizing behaviors (SEM model).*



FNE: Fear of Negative Evaluation
 SAD-New: Social Avoidance & Distress in New Situations
 SAD-Gen: General Social Avoidance & Distress

Figure 3.4. Disclosure as a moderator of the relationship between peer victimization and internalizing and externalizing behaviors (SEM model).



FNE: Fear of Negative Evaluation
 SAD-New: Social Avoidance & Distress in New Situations
 SAD-Gen: General Social Avoidance & Distress

Table 2.1: *Sample Demographics by Wave of Data Collection.*

	Wave 1	Wave 2	Total Sample
<i>N</i>	146	487	633
<i>Gender</i>			
Girls	92 (63.0%)	288 (59.1%)	380 (60.0%)
Boys	54 (37.0%)	199 (40.9%)	253 (40.0%)
<i>Age</i>	M = 17.41 (0.87)	M = 16.95 (0.97)	M = 17.05 (0.96)
<i>Ethnicity</i>			
White	38 (26.0%)	90 (18.5%)	128 (20.2%)
Black	21 (14.4%)	32 (6.6%)	53 (8.4%)
Hispanic/Latino	73 (50.0%)	317 (65.1%)	390 (61.6%)
Asian	1 (0.7%)	15 (3.1%)	16 (2.5%)
Mixed/Other	13 (8.9%)	33 (6.8%)	46 (7.3%)
<i>Grade</i>			
Tenth	12 (8.2%)	85 (17.5%)	97 (15.3%)
Eleventh	12 (8.2%)	140 (28.7%)	152 (24.0%)
Twelfth	122 (83.6%)	262 (53.8%)	384 (60.7%)

Table 3.1: Means and Standard Deviations of Study Variables by Gender

Measure	Girls	Boys	Total Sample	F value
<i>N</i>	380	253	633	
Social Anxiety Total	41.01 (13.93)	39.52 (12.84)	40.41 (13.51)	0.18
Anxiety/Depression	7.21 (5.73)	5.46 (5.01)	6.51 (5.52)	1.58
Aggressive Behaviors	7.28 (4.97)	8.11 (5.86)	7.61 (5.35)	0.02
Delinquent Behaviors	4.20 (3.02)	4.69 (3.14)	4.39 (3.07)	0.33
Peer Victimization				
Overt	3.92 (1.68)	4.42 (1.88)	4.12 (1.78)	2.01
Relational	12.42 (3.77)	12.34 (4.01)	12.39 (3.86)	0.28
Reputational	5.94 (2.62)	4.86 (2.23)	5.51 (2.53)	4.35*
Social Support				
Parents	48.39 (14.32)	51.07 (11.52)	49.46 (13.32)	0.32
Teachers	46.71 (12.19)	46.15 (10.86)	46.49 (11.67)	0.22
Classmates	46.93 (12.20)	46.22 (10.94)	46.64 (11.71)	1.20
Close Friends	62.46 (9.90)	57.38 (10.27)	60.43 (10.34)	2.11
Disclosure				
Parents	1.73 (2.44)	0.82 (1.63)	1.37 (2.20)	5.19*
Teacher	0.24 (0.83)	0.16 (0.59)	0.21 (.75)	12.53*
Friend	4.46 (3.14)	3.47 (3.04)	4.07 (3.14)	0.72
Sibling	1.12 (2.16)	0.68 (1.59)	0.95 (1.97)	4.14*
Significant Other	1.63 (2.50)	0.67 (1.41)	1.25 (2.19)	0.58
Other	0.22 (2.50)	0.24 (0.75)	0.23 (0.86)	2.79
No One	1.72 (2.64)	2.61 (2.96)	2.07 (2.80)	4.01*

Table 3.2: Means and Standard Deviations of Study Variables by Ethnicity

Measure	White	Black	Latino	Asian	Mixed	F value
<i>N</i>	128	53	390	16	46	
Social Anxiety	40.10 (12.48)	43.97 (17.13)	39.38 (13.03)	52.25 (13.34)	41.80 (13.49)	3.34**
Anx./Dep.	6.88 (6.03)	7.41 (6.47)	6.24(5.17)	8.86(6.60)	5.92(5.16)	0.42
Agg. Behaviors	7.63 (5.79)	8.16 (5.94)	7.51(5.13)	6.53(4.18)	8.15(5.71)	0.92
Del. Behaviors	4.26 (3.25)	4.45 (2.85)	4.43(3.03)	2.81(1.38)	4.95(3.47)	1.89
Peer Vic.						
Overt	4.02 (1.82)	4.53 (1.84)	4.07(1.73)	4.63(2.22)	4.21(1.80)	1.09
Relational	13.14 (3.96)	12.56 (4.43)	12.01 (3.64)	14.13 (5.12)	12.72 (3.91)	0.97
Reputational	5.61 (2.71)	6.11 (3.14)	5.38(2.37)	5.44(2.63)	5.60(2.43)	1.66
Social Support						
Parents	51.18 (12.19)	48.12 (14.88)	49.83 (13.68)	39.50 (9.36)	46.56 (10.75)	3.69**
Teachers	46.58 (11.03)	47.40 (11.80)	46.74 (11.90)	45.31 (8.60)	43.44 (12.14)	1.87
Classmates	46.50 (11.15)	46.69 (12.73)	47.09 (12.00)	42.88 (8.01)	44.55 (10.39)	1.86
Close Friends	58.90 (11.26)	60.48 (11.72)	61.18 (9.86)	56.88 (9.48)	59.46 (9.95)	0.72

Table 3.2 (cont.): *Means and Standard Deviations of Study Variables by Ethnicity*

Measure	White	Black	Latino	Asian	Mixed	F value
<i>N</i>	128	53	390	16	46	
Disclosure						
Parents	1.68(2.52)	1.27(2.15)	1.28(2.11)	1.25(1.61)	1.43(2.23)	0.26
Teacher	0.23(0.76)	0.04(0.20)	0.21(0.74)	0.38(0.89)	0.30(1.03)	1.50
Friend	4.26(3.16)	3.49(3.02)	4.05(3.12)	4.69(3.79)	4.17(3.17)	2.29
Sibling	1.09(2.20)	1.18(1.92)	0.88(1.91)	0.69(2.02)	0.91(1.80)	0.43
Sig. Other	1.62(2.54)	1.08(2.11)	1.20(2.14)	0.06(0.25)	1.24(1.75)	1.06
Other	0.26(1.11)	0.37(1.08)	0.20(0.72)	0.13(0.34)	0.24(0.95)	2.57
No One	1.87(2.60)	2.53(3.01)	2.13(2.96)	1.88(2.31)	1.65(1.79)	0.87

Table 3.3: *Correlations Among Key Study Variables*

	<i>Data Wave</i>	<i>Gender</i>	<i>Grade</i>	<i>Ethnicity</i>	<i>School</i>	<i>Overt Vic.</i>	<i>Relational Vic.</i>	<i>Reputational Vic.</i>	<i>Parent Support</i>	<i>Teacher Support</i>
Data Wave	1	.03	-.22**	.08*	.56**	-.11**	-.08	-.09*	.06	-.03
Gender	.03	1	.04	-.01	.07	.14**	-.01	-.21**	.10*	-.03
Grade	-.22**	.04	1	-.05	-.25**	-.01	.00	-.02	-.01	.00
Ethnicity	.08*	-.01	-.05	1	.14**	.02	-.06	-.03	-.09*	-.05
School	.56**	.07	-.25**	.14**	1	-.06	-.12**	-.09*	.01	-.01
Overt Victimization	-.11**	.14**	-.01	.02	-.06	1	.55**	.46**	-.09*	-.03**
Relational Victimization	-.08	-.01	.00	-.06	-.12**	.55**	1	.54**	-.15**	-.20**
Reputational Victimization	-.09*	-.21**	-.02	-.03	-.09*	.46**	.54**	1	-.12**	-.15**
Parent Support	.06	.10*	-.01	-.09*	.01	.09*	-.15**	-.12**	1	.35**
Teacher Support	-.03	-.02	.00	-.05	-.01	-.13**	-.20**	-.15**	.35**	1
Classmate Support	.02	-.03	-.06	-.03	.08*	-.14**	-.31**	-.17**	.37**	.39**
Friend Support	-.04	-.24**	-.03	.04	-.02	-.07	-.17**	.03	.26**	.29**
Disclosure to Parent	-.01	-.20**	.02	-.05	-.07	.11**	.23**	.24**	.18**	.02
Disclosure to Teacher	.03	-.05	.04	.03	-.06	.16**	.16**	.20**	.11**	.08*
Disclosure to Friend	-.09*	-.05**	-.01	-.01	-.11**	.17**	.42**	.32**	-.11**	-.03**
Disclosure to No One	.03	.16**	-.11**	-.01	.09*	.13**	.13**	.07	-.11**	-.04
Social Anxiety	-.02	-.05	-.02	.02	-.05	.18**	.48**	.27**	-.17**	-.19**
Anxiety/Depression	-.01	-.06**	-.01	-.04	-.03	.24**	.46**	.38**	-.33**	-.25**
Aggressive Behaviors	.04	.08	.02	.00	.06	.29**	.34**	.31**	-.25**	-.23**
Delinquent Behaviors	.06	.08*	.01	.03	.09*	.23**	.21**	.23**	-.32**	-.27**

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

Table 3.3 (cont.): *Correlations Among Key Study Variables*

	<i>Classmate Support</i>	<i>Friend Support</i>	<i>Disc. to Parent</i>	<i>Disc. to Teacher</i>	<i>Disc. to Friend</i>	<i>Disc. to No One</i>	<i>Social Anxiety</i>	<i>Anxiety/Depression</i>	<i>Agg. Behs.</i>	<i>Del. Behs.</i>
Data Wave	.02	-.04	-.01	.03	-.09*	.03	-.02	-.01	.04	.06
Gender	-.03	-.24**	-.20**	-.05	-.15**	.16**	-.05	-.16**	.08	.08*
Grade	-.06	-.03	.02	.04	-.01	-.11**	-.02	-.01	.02	.01
Ethnicity	-.03	.04	-.05	.03	-.01	-.01	.02	-.04	.00	.03
School	.08*	-.02	-.07	-.06	-.11**	.09*	-.05	-.03	.06	.09*
Overt Victimization	-.14**	-.07	.11**	.16**	.17**	.13**	.08**	-.24**	.29**	.23**
Relational Victimization	-.31**	-.17**	.23**	.06**	.42**	.03**	.48**	.46**	.34**	.21**
Reputational Victimization	-.17**	.03	.24**	.20**	.32**	.07	.27**	.38**	.31**	.23**
Parent Support	.37**	.26**	.18**	.11**	-.11**	-.11**	-.17**	-.33**	-.25**	-.32**
Teacher Support	.39**	.29**	.02	.08*	-.13**	-.04	-.19**	-.25**	-.23**	-.27**
Classmate Support	1	.45**	-.01	-.01	-.03	-.12**	-.35**	-.36**	-.17**	-.16**
Friend Support	.45**	1	.05	.08*	.06	-.18**	-.20**	-.17**	-.08	-.10*
Disclosure to Parent	-.01	.05	1	.35**	.34**	-.23**	.14**	.10*	.01	-.11**
Disclosure to Teacher	-.01	.08*	.35**	1	.14**	-.07	.09*	.06	.02	-.06
Disclosure to Friend	-.03	.06	.34**	.14**	1	-.33**	.19**	.12**	.15**	.04
Disclosure to No One	-.12**	-.18**	-.23**	-.07	-.33**	1	.06	.13**	.07	.12**
Social Anxiety	-.35**	-.20**	.14**	.09*	.19**	.06	1	.67**	.20**	.12**
Anxiety/Depression	-.36**	-.17**	.10*	.06	.12**	.13**	.64**	1	.52**	.35**
Aggressive Behaviors	-.17**	-.08	.01	.02	.15**	.07	.20**	.52**	1	.60**
Delinquent Behaviors	-.16**	-.10*	-.11**	-.06	.04	.12**	.12**	.35**	.60**	1

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

Table 3.4: *Hierarchical Linear Regression Predicting Total Social Anxiety with Social Support as the Moderator (N = 633)*

<i>Variable</i>	<i>R²</i> <i>Step</i>	<i>B</i>	<i>SE B</i>	<i>β</i>	<i>F Step</i>
Step 1	0.03				2.77**
Data Wave (Wave 1 = 0)		-0.19	1.57	-0.01	
Gender (Girls = 0)		-1.76	1.10	-0.06	
White		0.56	1.50	0.02	
Black		4.40	1.99	0.09*	
Asian		13.08	3.49	0.15**	
Mixed/Other		2.31	2.15	0.04	
School 1		-0.14	2.63	-0.00	
School 2		-0.56	1.35	-0.02	
Step 2	0.23				66.18**
Overt Victimization ^a		-4.25	1.71	-0.11*	
Relational Victimization ^a		24.31	2.01	0.52**	
Reputational Victimization ^a		0.89	1.37	0.03	
Step 3	0.05				10.18**
Parent Support		0.01	0.04	0.01	
Teacher Support		-0.03	0.04	-0.02	
Classmate Support		-0.23	0.05	-0.20**	
Close Friend Support		-0.05	0.05	-0.03	
Step 4	0.01				1.23
Black		4.41	1.70	0.09**	
Asian		9.75	3.01	0.11**	
Overt Victimization ^a		-4.13	1.70	-0.10*	
Relational Victimization ^a		20.35	2.06	0.44**	

Note: For Step 4, only significant effects were included in the table.

^aNatural log transformation

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

Final Model $F(24,608) = 12.24, p < .001, R^2 = 0.33$

Table 3.5: *Hierarchical Linear Regression Predicting Anxiety/Depression with Social Support as the Moderator (N = 633)*

<i>Variable</i>	R^2		<i>B</i>	<i>SE B</i>	β	<i>F Step</i>
	<i>Step</i>					
Step 1	0.04					2.95**
Data Wave (Wave 1 = 0)			-0.04	0.64	-0.00	
Gender (Girls = 0)			-1.84	0.45	-0.16**	
White			0.86	0.61	0.06	
Black			1.11	0.81	0.06	
Asian			3.14	1.43	0.09*	
Mixed/Other			-0.11	0.88	-0.01	
School 1			0.13	1.07	0.01	
School 2			0.14	0.55	0.01	
Step 2	0.20					52.46**
Overt Victimization ^a			-0.07	0.72	-0.00	
Relational Victimization ^a			6.91	0.84	0.36**	
Reputational Victimization ^a			1.85	0.57	0.14**	
Step 3	0.09					20.60**
Parent Support			-0.07	0.02	-0.17**	
Teacher Support			-0.02	0.02	-0.05	
Classmate Support			-0.09	0.02	-0.18**	
Close Friend Support			-0.00	0.02	-0.00	
Step 4	0.02					2.38*
Gender (Girls = 0)			-1.25	0.42	-0.11**	
Relational Victimization			5.21	0.83	0.27**	
Reputational Victimization			1.62	0.54	0.12**	

Note: For Step 4, only significant effects were included in the table.

^aNatural log transformation

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

Final Model $F(24,608) = 13.33, p < .001, R^2 = 0.35$

Table 3.6: *Hierarchical Linear Regression Predicting Aggressive Behaviors with Social Support as the Moderator (N = 633)*

<i>Variable</i>	R^2	<i>B</i>	<i>SE B</i>	β	<i>F Step</i>
Step 1	0.01				0.99
Data Wave (Wave 1 = 0)		0.17	0.63	0.01	
Gender (Girls = 0)		0.80	0.44	0.07	
White		0.31	0.60	0.02	
Black		0.86	0.80	0.05	
Asian		-0.97	1.40	-0.03	
Mixed/Other		0.80	0.86	0.04	
School 1		-0.39	1.05	-0.02	
School 2		0.53	0.54	0.05	
Step 2	0.16				40.76**
Overt Victimization ^a		1.29	0.72	0.08	
Relational Victimization ^a		4.11	0.84	0.22**	
Reputational Victimization ^a		2.45	0.58	0.19**	
Step 3	0.06				10.91**
Parent Support		-0.08	0.02	-0.21**	
Teacher Support		-0.05	0.02	-0.10*	
Classmate Support		0.00	0.02	0.01	
Close Friend Support		0.04	0.02	0.08	
Step 4	0.01				0.90
Gender (Girls = 0)		1.67	0.44	0.15**	
Asian		-2.61	1.27	-0.08*	
Relational Victimization		4.04	0.87	0.22**	
Reputational Victimization		2.16	0.57	0.17**	
Overt Victimization * Parent Support		-0.11	0.05	-0.39*	

Note: For Step 4, only significant effects were included in the table.

^aNatural log transformation

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

Final Model $F(24,608) = 7.98, p < .001, R^2 = 0.24$

Table 3.7: *Hierarchical Linear Regression Predicting Delinquent Behaviors with Social Support as the Moderator (N = 633)*

<i>Variable</i>	<i>R</i> ²		<i>SE B</i>	<i>β</i>	<i>F Step</i>
	<i>Step</i>	<i>B</i>			
Step 1	0.02				1.88
Data Wave (Wave 1 = 0)		0.23	0.36	0.03	
Gender (Girls = 0)		0.49	0.25	0.08	
White		-0.06	0.34	-0.01	
Black		0.20	0.46	0.02	
Asian		-1.64	0.80	-0.08*	
Mixed/Other		0.62	0.49	0.05	
School 1		-0.47	0.60	-0.04	
School 2		0.28	0.31	0.05	
Step 2	0.08				19.43**
Overt Victimization ^a		1.00	0.43	0.11*	
Relational Victimization ^a		0.87	0.50	0.08	
Reputational Victimization ^a		1.23	0.34	0.17**	
Step 3	0.11				22.11**
Parent Support		-0.07	0.01	-0.29**	
Teacher Support		-0.04	0.01	-0.15**	
Classmate Support		0.01	0.01	0.03	
Close Friend Support		0.02	0.01	0.05	
Step 4	0.02				1.44
Gender (Girls = 0)		0.90	0.25	0.14**	
Asian		-2.65	0.73	-0.15**	
Overt Victimization ^a		0.89	0.41	0.10*	
Reputational Victimization ^a		1.06	0.33	0.15**	

Note: For Step 4, only significant interactions were included in the table

^aNatural log transformation

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

Final Model $F(24,608) = 7.81, p < .001, R^2 = 0.24$

Table 3.8. *Disclosure of Peer Victimization to All Sources*

	Overt Victimization	Relational Victimization	Reputational Victimization
Total Disclosure (%)	97.5%	88.6%	93.6%
Parent	0.34(0.66)	0.74 (1.28)	0.50(0.88)
% disclosed	51.9%	38.4%	43.3%
Teacher	0.12(0.39)	0.08 (0.37)	0.09(0.39)
% disclosed	41.8%	9.8%	24.6%
Friend	0.86(0.91)	2.36(1.92)	1.45(1.10)
% disclosed	72.3%	78.9%	78.2%
Sibling	0.27(0.59)	0.54(1.16)	0.34(0.75)
% disclosed	48.4%	28.3%	35.8%
Significant Other	0.25(0.58)	0.69(1.29)	0.48(0.86)
% disclosed	47.3%	34.1%	42.4%
Other Person	0.09(0.33)	0.10(0.49)	0.08(0.35)
% disclosed	40.5%	9.9%	24.2%
No One	0.52(0.89)	1.35(1.71)	0.47(0.82)
% disclosed	56.2%	57.0%	43.8%

Table 3.9. *Hierarchical Linear Regression with Parent Support Predicting**Disclosure to Parents*

<i>Variable</i>	<i>R²</i> <i>Step</i>	<i>B</i>	<i>SE B</i>	<i>β</i>	<i>F Step</i>
Step 1	0.06				6.19**
Data Wave (Wave 1 = 0)		0.10	0.26	0.02	
Gender (Girls = 0)		-0.92	0.78	-0.21**	
Grade		-0.06	0.13	-0.02	
White		0.34	0.24	0.06	
Black		-0.12	0.32	-0.02	
Asian		-0.01	0.55	0.00	
Mixed/Other		0.08	0.34	0.01	
School 1		-0.35	0.44	-0.04	
School 2		-0.37	0.23	-0.08	
Step 2	0.04				26.46**
Parent Support ^a		0.03	0.01	0.21**	

^aCentered Variable* $p < .05$ ** $p < .01$ Final Model $F(10,607) = 6.46, p < .001, R^2 = 0.10$

Table 3.10. *Hierarchical Linear Regression with Teacher Support Predicting Disclosure to Teachers*

<i>Variable</i>	R^2 <i>Step</i>	<i>B</i>	<i>SE B</i>	β	<i>F Step</i>
Step 1	0.21				1.41
Data Wave (Wave 1 = 0)		0.16	0.09	0.09	
Gender (Girls = 0)		-0.08	0.06	-0.05	
Grade		0.05	0.05	0.05	
White		0.02	0.08	0.01	
Black		-0.20	0.11	-0.08	
Asian		0.12	0.19	0.03	
Mixed/Other		0.08	0.12	0.03	
School 1		0.26	0.15	0.08	
School 2		0.07	0.08	-0.05	
Step 2	0.01				4.80*
Teacher Support ^a		0.01	0.00	0.09*	

^aCentered Variable

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

Final Model $F(10,607) = 1.76, p > .05, R^2 = 0.03$

Table 3.11. *Hierarchical Linear Regression with Close Friend Support Predicting Disclosure to Friend*

<i>Variable</i>	R^2 <i>Step</i>	<i>B</i>	<i>SE B</i>	β	<i>F Step</i> ^a
Step 1	0.05				3.58*
Data Wave (Wave 1 = 0)		-0.56	0.35	-0.08	
Gender (Girls = 0)		-0.93	0.24	-0.15**	
Grade		-0.25	0.18	-0.06	
White		0.08	0.33	0.01	
Black		-1.01	0.44	-0.10*	
Asian		0.58	0.76	0.03	
Mixed/Other		-0.10	0.47	-0.01	
School 1		-0.30	0.60	-0.02	
School 2		-0.58	0.31	-0.10	
Step 2	0.00				0.23
Friend Support ^a		0.01	0.01	0.02	

^aCentered variable

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

Final Model $F(10,607) = 3.24, p < .001, R^2 = 0.05$

Table 3.12: *Hierarchical Linear Regression Predicting Social Anxiety with Disclosure as the Moderator (N = 616)*

<i>Variable</i>	<i>R² Step</i>	<i>B</i>	<i>SE B</i>	<i>β</i>	<i>F Step</i>
Step 1	0.03				2.23*
Data Wave (Wave 1 = 0)		-0.55	1.62	-0.02	
Gender (Girls = 0)		-1.26	1.12	-0.05	
Grade		-0.55	0.82	-0.03	
White		0.39	1.51	0.01	
Black		4.21	2.02	0.09*	
Asian		12.64	3.50	0.15**	
Mixed/Other		2.02	2.16	0.04	
School 1		-0.82	2.79	-0.01	
School 2		-0.76	1.43	-0.03	
Step 2	0.23				63.69**
Overt Victimization ^a		-4.44	1.72	-0.11**	
Relational Victimization ^a		24.77	2.06	0.52**	
Reputational Victimization ^a		1.21	1.38	0.04	
Step 3	0.00				0.77
Disclosure to Parent ^b		1.18	3.14	0.02	
Disclosure to Teacher ^b		3.56	8.88	0.02	
Disclosure to Friend ^b		-4.37	2.67	-0.07	
Disclosure to No One ^b		-1.83	2.63	-0.03	
Step 4	0.02				1.00
Asian		10.39	3.10	0.12**	
Overt Victimization ^a		-4.58	1.76	-0.12**	
Relational Victimization ^a		25.82	2.29	0.54**	
Overt Victimization *		-19.95	9.13	-0.45*	
Disclosure to Friend					

Note: For Step 4, only significant effects were included in the table.

^aNatural log transformation

^bCentered variable

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

Final Model $F(28,587) = 8.29, p < .001, R^2 = 0.28$

Table 3.13: *Hierarchical Linear Regression Predicting Anxiety/Depression with Disclosure as the Moderator (N = 616)*

<i>Variable</i>	<i>R² Step</i>	<i>B</i>	<i>SE B</i>	<i>β</i>	<i>F Step</i>
Step 1	0.03				2.29**
Data Wave (Wave 1 = 0)		-0.12	0.67	-0.01	
Gender (Girls = 0)		-1.75	0.46	-0.15**	
Grade		0.04	0.34	0.01	
White		0.81	0.62	0.06	
Black		1.06	0.83	0.05	
Asian		3.07	1.44	0.09*	
Mixed/Other		-0.20	0.89	-0.01	
School 1		0.06	1.15	0.00	
School 2		0.18	0.59	0.02	
Step 2	0.20				52.17**
Overt Victimization ^a		-0.14	0.72	-0.01	
Relational Victimization ^a		7.26	0.87	0.37**	
Reputational Victimization ^a		1.98	0.58	0.15**	
Step 3	0.02				3.33**
Disclosure to Parent ^b		-0.79	1.31	-0.02	
Disclosure to Teacher ^b		-2.22	3.70	-0.02	
Disclosure to Friend ^b		-3.27	1.12	-0.13**	
Disclosure to No One ^b		-0.22	1.10	0.01	
Step 4	0.04				2.46**
Gender (Girls = 0)		-1.38	0.45	-0.12**	
Relational Victimization ^a		7.99	0.94	0.40**	
Reputational Victimization ^a		2.36	0.60	0.18**	
Overt Victimization *		-11.44	3.75	-0.63**	
Disclosure to Friend					
Reputational Victimization *		6.70	3.04	0.44*	
Disclosure to No One					

Note: For Step 4, only significant effects were included in the table.

^aNatural log transformation

^bCentered variable

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

Final Model $F(28,587) = 8.35, p < .001, R^2 = 0.29$

Table 3.14: *Hierarchical Linear Regression Predicting Aggressive Behaviors with Disclosure as the Moderator (N = 616)*

<i>Variable</i>	<i>R</i> ²		<i>SE B</i>	<i>β</i>	<i>F Step</i>
	<i>Step</i>	<i>B</i>			
Step 1	0.02				1.06
Data Wave (Wave 1 = 0)		0.13	0.65	0.01	
Gender (Girls = 0)		0.82	0.45	0.08	
Grade		0.30	0.33	0.04	
White		0.26	0.61	0.02	
Black		0.88	0.82	0.05	
Asian		-0.92	1.41	-0.03	
Mixed/Other		0.76	0.87	0.04	
School 1		-0.29	1.12	-0.01	
School 2		0.84	0.58	0.08	
Step 2	0.17				40.97**
Overt Victimization ^a		1.22	0.72	0.08	
Relational Victimization ^a		4.45	0.87	0.23**	
Reputational Victimization ^a		2.54	0.58	0.20**	
Step 3	0.01				1.40
Disclosure to Parent ^b		-1.80	1.32	-0.06	
Disclosure to Teacher ^b		-5.29	3.73	-0.06	
Disclosure to Friend ^b		0.41	1.12	0.02	
Disclosure to No One ^b		-.01	1.11	0.00	
Step 4	0.02				0.97
Gender (Girls = 0)		1.13	0.46	0.10*	
School 2		1.07	0.53	0.10*	
Relational Victimization ^a		4.21	0.96	0.22**	
Reputational Victimization ^a		2.67	0.62	0.21**	
Disclosure to Friend ^b		19.92	8.83	0.81*	

Note: For Step 4, only significant effects were included in the table.

^aNatural log transformation

^bCentered variable

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

Final Model $F(28,587) = 5.42, p < .001, R^2 = 0.21$

Table 3.15: *Hierarchical Linear Regression Predicting Delinquent Behaviors with Disclosure as the Moderator (N = 616)*

<i>Variable</i>	<i>R² Step</i>	<i>B</i>	<i>SE B</i>	<i>β</i>	<i>F Step</i>
Step 1	0.02				1.64
Data Wave (Wave 1 = 0)		0.21	0.37	0.03	
Gender (Girls = 0)		0.48	0.26	0.08	
Grade		0.07	0.19	0.02	
White		-0.09	0.35	-0.01	
Black		0.19	0.47	0.02	
Asian		1.63	0.81	-0.08*	
Mixed/Other		0.60	0.50	0.05	
School 1		-0.49	0.64	-0.04	
School 2		0.33	0.33	0.05	
Step 2	0.09				19.95
Overt Victimization ^a		0.99	0.43	0.11*	**
Relational Victimization ^a		1.05	0.52	0.10*	
Reputational Victimization ^a		1.17	0.35	0.17**	
Step 3	0.04				6.28*
Disclosure to Parent ^b		-2.76	0.78	-0.15**	*
Disclosure to Teacher ^b		-4.23	2.20	-0.08	
Disclosure to Friend ^b		0.19	0.66	0.01	
Disclosure to No One ^b		0.50	0.65	0.03	
Step 4	0.03				1.55
Asian		-1.73	0.77	-0.09*	
Overt Victimization ^a		1.03	0.44	0.11*	
Relational Victimization ^a		1.14	0.57	0.10*	
Reputational Victimization ^a		1.34	0.36	0.18**	
Disclosure to Friend ^b		14.42	5.19	1.01**	

Note: For Step 4, only significant effects were included in the table

^bCentered variable

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

Final Model $F(28,587) = 4.41, p < .001, R^2 = 0.17$

APPENDIX A: Consent and Assent Forms

**University of Miami
Social Relationships Project
Department of Psychology
PO Box 249229
Coral Gables, FL 33124**

Dear Parent:

We invite your child to participate in a research study. In the coming weeks, high school students will have an opportunity to participate in a survey of adolescents' social relationships and adjustment. This project will be conducted by Dr. Annette La Greca, a University of Miami professor, and one doctoral student at the University of Miami (Lisa Bailey).

What is the study about? The purpose of this research study is to understand how adolescents' social relationships affect their overall emotional adjustment. Potentially, this research could lead to the development of preventive interventions for adolescents who are "at risk" for problems, such as anxiety, depression, and low self-esteem. Several questions to be examined include: how are adolescents' negative experiences with peers related to their emotional adjustment; what kinds of social support do adolescents receive from their parents, teachers, and peers; how does social support relate to adolescents' emotional adjustment; and how do peer experiences, social support, and emotional adjustment change over time? Because we are tracking changes over time, we ask that your child complete questionnaires at two different time points – Time 1 in a few weeks and Time 2 near the end of the school year.

What will be asked of my child? If you allow your child to participate, s/he will complete questionnaires that ask about your child's: current social and behavioral adjustment; social support from parents, teachers, and peers; peer experiences; emotional adjustment (e.g., self esteem, feelings of anxiety and depression); and gender identity. The Time 1 questionnaires take about 45 minutes to complete. At Time 2, the questionnaires about social, emotional, and behavioral adjustment, peer experiences, and social support will be repeated; this will take about 30 minutes. All questionnaires will be completed in school at an appropriate time determined by the school. You will not be told your child's answers.

Risks and Benefits: We expect that most adolescents will view their participation as a positive experience. Your child's participation in this study does not involve any known risks or discomfort. It is possible that some of the questions may make your child feel uncomfortable. Your child does not have to answer any questions that make him/her feel uncomfortable. The study will not benefit your child directly. The information will be used to develop interventions for adolescents.

Confidentiality. To protect your child's responses, no names will be used on the questionnaires. At Time 1, your child will be assigned a number to put on the

questionnaires. Your child's name will not be on the response forms. Your child's name and number will be recorded on a master list by one of the investigators. This is so that we can match your child's responses for Time 1 and Time 2. After the questionnaires are completed at Time 2, the list linking your child's name and number will be destroyed. All of the information obtained will be put in a computer file, and will be recorded by number. No one will know your child's responses. All results will be reported by group and not by name. The investigators and their assistants will consider you child's records confidential to the extent provided by law. However, it is possible that the investigators' records may be reviewed for audit purposes by authorized employees of the University of Miami, The Department of Health and Human Services (DHHS), or other agents who will be bound by the same provisions of confidentiality.

Other Information. Participation is voluntary. If you allow your child to participate, please sign the consent form attached below. Anyone wishing for their child not to participate or to withdraw permission may do so at any time without negative consequences to their child. If you have any questions, contact Dr. La Greca (305-284-5222, ext. 1) or Lisa Bailey (305-284-5222, ext. 6) at the University of Miami. If you have any questions about your rights as a research participant, contact the Human Subjects Research Office (305-243-3195) at the University of Miami.

Sincerely,

Annette M. La Greca, Ph.D.

Lisa D. Bailey, M.S.

 Parent's Name: _____ Your child's name: _____

_____ Yes, my child has my consent to participate in the research project. I understand that the project will be explained to my child and that s/he is free to decline to participate at any time. I further understand that the information from the questionnaires will be kept strictly confidential and available only to the research staff.

_____ No, my child does not have my consent to participate.

Parent's signature: _____

Date: _____

University of Miami
Social Relationships Project
Department of Psychology
PO Box 249229
Coral Gables, FL 33124

Dear Student (over 18):

We invite you to participate in a research study. High school students will have an opportunity to participate in a survey of adolescents' social relationships and adjustment. This project will be conducted by Dr. Annette La Greca, a University of Miami professor, and one doctoral student at the University of Miami (Lisa Bailey).

What is the study about? The purpose of this research study is to understand how adolescents' social relationships affect their overall emotional adjustment. Potentially, this research could lead to the development of preventive interventions for adolescents who are "at risk" for problems, such as anxiety, depression, and low self-esteem. Several questions to be examined include: how are adolescents' negative experiences with peers related to their emotional adjustment; what kinds of social support do adolescents receive from their parents, teachers, and peers; how does social support relate to adolescents' emotional adjustment; and how do peer experiences, social support, and emotional adjustment change over time? Because we are tracking changes over time, we ask that you complete questionnaires at two different time points – Time 1 in a few weeks and Time 2 near the end of the school year.

What will be asked of me? If you agree to participate, you will complete questionnaires that ask about your: current social and behavioral adjustment; social support from parents, teachers, and peers; peer experiences; emotional adjustment (e.g., self esteem, feelings of anxiety and depression); and gender identity. The Time 1 questionnaires take about 45 minutes to complete. At Time 2, the questionnaires about social, emotional, and behavioral adjustment, peer experiences, and social support will be repeated; this will take about 30 minutes. All questionnaires will be completed in school at an appropriate time determined by the school. Your answers will not be shared with your family.

Risks and Benefits: We expect that most students will view their participation as a positive experience. Your participation in this study does not involve any known risks or discomfort. It is possible that some of the questions may make you feel uncomfortable. You do not have to answer any questions that make you feel uncomfortable. The study will not benefit you directly. The information will be used to develop interventions for adolescents.

Confidentiality. To protect your responses, no names will be used on the questionnaires. At Time 1, you will be assigned a number to put on the questionnaires. Your name will not be on the response forms. Your name and number will be recorded on a master list by one of the investigators. This is so that we can match your responses for Time 1 and Time 2. After the questionnaires are completed at Time 2, the list

linking your name and number will be destroyed. All of the information obtained will be put in a computer file, and will be recorded by number. No one will know your responses. All results will be reported by group and not by name. The investigators and their assistants will consider your records confidential to the extent provided by law. However, it is possible that the investigators' records may be reviewed for audit purposes by authorized employees of the University of Miami, The Department of Health and Human Services (DHHS), or other agents who will be bound by the same provisions of confidentiality.

Other Information. Participation is voluntary. If you participate, please sign the consent form attached below. If you decide not to participate or withdraw from the study, you may do so at any time without negative consequences. If you have any questions, contact Dr. La Greca (305-284-5222, ext. 1) or Lisa Bailey (305-284-5222, ext. 6) at the University of Miami. If you have any questions about your rights as a research participant, contact the Human Subjects Research Office (305-243-3195) at the University of Miami.

Sincerely,

Annette M. La Greca, Ph.D.

Lisa D. Bailey, M.S.

 Signature of Participant

 Date

 Signature of person obtaining consent

 Date

**University of Miami
Social Relationships Project
Department of Psychology
PO Box 249229
Coral Gables, FL 33124**

Assent Form

Dear Student:

We invite you to participate in a research study. High school students will have an opportunity to participate in a survey of adolescents' social relationships and adjustment. This project will be conducted by Dr. Annette La Greca, a University of Miami professor, and one doctoral student at the University of Miami (Lisa Bailey). The purpose of this research study is to understand how adolescents' social relationships affect their overall emotional adjustment.

If you decide you want to be part of this study, you will be asked to complete questionnaires about experiences with peers and about your own behaviors and feelings. We would like to you to complete the enclosed questionnaires now, which should take about 30-45 minutes and again before the school year ends.

We expect that most students will view their participation as a positive experience. You might feel uncomfortable with some of the questions but you do not have to answer any question you do not want to.

Not everyone who takes part in this study will benefit. A benefit means that something good happens to you. We think these benefits might be helping create programs that might help adolescents.

This is not a test, and there are no right or wrong answers. We are interested in your honest answers to the questions. To protect your responses, no names will be used on the questionnaires. Please do NOT write your name anywhere on this packet. No one will be able to identify the answers you write. At Time 1, you will be assigned a number to put on the questionnaires. Your name and number will be recorded on a master list by one of the investigators. This is so that we can match your responses for Time 1 and Time 2. When we are finished with this study we will write a report about what was learned. This report will not include your name or that you were in the study.

The investigators and their assistants will consider your records confidential to the extent provided by law. However, it is possible that the investigators' records may be reviewed for audit purposes by authorized employees of the University of Miami, The Department of Health and Human Services (DHHS), or other agents who will be bound by the same provisions of confidentiality. When we are finished with this study we will write a report about what was learned. This report will not include your name or that you were in the study.

This survey is voluntary. You do not have to participate. If you decide to stop after we begin, that's okay too; nothing bad will happen if you do stop the study. You may ask questions about the study at any time. If you have any questions about your rights as a research participant, contact the Human Subjects Research Office (305-243-3195) at the University of Miami.

Sincerely,

Annette M. La Greca, Ph.D.

Lisa D. Bailey, M.S.

Dr. La Greca (305-284-5222, ext. 1) or Lisa Bailey (305-284-5222, ext. 6)

If you decide you want to be in this study, please sign your name.

_____ I agree to participate in this study.

_____ I do NOT agree to participate in this study.

(Sign your name here)

(Date)

University of Miami
Social Relationships Project
Department of Psychology
PO Box 249229
Coral Gables, FL 33124

Dear Parent:

We invite your child to participate in a research study. In the coming weeks, high school students will have an opportunity to participate in a survey of adolescents' social relationships and adjustment. This project will be conducted by Dr. Annette La Greca, a University of Miami professor, and doctoral students at the University of Miami (Lisa Bailey, Rebecca Siegel, Ryan Landoll).

What is the study about? The purpose of this research study is to understand how adolescents' social relationships affect their overall emotional adjustment. Potentially, this research could lead to the development of preventive interventions for adolescents who are "at risk" for problems, such as anxiety, depression, and low self-esteem. Several questions to be examined include: how are adolescents' close friendships, romantic relationships, and negative experiences with peers related to their emotional adjustment; what kinds of social support do adolescents receive from their parents, teachers, and peers; how does social support relate to adolescents' emotional adjustment; how do social skills influence adolescents' peer relationships; and how do peer experiences, social support, and emotional adjustment change over time. Because we are tracking changes over time, we ask that your child complete questionnaires at two different time points – Time 1 in a few weeks and Time 2 near the end of the semester.

What will be asked of my child? If you allow your child to participate, s/he will complete questionnaires that ask about your child's: current social and behavioral adjustment; social support from parents, teachers, and peers; peer experiences; emotional adjustment (e.g., self esteem, feelings of anxiety and depression); gender identity; perceptions of their friendships and romantic relationships; and social skills. The Time 1 questionnaires take about 60 minutes to complete. At Time 2, the questionnaires about social, emotional, and behavioral adjustment, peer experiences, and social support will be repeated; this will take about 30 minutes. All questionnaires will be completed in school at an appropriate time determined by the school. You will not be told your child's answers. You must complete **Box #1** on the next page, to allow your child to participate.

What will be asked of me? If you agree, we would also like to interview you briefly by telephone to ask about your adolescent's mood and behavior. The phone interview will take about 30 minutes, and will be conducted by a member of the research team. We will ask you questions about your adolescent's mood and behavior over the past month. You do not have to answer any questions that you do not want to answer. You must complete **Box #2** on the next page, if you agree to participate.

Permission to recontact. If you or your child participates, we would like permission to re-contact you in the future, if we continue the project over a longer period of time. You do not have to decide now if you or your child would like to participate further. We are only asking for permission to re-contact you, to tell you about future projects, should they

develop. To provide permission for us to re-contact you, please complete Box #3 on the next page.

Risks and Benefits: We expect that most adolescents will view their participation as a positive experience. Your child's participation in this study does not involve any known risks or discomfort. It is possible that some of the questions may make your child feel uncomfortable. Your child does not have to answer any questions that make him/her feel uncomfortable. The study will not benefit your child directly. The information will be used to develop interventions for adolescents. Should your child become upset, he/ she should seek help from the guidance counselor.

Confidentiality. To protect your child's responses, no names will be used on the questionnaires. At Time 1, your child will be assigned a number to put on the questionnaires. Your child's name will not be on the response forms. Your child's name and number will be recorded on a master list by one of the investigators. This is so that we can match your child's responses for Time 1 and Time 2. After the questionnaires are completed at Time 2, the list linking your child's name and number will be destroyed. All of the information obtained will be put in a computer file, and will be recorded by number. No one will know your child's responses. All results will be reported by group and not by name. The investigators and their assistants will consider you child's records confidential to the extent provided by law. However, it is possible that the investigators' records may be reviewed for audit purposes by authorized employees of the University of Miami, The Department of Health and Human Services (DHHS), or other agents who will be bound by the same provisions of confidentiality.

Other Information. Participation is voluntary. If you allow your child to participate, please sign the consent form attached below. Anyone wishing for their child not to participate or to withdraw permission may do so at any time without negative consequences to their child. If you have any questions, contact Dr. La Greca (305-284-5222, ext. 1) or Rebecca Siegel (305-284-6986) at the University of Miami. If you have any questions about your rights as a research participant, contact the Human Subjects Research Office (305-243-3195) at the University of Miami.

Sincerely,

Annette M. La Greca, Ph.D. Lisa D. Bailey, M.S. Rebecca Siegel, M.S. Ryan
Landoll, B.S.

Please complete each of the three parts below. Please sign your name in each section.

Box #1: PERMISSION FOR CHILD TO PARTICIPATE – complete the form and sign

Parent's Name (PRINT): _____ **Child's name (PRINT):**

____ Yes, my child has my consent to participate in the research project. I understand that the project will be explained to my child and that s/he is free to decline to participate at any time. I further understand that the information from the questionnaires will be kept strictly confidential and available only to the research staff.

No, my child does not have my consent to participate.

Parent's signature: _____ **Date:** _____

Box #2: PARENT PARTICIPATION – complete the form and sign

Parent's Name (PRINT): _____ **Child's name (PRINT):** _____

Yes, I would like to participate. I understand that someone from the project will contact me by phone or email to schedule a phone interview at my convenience. I also understand that I am free to stop at any time, and that the information from the study will be kept confidential. Answers to the questions will be kept confidential and available only to the research staff.

No, I do not want to participate.

Parent's signature: _____

PHONE NUMBER: _____

EMAIL ADDRESS _____

Preferred Method of Contact (Phone or EMail): _____

Box #3: PERMISSION TO RECONTACT – complete the form and sign

Parent's Name (PRINT): _____ **Child's name (PRINT):** _____

Yes, you may contact me in the future for my child or I to hear about any additional projects. I understand that there is no obligation for my child or I to participate.

No, do not contact me in the future.

Parent's signature: _____

PHONE NUMBER: _____

EMAIL ADDRESS _____

Preferred Method of Contact (Phone or EMail): _____

University of Miami
Social Relationships Project
Department of Psychology
PO Box 249229
Coral Gables, FL 33124

Dear Student (over 18):

We invite you to participate in a research study. High school students will have an opportunity to participate in a survey of adolescents' social relationships and adjustment. This project will be conducted by Dr. Annette La Greca, a University of Miami professor, and doctoral students at the University of Miami (Lisa Bailey, Rebecca Siegel, and Ryan Landoll).

What is the study about? The purpose of this research study is to understand how adolescents' social relationships affect their overall emotional adjustment. Potentially, this research could lead to the development of preventive interventions for adolescents who are "at risk" for problems, such as anxiety, depression, and low self-esteem. Several questions to be examined include: how are adolescents' close friendships, romantic relationships, and negative experiences with peers related to their emotional adjustment; what kinds of social support do adolescents receive from their parents, teachers, and peers; how does social support relate to adolescents' emotional adjustment; how do social skills influence adolescents' peer relationships; and how do peer experiences, social support, and emotional adjustment change over time? Because we are tracking changes over time, we ask that you complete questionnaires at two different time points –within the next month and then again about two months later.

What will be asked of me? If you agree to participate, you will complete questionnaires that ask about your: current social and behavioral adjustment; social support from parents, teachers, and peers; peer experiences; emotional adjustment (e.g., self esteem, feelings of anxiety and depression); gender identity, perceptions of your friendships and romantic relationships; and social skills. The Time 1 questionnaires take about 60 minutes to complete. At Time 2, the questionnaires about social, emotional, and behavioral adjustment, peer experiences, and social support will be repeated; this will take about 30 minutes. All questionnaires will be completed in school at an appropriate time determined by the school. We also will be asking one of your parents for permission to interview them briefly by telephone to ask about your mood and behavior. However, your answers will not be shared with your family.

Permission to recontact. If you participate, we would like permission to recontact you in the future, if we continue the project over a longer period of time. You do not have to decide now if you would like to participate further. To provide permission for us to re-contact you, please put your initials on the line underneath your signature.

Risks and Benefits: We expect that most students will view their participation as a positive experience. Your participation in this study does not involve any known risks or discomfort. It is possible that some of the questions may make you feel uncomfortable. You do not have to answer any questions that make you feel uncomfortable. The study will not benefit you directly. The information will be used to develop interventions for

adolescents. This study is not an intervention. Should you become upset, you should seek help from your guidance counselor.

Confidentiality. To protect your responses, no names will be used on the questionnaires. At Time 1, you will be assigned a number to put on the questionnaires. Your name will not be on the response forms. Your name and number will be recorded on a master list by one of the investigators. This is so that we can match your responses for Time 1 and Time 2. After the questionnaires are completed at Time 2, the list linking your name and number will be destroyed. All of the information obtained will be put in a computer file, and will be recorded by number. No one will know your responses. All results will be reported by group and not by name. The investigators and their assistants will consider your records confidential to the extent provided by law. However, it is possible that the investigators' records may be reviewed for audit purposes by authorized employees of the University of Miami, The Department of Health and Human Services (DHHS), or other agents who will be bound by the same provisions of confidentiality.

Other Information. Participation is voluntary. If you participate, please sign the consent form attached below. If you decide not to participate or withdraw from the study, you may do so at any time without negative consequences. If you have any questions, contact Dr. La Greca (305-284-5222, ext. 1) or Rebecca Siegel (305-284-6986) at the University of Miami. If you have any questions about your rights as a research participant, contact the Human Subjects Research Office (305-243-3195) at the University of Miami.

Sincerely,

Annette M. La Greca, Ph.D. Lisa D. Bailey, M.S. Rebecca Siegel, M.S. Ryan Landoll, B.S.

Signature of Participant

Date

Signature of Person Obtaining Consent

Date

Can we recontact you in the future (put your initials on the correct line)? YES NO

**University of Miami
Social Relationships Project
Department of Psychology
PO Box 249229
Coral Gables, FL 33124**

Assent Form

We are doing a research study on adolescents' relationships with peers and their social and emotional behaviors. If you decide you want to be part of this study, you will be asked to complete questionnaires about experiences with peers and about your own behaviors and feelings. We would like you to complete the enclosed questionnaires now, which should take about 60 minutes. We will also ask you similar questions in a few weeks that will take about 30 minutes of your time.

There are some things about this study you should know. **This is not a test, and there are no right or wrong answers.** We are interested in your honest answers to the questions. **Please do NOT write your name anywhere on this packet** – it is completely anonymous!! No one will be able to identify the answers you write.

You might feel uncomfortable with some of the questions but you do not have to answer any question you do not want to. This study is not an intervention. Should you become upset, you should seek help from your guidance counselor.

No benefits to participation are anticipated. A benefit means that something good happens to you. We think the benefit of this study might be to help create programs that help adolescents.

When we are finished with this study we will write a report about what was learned. This report will not include your name or that you were in a study.

This survey is voluntary. You do not have to participate. If you decide to stop after we begin, that's okay too; nothing bad will happen if you do stop the study. You may ask questions about the study at any time.

If you participate, we will also ask one of your parents questions about your mood and behavior. We will not share your answers to the questionnaires with your parents.

If you participate, we would like to be able to recontact you in the future, if we continue the project over a longer period of time. You do not have to decide now if you would like to participate when we re-contact you. We are only asking for permission to re-contact you, to tell you about future projects.

Do you have any questions? If you decide you want to be in this study, please sign your name.

____ I agree to participate in this study. ____ I do NOT agree to participate in this study.

(Sign your name here)

(Date)

Can we recontact you in the future (put your initials on the correct line)? ____ YES ____ NO

APPENDIX B: Background Information

1. Gender Male Female
2. Grade 9 10 11 12
3. Date of Birth (Month/Day/Year) / /
4. What is your ethnic background? Check the one that BEST fits your background
 White/Caucasian (not Hispanic)
 African American (not Hispanic)
 Caribbean-American (e.g., Haitian, Jamaican)
 Hispanic or Latino (e.g., Cuban, Columbian, Puerto Rican, Mexican) *circle all that apply*
 Asian
 Mixed Ethnicity/Other (please list) _____
5. From the above list, which ethnicity do you identify with the most? _____
6. What language did you FIRST speak as a child? (circle one) English Spanish Other(explain)
7. Who do you currently live with?
 Biological (birth) mom only
 Biological (birth) dad only
 Both biological parents
 Biological mom and her significant other (e.g. step-parent)
 Biological dad and his significant other (e.g. step-parent)
 Adoptive parents
 Other relatives
 Other (explain) _____
8. How many brothers and sisters do you live with at home? _____
9. How many of them are older than you? _____
10. PARENTS' OCCUPATION (answer the questions about the parent(s), you live with).
What is your mother's (or step-mother's) occupation? _____
What is her job title? _____
What is your father's (or step-father's) occupation? _____
What is his job title? _____

Continue to next page!

I. How many *very close friends* do you have? _____

Starting with your *closest friend*, please complete the information below, about each of your close friends. Start with your very best friend, then your next best friend, and so on. You do not have to list 8 people; just your *closest* friends.

For **ethnicity**, you can use these letters: **W** = White (not Hispanic), **AA** = African-American (not Hispanic), **CA** = Caribbean-American, **H** = Hispanic/Latino, **A** = Asian, **M** = Mixed Ethnicity or other

Friend's initial of first name	Sex (M or F)	Age	Ethnicity (White, Black, Hispanic, etc.)	How Long Have You Been Friends?			Does this person go to the same school as you? (Yes/No)
				1-6 months	6 months – 1 year	Over 1 year	
<i>Example A.</i>	<i>Female</i>	<i>17</i>	<i>H</i>		<i>X</i>		<i>yes</i>
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							

II. Starting with your *closest relative*, please complete the information below, about each of your family members that you have a close relationship with. Start with your very closest relative, then your next closest relative, and so on. You do not have to list 8 people; just your relatives you feel *closest* to.

For **ethnicity**, you can use these letters: **W** = White (not Hispanic), **AA** = African-American (not Hispanic), **CA** = Caribbean-American, **H** = Hispanic/Latino, **A** = Asian, **M** = Mixed Ethnicity or other

Relative's initial of first name	Sex (M or F)	Age	Ethnicity (White, Black, Hispanic, etc.)	How is this person related to you? (Mother, Father, Brother, Sister, etc.)
<i>Example A.</i>	<i>Female</i>	<i>17</i>	<i>H</i>	<i>Mother</i>
1.				
2.				
3.				
4.				
5.				

APPENDIX C: Revised Peer Experiences Questionnaire

**These questions ask about some things that often happen between teens.
Please rate how often these things have happened to you in the past year.**

How often has this happened to you?

1 = Never 2 = Once or Twice 3 = A Few Times 4 = About Once a Week 5 = A Few Times a Week

1. Some teens left me out of an activity that I really wanted to be included in. **1 2 3 4 5**
At the times this has happened who have you told, if anyone? (You can circle more than one.)

Parent Teacher Friend No one
 Sibling Boyfriend/Girlfriend Other (describe): _____

2. A teen chased me like he/she was really trying to hurt me. **1 2 3 4 5**
At the times this has happened who have you told, if anyone? (You can circle more than one.)

Parent Teacher Friend No one
 Sibling Boyfriend/Girlfriend Other (describe): _____

3. Another teen helped me when I was having a problem. **1 2 3 4 5**

4. A teen I wanted to be with would not sit near me at lunch or in class. **1 2 3 4 5**
At the times this has happened who have you told, if anyone? (You can circle more than one.)

Parent Teacher Friend No one
 Sibling Boyfriend/Girlfriend Other (describe): _____

5. A teen tried to damage my social reputation by spreading rumors about me.

1 2 3 4 5

At the times this has happened who have you told, if anyone? (You can circle more than one.)

Parent Teacher Friend No one
 Sibling Boyfriend/Girlfriend Other (describe): _____

6. Another teen was nice and friendly to me when I needed help. **1 2 3 4 5**

A teen did not invite me to a party/social event even though they knew that I wanted to go.

1 2 3 4 5

At the times this has happened who have you told, if anyone? (You can circle more than one.)

Parent Teacher Friend No one
 Sibling Boyfriend/Girlfriend Other (describe): _____

7. A teen left me out of what they were doing. **1 2 3 4 5**

At the times this has happened who have you told, if anyone? (You can circle more than one.)

Parent Teacher Friend No one
 Sibling Boyfriend/Girlfriend Other (describe): _____

8. To get back at me, another teen told me that he/she would not be friends with me anymore. 1 2 3 4 5
At the times this has happened who have you told, if anyone? (You can circle more than one.)
 Parent Teacher Friend No one
 Sibling Boyfriend/Girlfriend Other (describe): _____
9. Another teen stuck up for me when I was being picked on or excluded. 1 2 3 4 5
10. Another teen gossiped about me so others would not like me. 1 2 3 4 5
At the times this has happened who have you told, if anyone? (You can circle more than one.)
 Parent Teacher Friend No one
 Sibling Boyfriend/Girlfriend Other (describe): _____
11. A teen threatened to hurt or beat me up. 1 2 3 4 5
At the times this has happened who have you told, if anyone? (You can circle more than one.)
 Parent Teacher Friend No one
 Sibling Boyfriend/Girlfriend Other (describe): _____
12. A teen gave me the silent treatment (did not talk to me on purpose). 1 2 3 4 5
At the times this has happened who have you told, if anyone? (You can circle more than one.)
 Parent Teacher Friend No one
 Sibling Boyfriend/Girlfriend Other (describe): _____
13. Another teen said mean things about me so that people would think I was a loser. 1 2 3 4 5
At the times this has happened who have you told, if anyone? (You can circle more than one.)
 Parent Teacher Friend No one
 Sibling Boyfriend/Girlfriend Other (describe): _____
14. A teen helped me join a group or conversation. 1 2 3 4 5
15. A teen hit, kicked, or pushed me in a mean way. 1 2 3 4 5
At the times this has happened who have you told, if anyone? (You can circle more than one.)
 Parent Teacher Friend No one
 Sibling Boyfriend/Girlfriend Other (describe): _____
16. A teen teased me in a mean way, by saying rude things or calling me bad names. 1 2 3 4 5
At the times this has happened who have you told, if anyone? (You can circle more than one.)
 Parent Teacher Friend No one
 Sibling Boyfriend/Girlfriend Other (describe): _____
17. A teen spent time with me when I had no one else to hang out with. 1 2 3 4 5

APPENDIX D: Child and Adolescent Social Support Scale

CHILD AND ADOLESCENT SOCIAL SUPPORT SCALE - CASSS

Grades 3 – 12

Christine Kerres Malecki, Michelle Kilpatrick Demaray, and Stephen N. Elliott

On the next two pages, you will be asked to respond to sentences about some form of support or help that you might get from either a parent, a teacher, a classmate, a close friend, or people in your school. Read each sentence carefully and respond to them honestly. There are no right or wrong answers.

For each sentence you are asked to provide two responses. First, rate how often you receive the support described and then rate how important the support is to you. Below is an example. Please read it carefully before starting your own ratings.

	<u>HOW OFTEN?</u>						<u>IMPORTANT?</u>		
	NEVER	ALMOST NEVER	SOME OF THE TIME	MOST OF THE TIME	ALMOST ALWAYS	ALWAYS	NOT IMPORTANT	IMPORTANT	VERY IMPORTANT
1. My teacher(s) helps me solve problems.	1	2	3	4	5	6	1	2	3

In this example, the student describes her 'teacher helps me solve problems' as something that happens 'some of the time' and that is 'important' to her.

Please ask for help if you have a question or don't understand something. Do not skip any sentences. Please turn to the next page and answer the questions. Thank you!

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				How Often?						Important?			
				Never	Almost Never	Some of the Time	Most of the Time	Almost Always	Always	Not Important	Important	Very Important	
My Parent(s)...													
E	I	A	I	My Parent(s)...									
				1. ...show they are proud of me.	1	2	3	4	5	6	1	2	3
				2. ...understand me.	1	2	3	4	5	6	1	2	3
				3. ...listen to me when I need to talk.	1	2	3	4	5	6	1	2	3
				4. ...make suggestions when I don't know what to do.	1	2	3	4	5	6	1	2	3
				5. ...give me good advice.	1	2	3	4	5	6	1	2	3
				6. ...help me solve problems by giving me information.	1	2	3	4	5	6	1	2	3
				7. ...tell me I did a good job when I do something well.	1	2	3	4	5	6	1	2	3
				8. ...nicely tell me when I make mistakes.	1	2	3	4	5	6	1	2	3
				9. ...reward me when I've done something well.	1	2	3	4	5	6	1	2	3
				10. ...help me practice my activities.	1	2	3	4	5	6	1	2	3
				11. ...take time to help me decide things.	1	2	3	4	5	6	1	2	3
				12. ...get me many of the things I need.	1	2	3	4	5	6	1	2	3
				How Often?						Important?			
				Never	Almost Never	Some of the Time	Most of the Time	Almost Always	Always	Not Important	Important	Very Important	
My Teacher(s)...													
E	I	A	I	My Teacher(s)...									
				13. ...cares about me.	1	2	3	4	5	6	1	2	3
				14. ...treats me fairly.	1	2	3	4	5	6	1	2	3
				15. ...makes it okay to ask questions.	1	2	3	4	5	6	1	2	3
				16. ...explains things that I don't understand.	1	2	3	4	5	6	1	2	3
				17. ...shows me how to do things.	1	2	3	4	5	6	1	2	3
				18. ...helps me solve problems by giving me information.	1	2	3	4	5	6	1	2	3
				19. ...tells me I did a good job when I've done something well.	1	2	3	4	5	6	1	2	3
				20. ...nicely tells me when I make mistakes.	1	2	3	4	5	6	1	2	3
				21. ...tells me how well I do on tasks.	1	2	3	4	5	6	1	2	3
				22. ...makes sure I have what I need for school.	1	2	3	4	5	6	1	2	3
				23. ...takes time to help me learn to do something well.	1	2	3	4	5	6	1	2	3
				24. ...spends time with me when I need help.	1	2	3	4	5	6	1	2	3

				How Often?						Important?			
				Never	Almost Never	Some of the Time	Most of the Time	Almost Always	Always	Not Important	Important	Very Important	
My Classmates													
E	I	A	I	My Classmates...									
				25. ...treat me nicely.	1	2	3	4	5	6	1	2	3
				26. ...like most of my ideas and opinions.	1	2	3	4	5	6	1	2	3
				27. ...pay attention to me.	1	2	3	4	5	6	1	2	3
				28. ...give me ideas when I don't know what to do.	1	2	3	4	5	6	1	2	3
				29. ...give me information so I can learn new things.	1	2	3	4	5	6	1	2	3
				30. ...give me good advice.	1	2	3	4	5	6	1	2	3
				31. ...tell me I did a good job when I've done something well.	1	2	3	4	5	6	1	2	3
				32. ...nicely tell me when I make mistakes.	1	2	3	4	5	6	1	2	3
				33. ...notice when I have worked hard.	1	2	3	4	5	6	1	2	3
				34. ...ask me to join activities.	1	2	3	4	5	6	1	2	3
				35. ...spend time doing things with me.	1	2	3	4	5	6	1	2	3
				36. ...help me with projects in class.	1	2	3	4	5	6	1	2	3
				How Often?						Important?			
				Never	Almost Never	Some of the Time	Most of the Time	Almost Always	Always	Not Important	Important	Very Important	
My Close Friend													
E	I	A	I	My Close Friend...									
				37. ...understands my feelings.	1	2	3	4	5	6	1	2	3
				38. ... sticks up for me if others are treating me badly.	1	2	3	4	5	6	1	2	3
				39. ... helps me when I'm lonely.	1	2	3	4	5	6	1	2	3
				40. ...gives me ideas when I don't know what to do.	1	2	3	4	5	6	1	2	3
				41. ...gives me good advice.	1	2	3	4	5	6	1	2	3
				42. ...explains things that I don't understand.	1	2	3	4	5	6	1	2	3
				43. ...tells me he or she likes what I do.	1	2	3	4	5	6	1	2	3
				44. ...nicely tells me when I make mistakes.	1	2	3	4	5	6	1	2	3
				45. ...nicely tells me the truth about how I do on things.	1	2	3	4	5	6	1	2	3
				46. ...helps me when I need it.	1	2	3	4	5	6	1	2	3
				47. ...shares his or her things with me.	1	2	3	4	5	6	1	2	3
				48. ...takes time to help me solve my problems.	1	2	3	4	5	6	1	2	3

APPENDIX E: SAS-A (Adolescents)

This is not a test. There are no right or wrong answers. Please answer each item as honestly as you can. Use these numbers to show HOW MUCH YOU FEEL something is true for you:

- 1 = Not at all
- 2 = Hardly ever
- 3 = Sometimes
- 4 = Most of the time
- 5 = All the time

Now let's try these sentences first. How much does each describe how you feel?

	1	2	3	4	5
a. I like summer vacation....	1	2	3	4	5
b. I like to eat spinach.....	1	2	3	4	5
1. I worry about doing something new in front of others.....	1	2	3	4	5
2. I like to do things with my friends.....	1	2	3	4	5
3. I worry about being teased.....	1	2	3	4	5
4. I feel shy around people I don't know.....	1	2	3	4	5
5. I only talk to people I know really well.....	1	2	3	4	5
6. I feel that peers talk about me behind my back.....	1	2	3	4	5
7. I like to read.....	1	2	3	4	5
8. I worry about what others think of me.....	1	2	3	4	5
9. I'm afraid that others will not like me.....	1	2	3	4	5
10. I get nervous when I talk to peers I don't know very well.....	1	2	3	4	5
11. I like to play sports.....	1	2	3	4	5
12. I worry about what others say about me.....	1	2	3	4	5
13. I get nervous when I meet new people.....	1	2	3	4	5
14. I worry that others don't like me.....	1	2	3	4	5
15. I'm quiet when I'm with a group of people.....	1	2	3	4	5
16. I like to do things by myself.....	1	2	3	4	5
17. I feel that others make fun of me.....	1	2	3	4	5
18. If I get into an argument, I worry that the other person will not like me..	1	2	3	4	5
19. I'm afraid to invite others to do things with me because they might say no.....	1	2	3	4	5
20. I feel nervous when I'm around certain people.....	1	2	3	4	5
21. I feel shy even with peers I know well.....	1	2	3	4	5
22. It's hard for me to ask others to do things with me.....	1	2	3	4	5

APPENDIX F: Youth Self-Report

Below is a list of items that describe kids. For each item that describes you *now or within the past 6 months*, please circle the **2** if the item is *very true or often true* of you. Circle the **1** if the item is *somewhat or sometimes true* of you. If the item is *not true* of you, circle the **0**. **Please be sure to answer the following questions.**

0 = Not True 1 = Somewhat or Sometimes True 2 = Very True or Often True

- | | | | |
|--|---|---|---|
| 1. I act too young for my age. | 0 | 1 | 2 |
| 2. I argue a lot. | 0 | 1 | 2 |
| 3. I brag. | 0 | 1 | 2 |
| 4. I'm too dependent on adults. | 0 | 1 | 2 |
| 5. I feel lonely. | 0 | 1 | 2 |
| 6. I cry a lot. | 0 | 1 | 2 |
| 7. I am mean to others. | 0 | 1 | 2 |
| 8. I deliberately try to hurt or kill myself. | 0 | 1 | 2 |
| 9. I try to get a lot of attention. | 0 | 1 | 2 |
| 10. I destroy my own things. | 0 | 1 | 2 |
| 11. I destroy things belonging to others. | 0 | 1 | 2 |
| 12. I disobey at school. | 0 | 1 | 2 |
| 13. I don't get along with other kids. | 0 | 1 | 2 |
| 14. I don't feel guilty about doing something I shouldn't. | 0 | 1 | 2 |
| 15. I am jealous of others. | 0 | 1 | 2 |
| 16. I am afraid I might think or do something bad. | 0 | 1 | 2 |
| 17. I feel that I have to be perfect. | 0 | 1 | 2 |
| 18. I feel that no one loves me. | 0 | 1 | 2 |
| 19. I feel that others are out to get me. | 0 | 1 | 2 |
| 20. I feel worthless or inferior. | 0 | 1 | 2 |
| 21. I get into many fights. | 0 | 1 | 2 |
| 22. I get teased a lot. | 0 | 1 | 2 |
| 23. I hang around with kids who get in trouble. | 0 | 1 | 2 |
| 24. I lie or cheat. | 0 | 1 | 2 |

25. I am nervous or tense.	0	1	2
26. I am not liked by other kids.	0	1	2
27. I am too fearful or anxious.	0	1	2
28. I feel too guilty.	0	1	2
29. I physically attack people.	0	1	2
30. I am poorly coordinated or clumsy.	0	1	2
31. I would rather be with younger kids than kids my own age.	0	1	2
32. I run away from home.	0	1	2
33. I scream a lot.	0	1	2
34. I am self-conscious or easily embarrassed.	0	1	2
35. I set fires.	0	1	2
36. I show off or clown.	0	1	2
37. I steal at home.	0	1	2
38. I steal from places other than home.	0	1	2
39. I am stubborn.	0	1	2
40. My moods or feelings change suddenly.	0	1	2
41. I am suspicious.	0	1	2
42. I swear or use dirty language.	0	1	2
43. I think about killing myself.	0	1	2
44. I talk too much.	0	1	2
45. I tease others a lot.	0	1	2
46. I have a hot temper.	0	1	2
47. I threaten to hurt people.	0	1	2
48. I cut classes or skip school.	0	1	2
49. I am unhappy, sad, or depressed.	0	1	2
50. I am louder than other kids.	0	1	2
51. I use drugs for nonmedical purposes.	0	1	2
52. I keep from getting involved with others.	0	1	2
53. I worry a lot.	0	1	2

APPENDIX G: Results of Structural Equation Modeling Approach

Planned data analyses called for testing of the main study question (Does social support moderate the relationship between peer victimization and psychosocial maladjustment?) using Structural Equation Modeling with follow-up analyses using regression. However, analyses of the data using SEM procedures demonstrated that the measurement models did not fit the data. As such, the full model could not be tested and the study hypothesis could not be evaluated. Therefore, as regression analyses were planned for follow-up analyses, hypotheses were tested using hierarchical linear regression procedures and appropriate post hoc analyses. This was done in order to examine the relationships among specific types of peer victimization, social support, and internalizing and externalizing behaviors, rather than composites used in SEM procedures. However, as analyses were attempted using SEM procedures, the results of those analyses will be presented in this appendix.

Development and Analysis of Measurement Models

Hypotheses for the SEM models took into account gender differences; therefore, both measurement models were analyzed separately for girls and boys. As the separate measurement models could not be used, the models were tested again using the total sample. Results using the total sample were the same as the results using separate models for girls and boys, with the internalizing model being identified, but not fitting the data and the externalizing model not being identified. For the sake of accuracy, results will be presented according to original hypotheses, with separate models for girls and boys. The measurement models below were assessed with maximum likelihood of covariance matrices using the Analysis of Moment Structures program (AMOS; Arbuckle, 1999).

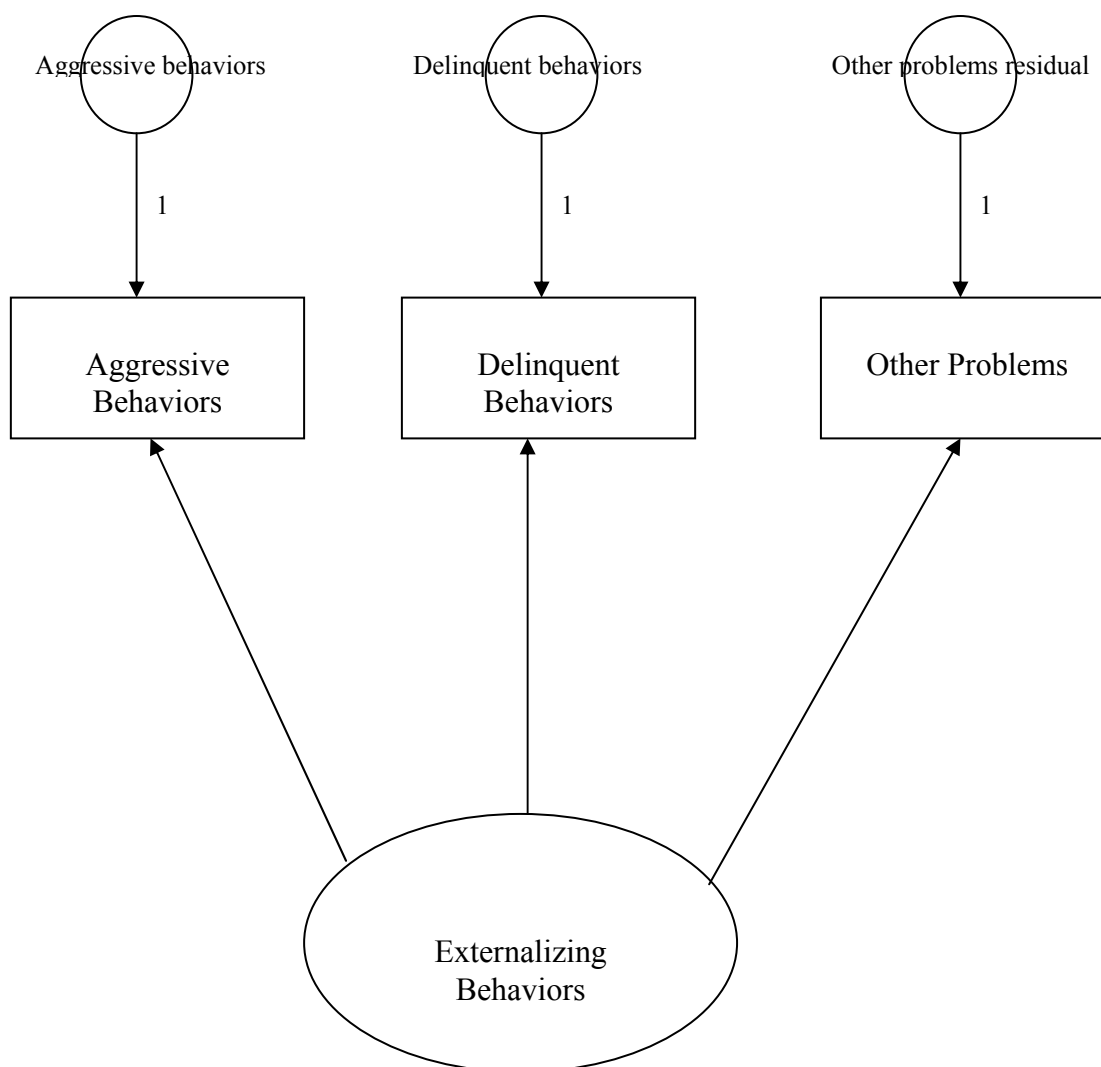
As it has been suggested that it is best to use multiple measures to evaluate the overall fit of models (Browne & Cudek, 1993; Kline, 2004), four indices of goodness-of-fit were obtained from the SEM analyses, Chi-square, the Goodness-of-Fit Index (GFI), the Comparative Fit Index (CFI), and the Root Mean Square Error of Approximation (RMSEA). The Chi-square is a measure of the probability that the model does not fit the data. As such, a large, or statistically significant, Chi-square value is indicative of poor model fit (Kline, 2004). The GFI is similar to the R^2 in regression and measures the amount of variance and covariance accounted for by the model. The CFI measures the improvement in fit over a null model generated by the AMOS (or other) computer program (Kline, 2004). The GFI and CFI range from 0 to 1.00, with 1.00 indicating perfect model fit. Values greater than .90 are generally accepted as indicative of good model fit (Kline, 2004). The RMSEA does not make comparisons to a null model and is more similar to the Chi-square in that larger numbers indicate poor model fit. Values of RMSEA range from 0 to 1.00, with values of 0.05 or less indicating good model fit, values between 0.05 and 0.08 indicating reasonable model fit, and values greater than 0.10 indicating poor model fit (Browne & Cudek, 1993; Kline, 2004).

Externalizing Behaviors Measurement Models

The externalizing behaviors measurement model was tested separately for girls and boys. However, the models encountered the same problems and will be discussed together here. The externalizing behavior model included the three variables from the YSR, aggressive behaviors, delinquent behaviors, and other problems. Factor loadings for each externalizing variable were not computed because the model was not identified. See Figure 1 for the externalizing model tested for girls and boys.

When SEM procedures were used to analyze model fit, for both girls and boys, the measurement models were not able to be identified, even when adjustments were made to the model. For instance, theoretically necessary correlations among the YSR variables were initially included in the model. This was done to account for measurement error due to the variables being obtained from the same questionnaire. However, as the model could not be identified, the correlations among the error terms were removed, with the exception of the correlation between aggressive and delinquent behaviors. This did not change the inability of the model to be identified. The model was just identified when all correlations among error terms were removed. However, this was not a theoretically sound measurement model, as it did not account for correlations in error variances among the variables included in the model. As such, it was determined that the measurement model for externalizing behaviors could not be used in any further analyses, meaning that the overall study question could not be answered for girls or for boys.

Figure 1: *Measurement Model for Externalizing Behaviors in Girls and Boys*



Note: Factor loadings could not be computed as the model was unidentified.

Internalizing Behaviors Measurement Models

The internalizing behaviors measurement model was tested separately for girls and boys. The models again encountered the same problems and will be discussed together here. The internalizing behavior model included the three variables from the SAS-A (fear of negative evaluation, social avoidance and distress in new situations, general social avoidance and distress) and the two variables from the YSR (anxiety/depression, withdrawal). The factor loadings for each measure of internalizing behaviors were acceptable, suggesting that the five variables were reliable measures of internalizing behaviors. See Figures 2 and 3 for the internalizing models tested for girls and boys, respectively, with factor loadings (standardized regression weights) included.

SEM procedures assessing model fit yielded an identified model. However, the initial model did not include theoretically necessary correlations among the error terms of the model. Also, the fit of this model was very poor for both girls and boys ($\chi^2_{\text{girls}} = 142.77, df = 5; \chi^2_{\text{boys}} = 126.67, df = 5$). When all appropriate error terms were included, the model was not identified. An adjustment was made to the model, removing the correlation between the error terms for fear of negative evaluation and general social avoidance and distress as these two variables had the smallest correlation between them. This yielded an identified model. However, it should be kept in mind that this was not the ideal model because of the removal of the correlation. The model fit for this model was better than the first model, but indices overall still suggested poor model fit ($\chi^2_{\text{girls}} = 68.05, df = 2; \chi^2_{\text{boys}} = 60.31, df = 2$). Please see Table 17 for other fit indices of this model for girls and boys. The GFI and CFI suggested good fit, but the RMSEA and Chi-square suggested poor fit. As the fit indices did not uniformly indicate good model fit, it

is interpreted that the model is not a good fit to the data. In addition, since not all theoretically necessary correlations could be included in the model, it is not considered a theoretically sound measurement model. For both these reasons, as with externalizing behaviors, it was determined that the measurement model for internalizing behaviors could not be used in any further analyses, meaning that the overall study question could not be answered for girls or for boys.

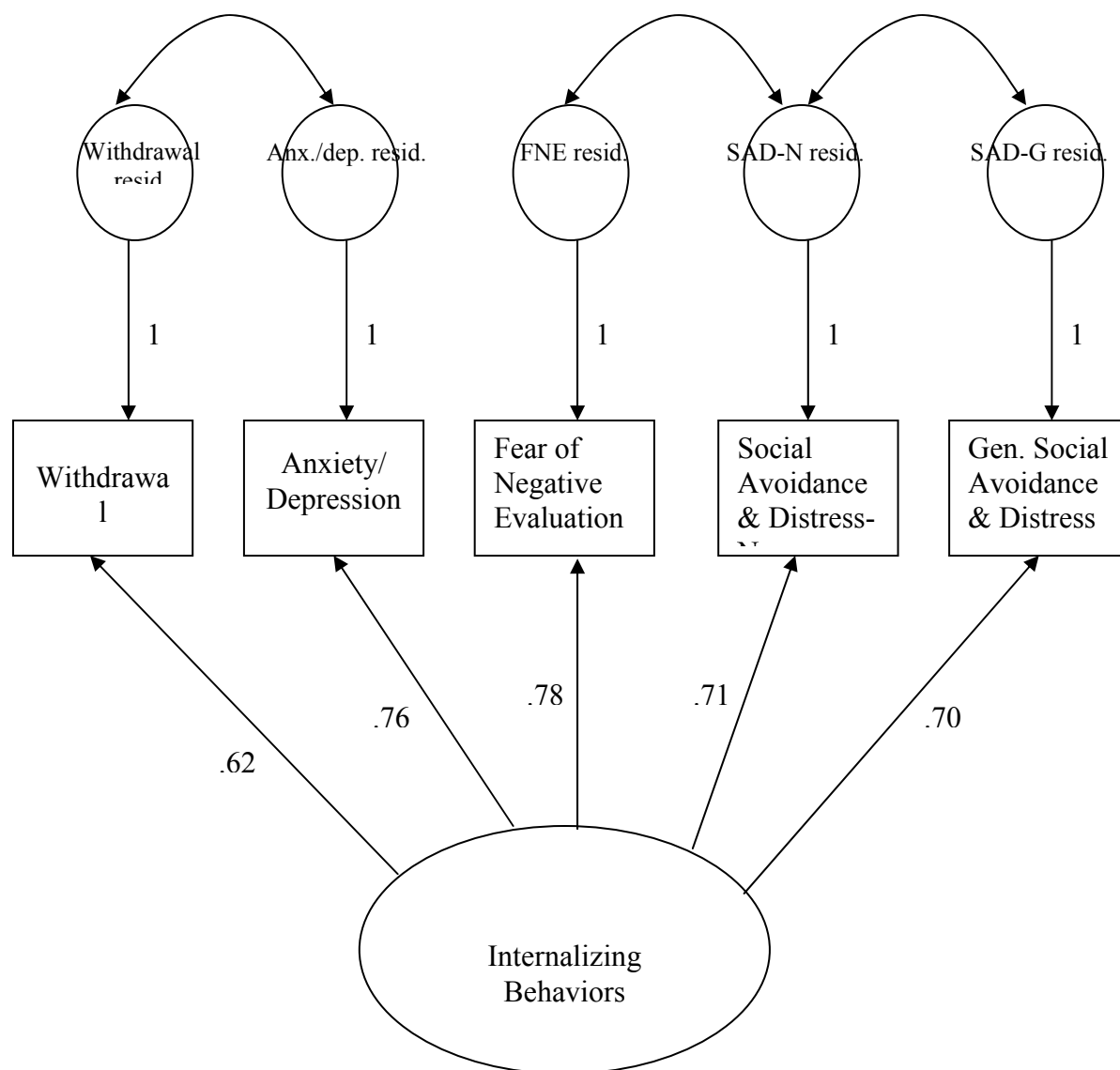
Figure 2. *Measurement Model with Factor Loadings for Internalizing Behaviors in Girls*

Table 17. Indices of Model Fit for Internalizing Behavior Measure Models – Girls and Boys

<i>Model</i>	χ^2	<i>df</i>	<i>GFI</i>	<i>CFI</i>	<i>RMSEA</i>
Girls Internalizing	68.05**	2	0.94	0.93	0.29
Boys Internalizing	60.31**	2	0.93	0.91	0.33

** $p < .001$

Figure 3. *Measurement Model with Factor Loadings for Internalizing Behaviors in Boys*