

**Specificity in Links between Parenting Style, Peer Relationship Difficulties, and Adjustment Problems in Preadolescences**

by

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## Abstract

This study examined specificity linkages among peer relationship difficulties, negative parenting, and preadolescent adjustment problems. Of particular interest was whether specificity exists between bullying, hostile parenting and externalizing problems and, between victimization, psychological control, and internalizing problems. Also of interest was whether negative parenting and peer relationship difficulties had additive effects on preadolescent's adjustment problems. Data were collected in 2012 when participants were 12-years-old ( $N = 100$ ). Information collected from parents, teachers and preadolescents was used to create measures; demographic data also were collected. Findings show that: (1) there was specificity in linkages between bullying and externalizing problems and between victimization and internalizing problems; (2) hostile parenting more strongly predicted peer difficulties and adjustment problems than did psychological control; (3) cumulative risk effect of hostile parenting and peer relationship difficulties on preadolescent's adjustment problems, in which hostile parenting and bullying uniquely predicted externalizing problems, whereas hostile parenting and victimization uniquely predicted internalizing problems. Moreover, the general pattern of findings was consistent across informants. Collectively, these findings suggest that negative parenting and adjustment difficulties are significantly and uniquely associated with preadolescents' adjustment problems. Implications for programs designed to decrease the adjustment problem as well as prevention for peer relationship problems are discussed.

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## Table of Contents

Abstract.....	ii
Acknowledgments.....	iii
List of Tables .....	vi
List of Figures.....	viii
Chapter I: Introduction .....	1
Bullying, Victimization, and Youth Adjustment .....	2
Bullying, Victimization, and Parent-Child Relationships .....	4
Parenting and Peer Problems as Additive Predictors of Adjustment Problems.....	5
The Current Study.....	5
Chapter II: Review of Literature .....	8
Bullying, Victimization, and Youth Adjustment .....	8
Specificity in Links between Bullying, Victimization, and Adjustment Problems .....	13
Informant Considerations in the Research on Bullying and Victimization .....	14
Antecedents of Bullying and Victimization: The Role of Parenting .....	15
Antecedents of Internalizing and Externalizing Problem: The Role of Parenting.....	19
The impact of Peer Relationship Problems and Parenting on Children’s Adjustments:	
Additive or Redundant? .....	23
Goals of Present Study .....	25
Chapter III: Method .....	27

Sample and Procedure.....	27
Measures .....	28
Chapter IV: Results .....	31
Descriptive Statistics.....	31
Correlations within and between variable domains .....	32
Correlation across variable domains .....	33
Regression Analysis.....	34
Chapter V: Discussion .....	49
Limitations and Future Directions .....	61
Conclusions .....	65
References .....	67
Appendix A: Tables .....	79
Appendix B: Data Collection Instruments .....	103

## List of Tables

Table 1 .....	79
Table 2-1 .....	80
Table 2-2 .....	81
Table 3 .....	82
Table 4 .....	83
Table 5 .....	84
Table 6 .....	85
Table 7 .....	86
Table 8 .....	87
Table 9 .....	88
Table 10 .....	89
Table 11 .....	90
Table 12 .....	91
Table 13 .....	92
Table 14 .....	93
Table 15 .....	94
Table 16 .....	95
Table 17 .....	96
Table 18 .....	97
Table 19 .....	98

Table 20 .....	99
Table 21 .....	100
Table 22 .....	101
Table 23 .....	101

List of Figures

Figure 1 ..... 24



## I. Introduction

Peer relationships can be important sources of both support and stress during the transition to early adolescence. Whereas supportive friends and an extensive peer network may provide developmental assets, problematic relationships with peers may place young adolescents at risk for a variety of maladaptive outcomes (Parker, Rubin, Erath, Wojslawowicz, & Buskirk, 2006). Bullying and peer victimization are two common peer relationship problems that peak during the early adolescent years. Bullying typically involves premeditated, instrumental aggression, and is a risk factor for a variety of adjustment problems, including rule-breaking behavior. Victimization likewise is a risk factor for negative outcomes, including anxiety and depression. Considerable research has been devoted to an examination of factors that predict these peer relationship difficulties, and particularly the role that family experiences may play in their development. For example, bullying (and aggression more generally) has been linked with early exposure to harsh discipline and family conflict (Schwartz, Dodge, Pettit, Bates, 2000; Dodge & Pettit, 2003). Victimization, on the other hand, has been found to be associated with intrusive and inconsistent parenting (Finnegan, Hodges & Perry, 1998; Georgiou, 2008). Less research has considered specificity in the links between parenting styles, peer difficulties, and adjustment problems.

Specificity would be shown if some aspects of parenting were linked more strongly with bullying, others with victimization, and still others with both. The literature on parenting and youth adjustment is extensive, and many different types and styles of parenting have been identified (Ladd & Pettit, 2002, Pettit & Mize, 1993). Negative control has emerged as an important aspect of parenting in many studies and may be especially relevant for understanding the development of bullying and victimization. Negative control may take two forms, one that is

physically harsh and punitive and one that is psychologically intrusive. The former has been linked consistently with aggressive behavior and to a lesser extent victimization (Chang, Landsford, Schwartz, & Farver, 2004; Gershoff, 2002); the latter has tended to be more strongly associated with victimization and internalizing problems (Barber & Harmon, 2002; Silk, Morris, Kanaya, & Steinberg, 2003). It therefore seems plausible to expect that psychologically controlling parenting (i.e., intrusiveness) may be especially important as a predictor of victimization, whereas harsh and punitive parenting may be especially important as a predictor of bullying. As noted, tests of such specificity have not been reported in the literature, and are the focus of the proposed study.

### **Bullying, Victimization, and Youth Adjustment**

Extensive literature has established that both bullying and victimization are risk factors for a variety of youth adjustment problems (Hawker & Boulton, 2000; Reijntjes, Kamphuis, Prinzie, & Schoot, 2011; Reijntjes, Kamphuis, Prinzie, & Telch, 2010). The most frequently studied problem behaviors for bullying are externalizing problems, such as aggression, truancy and delinquency. For example, Loeber and Dishion (1983), in a longitudinal study, found 60% of boys who were characterized as bullies in high school have been convicted of at least one officially registered crime by the age of 24. The most widely studied adjustment difficulties associated with victimization are internalizing problems, including depression, loneliness, anxiety, and low self-esteem (Hawker & Boulton, 2000; Reijntjes et al., 2010). Schwartz, Gorman, Nakamoto, and Toblin (2005), for instance, reported that peer victimization was a significant predictor of depression and poor academic functioning across the elementary school years.

There is also evidence that bullying is associated with internalizing problems and that victimization is associated with externalizing problems. For example, Reijntjes et al. (2011), in a meta-analysis, found that victimization also was associated with externalizing problems, though not to the same degree as internalizing problems. They pointed out that children who experience bullying may use aggression and anger to defend themselves against peer torment. Other research has documented that bullying predicts subsequent internalizing problems (O’Brennan, 2008), possibly because bullies lack sufficient interpersonal resources to effectively cope with others’ aggressive behavior. The overlap across peer problems and types of adjustment problems may be due to the ways in which bullying and victimization have been operationalized and the co-morbid nature of the two types of peer problems. Bullying and victimization have consistently been found to be significantly correlated. In some studies this correlation is quite high (e.g.,  $r = .58, p < .001$ , in Duong, Schwartz, Chang, Kelly, & Tom, 2008) and in other studies it is more modest (e.g.,  $r = .35, p < .001$  in study 1;  $r = .16, p < .001$  in study 2 in Schwartz et al., 2000). This overlap has led some researchers to use typological approaches to distinguish between “pure” bullies and victims and bully-victims (Cook, Williams, Guerra, Kim, & Sadek, 2010; Schwartz, Dodge, Pettit, & Bates., 1997; Unnever, 2005). Bully-victims tend to show the worst outcomes and to have different kinds of socialization experiences compared to bullies-only and victims-only (Espelage & Swearer, 2003; Ivarsson, Broberg, Arvidsson, & Gillberg, 2005).

Although it is important to recognize the overlap between bullying and victimization, there also are theoretical and empirical reasons to distinguish between the two types of peer problems. Theoretically, the distinction is useful for understanding whether those who bully but are not victims are at risk for adjustment problems—especially externalizing problems—and have family socialization experiences that both correlate with bullying and place them at risk for

adjustment problems. Similarly, examining those who are victims but not bullies can shed light on whether they are especially at risk for internalizing problems and likewise have family socialization experiences that increase their risk for later problems. A key question is whether there is distinctiveness—specificity—in the links between family experience, peer problems, and adjustment problems. Empirically, this issue can be addressed by controlling for bullying when examining associations with victimization, adjustment, and family experiences, and controlling for victimization when examining associations among bullying, adjustment, and family experiences.

### **Bullying, Victimization, and Parent-Child Relationships**

A substantial body of literature exists on the relation between family environment and peer relationship difficulties (Ladd & Pettit, 2002; Salmivalli & Peets, 2009). Considerable evidence supports that bullying or aggression has been linked to early exposure to punitive parenting (Schwartz, McFadyen-Ketchum, Dodge, Pettit, & Bates, 1998) and abusive family treatment (Emery, Fincham, & Joyce, 1987). For instance, Duong et al. (2009) found that maternal physical discipline was a significant predictor of peer aggressive behavior in children. In contrast, the most well-studied family environments associated with victimization are maternal overprotection and psychologically controlling parenting (Georgiou, 2008). Ladd and Ladd (1998), for example, reported that high intrusive demandingness and low responsiveness, as well as the intense closeness of parent-child relationships were associated with higher levels of peer victimization. It therefore appears that there is some overlap (harsh and abusive parenting predicts both types of peer relationship problem) and some specificity (psychological control is more strongly implicated in peer victimization than bullying) in the links between parenting and bullying, and between parenting and victimization.

The extensive literature of parenting style and child adjustment difficulties likewise provides evidence of both specificity and generality in links with externalizing and internalizing problems. As documented in a number of reviews and meta-analyses, harsh and abusive parenting is consistently found to be strongly associated with externalizing problems (Gershoff, 2002; Rothbaum & Weisz, 1994; Pettit & Arsiwalla, 2008). Psychological control, which refers to parental attempts at interfering with children's autonomy and self-expression, is theoretically more strongly linked with internalizing problems (Barber, 1996) but empirical evidence suggests that it predicts both kinds of adjustment problems (Barber, Stolz, & Olsen., 2005; Pettit, Laird, Dodge, Bates, & Criss, 2001).

### **Parenting and Peer Problems as Additive Predictors of Adjustment Problems**

As noted earlier, both parenting qualities and peer relationship problems are associated with adjustment problems. A small body of research has considered the interplay of parenting and peer problems and whether they are related to adjustment problems in additive (incremental) or overlapping (redundant) ways (e.g., Criss, Shaw, Moilanen, Hitchings, & Ingoldsby, 2009; Sentse & Laird, 2010). Thus, some researchers proposed additive models involving family experience, peer relationship and children's socio-emotional development (Ingoldsby, Shaw, Winslow, Schonberg & Criss, 2006). Understanding this additive effect is critical in that it affords valuable information regarding the unique contribution of a particular variable in predicting child adjustment above and beyond the influence of putative factors. It will also help us to better understand the relative importance of family and peer factors in prediction of child adjustment.

### **The Current Study**

The current research addressed three main questions. The first question is whether bullying and victimization are differentially related to externalizing and internalizing problems. Because of the empirical overlap between bullying and victimization, analyses controlled for one type of problem (e.g., bullying) when examining links between the other type of problem (e.g., victimization) and each adjustment problem outcome.

The second question concerns the predictive links between parenting styles and problematic peer relationships. Of particular interest is whether harsh discipline is more strongly related to bullying than to victimization and whether psychological control is more strongly related to victimization than to bullying. As with the first research question, one type of peer problem was controlled when examining links between parenting and the other type of peer problem. Associations between parenting and externalizing and internalizing problems also were examined.

The third question concerns the nature of the relations between parenting, peer problems, and adjustment outcomes. Two possibilities were considered. The first is that problems in one socialization domain are sufficient for understanding the development of behavior problems. In other words, in the context of poor parenting, peer relationship difficulties do not account for additional variance in externalizing and internalizing problems. Likewise, when peer problems are present, poor parenting practices do not add to the prediction of adjustment problems. The second possibility was one of additive risk, that is, poor parenting would predict adjustment difficulties and peer problems add (i.e., account for additional variance) to that prediction.

These questions were addressed with data collected as part of a short-term longitudinal study of preadolescents' transition to middle school. This is a developmental period when concerns about problematic peer relationships are significant. Understanding the interplay of

parenting and peer difficulties during this important developmental transition can shed light on both risk and protective factors in youth adjustment. Understanding whether there is specificity exists between peer relationship difficulties, adjustment problems and parenting style would offer a new perspective for intervention program, and improving the effectiveness.

## **II. Review of Literature**

The current study was concerned with specificity in the links between parenting styles, peer difficulties, and adjustment problems. Of particular interest is whether bullying is associated with externalizing problem and whether victimization is associated with internalizing problems, and whether harsh parenting, compared to psychological control, is more strongly related to bullying and externalizing problem and whether psychological control, in contrast to harsh parenting, is more strongly related to victimization and internalizing problems. In keeping with the study goals, the present review examined literature pertinent to each of the following topics: (1) the negative outcomes of bullying and victimization, especially during the preadolescent years (i.e., transition from middle school to high school), (2) predictors of bullying and victimization, with special reference to parenting style (i.e., psychological control, harsh parenting), (3) predictive links between parenting style and internalizing and externalizing problems, and (4) whether parenting and peer relationship problems additively predict subsequent adjustment outcomes.

### **Bullying, Victimization, and Youth Adjustment**

Bullying and victimization have been and continue to be a major concern for parents, schools, and society at large. Both bullying and victimization are prevalent in childhood and adolescence, peaking in early adolescence. Victimization is defined as someone being exposed, repeatedly and over time to negative actions on the part of one or more other students, a recipient of any kind of aggressive attacks (Olweus, 1978). Approximately 10-15% of middle school students report at least weekly victimization experiences and 50% report at least occasional victimization (Wang, Iannotti, & Nansel, 2009). These experiences can lead to emotional distress, behavioral problems, and school disengagement. Bullying can be defined as an



intentional or aggressive behavior that is carried out repeatedly and over time in an interpersonal relationship characterized by an imbalance of power (Olweus, 1978). Bullying also has been linked to a number of different behavior and emotional difficulties.

Bullying and victimization are not two sides of the same coin (i.e., that those who bully are unlikely to be victims and vice versa). As noted by Schwartz (2000), and others (e.g., Salmivalli & Peets, 2009), some bullies also can be victims. A considerable body of research has examined the concurrent and longitudinal links between bullying, victimization, and the combination of bullying and victimization, and children's and adolescent's adjustment difficulties (see Cook et al., 2010; Hawker & Boulton, 2000; Salmivalli & Peets, 2009). A general conclusion is that bullying and victimization are associated with both similar and somewhat distinct adjustment outcomes.

The two most commonly examined adjustment difficulties are internalizing and externalizing problems. In a meta-analytic review of cross-sectional studies, Hawker and Boulton (2000) examined correlations between peer victimization and psychosocial maladjustment among 23 studies and 5000 children. Results showed that victimization was associated with internalizing problems, such as depression, loneliness, and anxiety. Similar results were found in another meta-analysis of longitudinal studies by Reijntjes et al. (2010), who examined the prospective linkage between peer victimization and internalizing problem among 15 studies and 12361 participants. After controlling for the initial level of internalizing symptoms, they found peer victimization significantly predicted increases in internalizing problems over time. Numerous recent studies provided findings consistent with the meta-analyses. For example, Schwartz, Gorman, Nakamoto, and Toblin (2005) reported a significant and positive correlation between peer victimization and depression ( $\beta = .37, p < .001$ ) over a

period of one year. Along these lines, in a 6-year longitudinal study, Desjardins and Leadbeater (2011) found that at each time point (Year 1, 3, 5), victimization significantly predicted higher levels of adolescents' internalizing problems ( $\beta_{y1} = .33, p < .001$ ;  $\beta_{y3} = .27, p < .001$ ;  $\beta_{y5} = .32, p < .001$ ). The findings from these studies are broadly consistent with prior research documenting links between victimization in the peer group and various dimensions of psychological distress, including loneliness (Boivin, Hymel, & Bukowski, 1995), anxiety (Craig, 1998), and low-esteem (Graham & Juvonen, 1998). Clearly, the experience of mistreatment by peers undermines the development of skills, competencies, and psychological coping capacities.

Some have suggested that internalizing problems and victimization are reciprocally related. Social withdrawal and submissiveness, for example, are characteristic of victimized children and may evoke bullying and being victimized (Reijntjes et al., 2010; Salmivalli & Peets, 2009). However, Schwartz et al. (2005) reported that in their short-term longitudinal study, victimization predicted increases in depression but depression did not predict increases in victimization. Thus, for now, there is mixed evidence of a reciprocal relationship between peer victimization and internalizing problems.

Theoretical and empirical evidence suggest that victimization is linked with internalizing problems because of feelings of anxiety associated with anticipation of being bullied. Victims may come to view themselves as deserving of these peer attacks, which would further contribute to the development of depression and sense of helplessness. Theorists also have suggested that victimized children and adolescents may feel a sense of injustice and attribute their maltreatment to the hostility of their peers (Cook et al., 2010; O'Brennan, 2009). In this way the experience of victimization may become associated with later externalizing problems. Some research has reported findings consistent with this premise. For example, Ladd and Troop-Gordon (2003)

found that victimization during the first to third grades predicted both loneliness and externalizing problem at the end of fourth grade even after controlling for the fourth-year victimization experiences. The victimization-externalizing link also has been documented in adolescent samples. Goldbaum and colleagues (Goldbaum, Craig, Pepler, & Connolly, 2007) found that early adolescents with increasing victimization showed increasing aggression over time.

Turning to bullying, a substantial body of work has shown that it is associated prospectively with a vast array of externalizing difficulties, such as disruptive, hyperactive, and aggressive behaviors, which result in later juvenile delinquency, adult crime behavior, and violence (Galezewski, 2005; Ladd, 2005; Prinstein, Rancourt, Guerry & Browne, 2009). Children and adolescents who bully others often attribute hostile intentions to the behavior of peers in ambiguous situations and expect bullying (or instrumental aggression more generally) to lead to desired outcomes. In a meta-analytic investigation of 153 studies, Cook and colleagues (Cook et al., 2010) presented evidence that typical bullying (i.e., by non-victimized bullies) was significantly associated with externalizing behaviors. Results consistently demonstrate that children who are aggressive are more likely to exhibit externalizing symptoms later in development. For instance, aggressive behavior in kindergarten (forms of which overlap with bullying) correlated positively with externalizing problems in fourth grade (Ladd & Troop-Gordon, 2003). In a long-term prospective follow-up, Woodward and Fergusson (1999) found that children who bully peers at age 9 were at increased risk for later criminal behavior, substance abuse, and suicidal behavior by age 18. This could be also explained by social learning theories, in which children generate internal rules linking social behaviors to consequences, such as praise, criticism, and guide their behavior according to these rules (Parker et al., 2006). In

another words, preadolescents tend to repeat behaviors their peer approve of. Thus, because rule-breaking behavior had been seen as “cool” among preadolescents, aggressive preadolescents might also using rule-breaking to gain popularity and attention from other peers.

Some research also has shown that bullying is associated with internalizing problems, possibly because bullies lack sufficient interpersonal resources to effectively cope with others’ aggressive behavior that may be directed toward them in retaliation (O’Brennan, 2008). In Cook’s meta-analysis study, bullying was positively associated with internalizing symptoms though with a smaller effects size compared to externalizing problems (Cook et al., 2010). Recent empirical demonstrations include studies by Murray-Close, Ostrov & Crick (2007) and Rose & Swenson (2009). Murray-Close et al. (2007) found that among 4<sup>th</sup> grade children, an increase over time of aggression was positively associated with an increase in internalizing symptoms. Along these lines, Rose and Swenson (2009) showed that among 7<sup>th</sup> and 9<sup>th</sup> grade adolescents, aggression was positive correlated with internalizing problems.

Although most victimized children display submissive social behavior, a small group of victimized children use aggressive behavior to defend themselves, which are named aggressive victims, or bully-victims (Olweus, 1986; Schwartz, 2005; Swearer, Siebecker, Johusen-Frerichs, & Wang, 2010). Comparisons of children and adolescents categorized as "pure bully", "pure victim" and "bully-victim" reveals distinct antecedents and behavioral characteristics (O’Brennan, 2009; Schwartz et al., 1997; Schwartz et al., 2005; Uneven, 2005). Bully-victims have the worst psychological problems, compared to “pure” bullies or victims, including high levels of both internalizing and externalizing symptoms, and maladjustment across domains of functioning (Schwartz et al., 2005; Swearer et al., 2010). This overlap across peer problems may contribute to the somewhat mixed evidence of links with different types of adjustment problems.

As will be discussed in the following section, the moderate to strong correlation between aggression (including bullying) and victimization may limit the detection of specificity in adjustment outcomes.

### **Specificity in Links between Bullying, Victimization, and Adjustment Problems**

As noted earlier, and as shown in the preceding review, there is evidence of fairly strong and consistent associations between bullying and externalizing and between victimization and internalizing. Less strong and consistent associations have been reported between bullying and internalizing and between victimization and externalizing. The ways in which the two types of peer problems have been operationalized and how their impact has been analyzed may explain part of the overlap. The significant correlation between aggression and victimization can range from modest (e.g.:  $r = .27, p < .001$  in Ellis & Zarbatany, 2007;  $r = .29, p < .001$  in Abou-ezzeddine, Schwartz, Change, lee-Shin, 2007) to high (e.g.:  $r = .58, p < .001$  in Duong et al., 2009;  $r = .60, p < .001$  in Tom, Schwartz, Change, Farver, & Xu, 2010). In these correlations, a shared method variance problem should be noticed. Moreover, dimensional approaches typically have not controlled for bullying in examining outcomes of victimization and vice versa. For example, Schwartz et al. (1998) followed up third and fourth-grade children for 2 years, and showed that peer victimization was a significant predictor of increasing externalizing problems. However, even though victimization was positively correlated with bullying ( $\beta = .36, p < .001$ ), they did take bullying into account when examining the predictive relation between victimization and changes in behavior problems. Thus, they could not rule out the possibility that the increasing externalizing problem is partially due to the overlap between victimization and aggression. In the current study, in order to evaluate whether victimization (bullying) would provide unique information about internalizing (externalizing) problem, we controlled for

bullying when examining victimization and internalizing, and controlled for victimization when examining bullying and externalizing.

Past researchers have consistently found that there are strong gender differences in the different forms of bullying (Crick & Crotpeter, 1995). Research on school-based violence and bullying suggested that males are more likely to be both perpetrators and victims of direct forms of bullying, such as physical fight. However, girls are more likely than boys to experience indirect forms of bullying (relational aggression) such as teasing or joking about.

### **Informant Considerations in the Research on Bullying and Victimization**

Little attention has been devoted to the issue of whether different informants (child, parent, teacher, and peer) agree or disagree with respect to the occurrence of bullying and victimization (Ladd & Kochenderfer-Ladd, 2002). Moreover, there have been few studies contrasting the antecedents and outcomes of bullying and victimization as a function of informant. A basic assumption of modern measurement theory is that information from a single source cannot provide complete information about its conceptual referent. Based on this theory, researchers have suggested that gaining information across different informants is the most comprehensive approach for studying victimization and bullying, because it minimizes error variance and possible biases evident in the reports provided by single informants (Salmivalli & Peets, 2009). Ladd and colleagues (2002) suggested that a combination of different informants for victimization (and presumably for bullying as well) yield the best prediction of relational adjustment, such as loneliness, internalizing and social problems. This is especially true at middle school, when a range of informants, including self, peer, teachers, and parents, are all in a position to supply common but unique information about peer victimization and adjustment problems (Ladd & Kochenderfer-Ladd, 2002; Salmivalli & Peets, 2009). Thus, research needs to

include different informants so that the strength and patterning of predictive links (as well as antecedents) can be contrasted. However, numerous studies used only one type of assessment (e.g., peer or self-report) which may provide a stronger relationship with outcomes, while sacrificing the validity and reliability of the study. Those researchers argued that for some types of measures, some informants are better than other informants. For example, most researchers used self-reported internalizing problem because they believed adolescent have a better sense of themselves than parents or teacher. Therefore, in the current study, data on peer problems were drawn from parents, teacher and children, we tested whether there is the most effective informant or whether it isn't matter which informant one use.

### **Antecedents of Bullying and Victimization: The Role of Parenting**

Socialization factors in the development of peer relationship difficulties have received increasing attention over the past decade (see Ladd & Pettit, 2002). One such socialization factor has been the quality of the parent-child relationship. A wide range of parenting behaviors and peer relationship problems has been examined. In this section, we limit the review to those studies that have specifically considered linkages between parenting and bullying, and parenting and victimization. In addition, a general overview of the large body of research on parenting and aggression toward peers is presented.

Aggressive behavior consistently has been found to be associated with harsh and inconsistent discipline, parental rejection, and parent-child conflict (see Dodge & Pettit, 2003; Pettit & Mize, 2007). To a lesser extent, aggression has been linked with psychologically controlling and intrusive parenting (Pettit & Laird, 2002). Through modeling, reinforcement, and biased social-information processing styles, these kinds of parenting behaviors may engender the development of aggressive behavior, including the proactive/instrumental form of aggressive

characteristic of bullies. Social information processing theory has been used to explore cognitive processes by which children interpret and respond to social situations. Crick and Dodge (1994) proposed that children's social responses involve six stages: encoding pertinent internal and external cues, interpreting and representing those cues, formulating a goal, considering possible responses, selecting a response, and enacting that response. Various information processing biases at each stage are believed to account for individual differences in peer behaviors and, in turn, varying degrees of peer competences (Pettit, Lansford, Malone, Dodge, & Bates, 2010). A small body of research has been concerned with parenting and bullying per se. This work has tended to show that bullies are more likely to come from families in which parents use authoritarian, harsh and punitive childrearing practice and tend to use physical punishment as the primary discipline strategy. For example, Espelege, Bosworth, and Simon (2000) found that parent physical discipline was significantly associated with bullying behavior. Curtner-Smith (2000) likewise found that students who reported that their parents used inappropriate forms of discipline (e.g., physical discipline) strategies when they broke a rule at home were more likely to report engaging in bullying behaviors that harsh discipline fosters the development of peer-directed aggression. These findings are consistent with previous hypotheses, based on the social-information-process theory. For instance, Pettit and colleagues (Pettit, Harrist, Bates, & Dodge, 1991) proposed that the disciplinary style experienced within the family was transferred by the child from family to peer systems; the interaction experienced in the family thus indirectly contributed to the quality of the child's interactions within the peer environment.

Additional evidence has established links between harsh parenting and proactive aggression. Proactive aggression is defined as less highly organized, "cold-blooded," characterized by little autonomic activation, and more likely driven by the expectation of reward



(Bandura, 1983). It usually includes bullying, dominating, teasing, name-calling and coercive acts. Dodge, Lochman, Harnish, Bates and Pettit, (1997) using longitudinal data from two separate samples, found that children who were chronically proactively aggression had a developmental history of exposure to aggressive role models at home during the school year. Using a Chinese data set, Xu, Farver and Zhang (2009) found that parents reported mother and father harsh discipline significantly predicted teacher reported proactive aggression in children ( $\beta_{\text{mum}} = .23, p < .001$  ;  $\beta_{\text{dad}} = .20, p < .001$ ). Parents' frequent use of punitive and non-reasoning discipline strategies creates a family environment in which coercive behaviors are directly reinforced and are perceived as functional (Salmivalli & Peets, 2010) and may encourage children to use coercive behavior as an effective means in resolving peer conflicts. Those children may be led to expect positive outcomes for aggression and provide a justification for the use of proactive aggression to achieve their goals. Moreover, harsh parenting might influence certain goal orientations, such as valuing admiration and dominance, which in combination with aggression-encouraging cognitions, can result in proactive type of aggression, such as bullying (Nickerson, Mele, & Osborne-Oliver, 2010).

As noted in the previous section, aggressive children likely possess regulatory deficits that present management problems for their parents and, at the same time, make them likely targets for peer victimization. In this way the experience of harsh discipline at home may become associated with later victimization. Research in bully-victim children has reported findings consistent with this premise. For example, Schwartz et al. (1997) found that children who emerge as both aggressive and victimized in the elementary school tended to have preschool histories of exposure to punitive physical discipline, maternal hostility, and marital conflict. Schwartz et al. (2000) found that Time 1 restrictive discipline was associated with Time 3

victimization ( $r = .21, p < .001$ ) and aggression ( $r = .14, p < .001$ ), but a moderate correlation between victimization and aggression should be noticed ( $r = .35, p < .001$ ). Consistently, in a recent study, with a Hong Kong preadolescence sample, Duong et al. (2009) found that physical discipline was significantly associated with both aggression ( $r = .20, p < .01$ ) and victimization ( $r = .16, p < .01$ ), but a high correlation existed between victimization and aggression ( $r = .58, p < .001$ ). This may be due to the overlap between bullying and victimization noted earlier, if we control for aggression when examine victimization and harsh discipline, we will see the special and unique role of harsh discipline.

Psychologically intrusive parenting also has been examined as a predictor of peer relationship difficulties, though not to the extent of research on harsh discipline. The most widely studied and consistent finding about psychological control concerns victimization (Georgiou; 2008). Parental psychological control is defined as verbal and nonverbal behaviors that intrude on youth's emotional and psychological autonomy (Barber, 1996). It includes constraining verbal expression, invalidating feelings, personal attacks, guilt induction, love withdrawal, and inconsistent emotional expression (Barber, 1996; Pettit & Laird, 2003). Ladd and Ladd (1998) observed parent-child relationship in kindergarten children, and the result showed that parental intrusive demands (interrupting, overriding initiatives, demanding conformity) were significantly associated with a high level of victimization in boys. Finnegan and colleagues (1998), using child self-report, found that psychological control (threat of rejection and coercion) was positively associated with peer victimization among preadolescents (Finnegan et al., 1998). These intrusive parenting practices do not allow the child to develop as an independent individual from parents, and may lead children to display passive or dependent behavior, which then place them at an increased risk for victimization (Ladd & Ladd, 1998).

Furthermore, intrusive parenting interferes with the proper acquisition of social skills, which is important to management during peer conflict, and facilitates adoption of manipulative behaviors and relationally aggressive strategies towards peers (Barber et al., 2005). For example, Schwartz et al. (1997) found that exposure to psychologically controlling parenting was associated with both aggression and victimization. In Kuppens, Grietens, Onghena and Michiels (2009)'s study, both psychological control and harsh discipline were examined as predictors of aggression. Result showed that psychological control significantly predicted relational aggression both at home and school ( $\beta_{\text{home}} = .35, p < .001$ ;  $\beta_{\text{school}} = .32, p < .001$ ). However, there was a high correlation between harsh discipline and psychological control ( $r = .53, p < .001$ ). After controlling of harsh discipline, psychological control did not predict relational aggression any more. As stated earlier, harsh discipline has consistently been found to be associated with aggression and bullying. Thus, we hypothesized a specific association would exist between psychological control and victimization controlling for bullying (aggression).

### **Antecedents of Internalizing and Externalizing Problem: The Role of Parenting**

Links between children's experiences in the family and their adjustment problems have been the subject of much theoretical and empirical work in the past few decades. A large number of parent-child relationship and youth adjustment problems has been examined. In this section, we limit the review to those studies that have specifically considered linkages between parenting and internalizing problems, and parenting and externalizing problems.

Externalizing problem consistently has been found to be strongly associated with negative behavior control (harsh parenting, physical discipline) (see Gershoff, 2002; Rothbaum & Weisz, 1994, for a review). To a lesser extent, harsh parenting has been linked with internalizing problems. The relation is likely reciprocal, and there is compelling evidence from

longitudinal and intervention studies that harsh parenting contributes to externalizing behavior (Patterson, 2002; Pettit & Arsiwalla, 2008). It appears that parents who use harsh and coercive strategies when confronting child misbehaviors inadvertently foster further hostile attributions and disruptive behavior, and initiate coercive cycles of aversive behaviors between parent-child and child peer relations. For instance, in a longitudinal study, researchers found that the experience of physical discipline in the first five years of life and during early adolescence was associated with higher levels of externalizing behavior problems in grade 11 for adolescents of both genders (Lansford, Deater-Deckard, Dodge, Bates, & Pettit, 2004). Along the same line, Lansford and colleagues examined the reciprocal relation between harsh discipline and externalizing problem. They found that from ages 6 to 9, high levels of physical discipline in a given year predicted high levels of externalizing behavior in the next year controlling for earlier levels of externalizing problems, and externalizing behavior in a given year predicted high levels of physical discipline in the next year controlling for earlier physical discipline. However, from ages 10 to 15, only physical discipline predicted antisocial behavior in the next year, not vice versa (Lansford, Criss, Laird, Shaw, Pettit, Bates, & Dodge, 2011). In conclusion, the overwhelmingly consistent result in the literature is consistent with the premise that harsh parenting strongly predicts externalizing problems.

Moreover, harsh parenting has also found to be associated with children's internalizing problems. Harsh parenting is distressing for children and may increase children's feelings of anxiousness, wariness, and unease. Over time, repeated exposure to harsh parenting may increase children's risk for developing internalizing problems. For instance, harsh punishment has been associated significantly with adolescents' depressive symptomatology and distress even after controlling for age, gender, family socioeconomic status (McLoyd, Jayaratne, Ceballo, &

Borquez, 1994). Along these lines, Manongdo and Ramírez-García (2011) found that Time 1 harsh parenting was significantly associated with Time 2 externalizing and internalizing problems ( $\beta_{\text{ext}} = .44, p < .01$ ;  $\beta_{\text{int}} = .35, p < .01$ ). But one must note that a high correlation between internalizing and externalizing problems existed in this study ( $r = .73, p < .01$ ). Interestingly, it seems that both internalizing and externalizing problems tend to co-occur such that children who are rated high on internalizing problems also tend to be rated high on externalizing problems, that is, substantial overlap in problem behaviors during childhood. When both internalizing and externalizing problems are analyzed as separate dependent variables without controlling for the co-variation between the scores, researchers run the risk of repeatedly predicting the common variance rather than independently predicting variance that is unique to each problem domain. In the present study, we considered the unique variance by controlling for the co-variation of internalizing and externalizing problems when examine harsh parenting. We hypothesized that harsh parenting is more strongly associated with externalizing problem, and less strongly associated with internalizing problem.

Psychologically intrusive parenting also has been examined as a risk factor for youth adjustment problems. Parental psychological control is associated robustly with child internalizing symptoms (see Barber & Harmon, 2002, for a review). As stated in previous sections, these parenting strategies can derogate the child, foster maladaptive perfectionism, limit social interaction opportunities, and stifle independent expression and identity exploration (Pettit & Laird, 2003). In turn, children of intrusive parenting are highly likely to experience internalizing symptoms, such as amplified guilt and worry, physiological arousal, lower perceptions of control and competence, and lessened feelings of self-worth. In the meta-analysis, Barber and Harmon identified 34 studies which examined intrusive parenting and internalizing

problems. They found psychological control to be positively related to internalizing problems in general, such as depression and anxiety (Barber & Harmon, 2002). Numerous recent studies provided findings consistent with the meta-analyses. For instance, Loukas (2009) reported a significant and positive association between psychological control and internalizing symptoms of both genders ( $\beta_{\text{male}} = .34, p < .001$ ;  $\beta_{\text{fem}} = .21, p < .001$ ) over a year period. Along these lines, in another longitudinal study, El-Sheikh and colleagues (2010) found that psychologically controlling parenting predicted higher levels of adolescents' internalizing problems ( $\beta_{\text{depression}} = .32, p < .001$ ;  $\beta_{\text{anxiety}} = .41, p < .001$  in El-Sheikh, Hinnant, Kelly, & Erath; 2010). The findings from these studies are broadly consistent with prior research documenting links between psychological control and various dimensions of psychological distress, including depression (Barber, 1996), suicidal ideation (Comstock, 1994), withdrawn behavior (Mills & Rubin, 1998), and passive resistance (Bronstein, 1994). Clearly, the experience of intrusive parenting undermines the development of independence, self-identity, and psychological autonomy.

Moreover, there is growing evidence that psychological control is also related positively to externalizing problems, although somewhat less consistently than internalizing problems (Barber & Harmon, 2002; Barber et al., 2005). For example, in a longitudinal study, researchers found parental psychological control predicted change in adolescent externalizing problems one year later, but neither child reported maternal or paternal psychological control was associated with change in subsequent internalizing problems (Rogers, Buchanan, Winchell, 2003). Other studies found psychological control to be related to both externalizing and internalizing problems. Pettit and colleagues (2001) found longitudinal links between psychological control and externalizing and internalizing symptoms mainly for girls. In the meta-analysis, Barber and Harmon found that psychological control was significantly related to externalizing problem in

general, but not significantly related to gang membership, rebelliousness or compliance, or deviance (Barber & Harmon, 2002). Thus, there is less consistency in these findings compared to those for internalized problem behaviors, suggesting that a weaker association exists between parental psychological control and externalizing problem. We hypothesized that psychological control is more strongly associated with internalizing problems.

### **The Impact of Peer Relationship Problems and Parenting on Children's Adjustment: Additive or Redundant?**

The importance of parenting qualities and peer relationships as contexts for child adjustment has been established well in previous sections. As noted, poor parenting and peer relationship difficulties are associated with adjustment problems and lower social skills. Those results stimulated researchers to consider the interplay of parenting and peer problems and whether they are related to adjustment problems in additive or overlapping ways (e.g., Criss et al., 2009; Sentse & Laird, 2010). There is a huge debate in the field regarding the relative importance of family and peer relationships in shaping child development (Ladd & Pettit, 2002). Some social scholars emphasized family experience and parenting (Laible & Thompson, 2007), whereas other authors attributed a great role to peer group experiences (Hariss, 1995). It is more likely, however, that both parenting and peers is critical (Collins, Maccoby, Steinberg, Hetherington & Bornstein, 2000). Therefore, some researchers proposed an additive model, in which individual risk factors were hypothesized to make unique contributions to children's development after accounting for each variable's contribution (Criss et al., 2009; Ingoldsby, Shaw, Winslow, Schonberg & Criss, 2006).

A limited number of studies have addressed these competing viewpoints and tested the additive model. For instance, in a longitudinal national study, early family experience and peer

difficulties contributed uniquely to the development of chronic externalizing problems, but pure internalizing problems were uniquely influenced by maternal depression (Fanti & Henrich, 2010). Criss, Pettit, Bates, Dodge and Lapp (2002) reported that both harsh parenting and peer acceptance were significant predictors of externalizing behaviors when examined concomitantly. These studies provided some evidence for the additive effects model, suggesting that children would have the worst outcome if they suffer both poor parenting and peer relation difficulties.

In the current study, we tested two possibilities of the additive model (See Figure 1). The first is that either parenting style or peer relation problems are sufficient for understanding the development of behavior problems. To be specific, in the context of harsh parenting, bullying does not account for additional variance in externalizing problems; and in the context of psychological control, victimization does not account for additional variance in internalizing problems. Likewise, when bullying or victimization is present, harsh parenting or psychological control does not add to the prediction of externalizing or internalizing symptoms. The second possibility was one of additive risk that is, poor parenting would predict adjustment difficulties and peer problems account for more variance in adjustment.

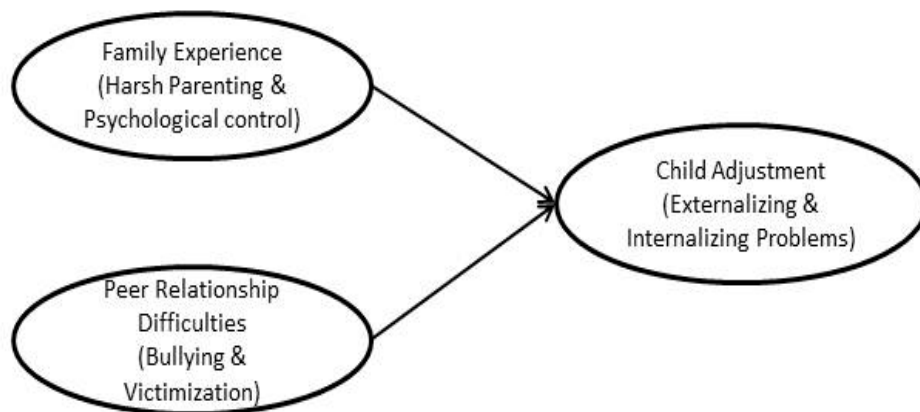


Figure 1. Additive Models Involving Family Experience, Parenting Style, Peer Relationship and Child adjustment.



## Goals of the Present Study

One of the prime goals of this study is to examine the specificity between parenting styles, peer difficulties, and adjustment problems. There have been few, if any, attempts to examine the unique role of parenting style, peer relationship, and adjustment outcomes. As many researchers have noted, the examination of specificity in the findings has been a limitation in the past. In addition, the additive model of parental control (hostile parenting and psychological control) and peer relationship (bullying and victimization) has not yet been examined in previous research.

Given the preceding review, the following questions and hypotheses were examined:

- 1). a. Does bullying predict externalizing problems more strongly than internalizing problems? After controlling for victimization, does bullying still significantly predict internalizing problems?
- b. Does victimization more strongly predict internalizing problems than externalizing problems? After controlling for bullying, does victimization still significantly predict externalizing problems?
- 2). a. Is hostile parenting more strongly associated with bullying than with victimization? Does hostile parenting significantly predict victimization after controlling for psychological control?
- b. Is psychological control more strongly associated with victimization than with bullying? Does psychological control significantly predict bullying after controlling for hostile parenting?

- 3). a. Is hostile parenting more strongly associated with externalizing problems than with internalizing problems? Does hostile parenting significantly predict internalizing problem after controlling for psychological control?
- b. Is psychological control more strongly associated with internalizing problems than with externalizing problems? Does psychological control significantly predict externalizing problem after controlling for hostile parenting?
- 4). a. Do hostile parenting and bullying both contribute to externalizing problem or does one of them play the dominant role?
- b. Do psychological control and victimization both contribute to internalizing problems or does one of them play the dominant role?

### **III. Method**

#### **Sample**

A total of 100 fifth and sixth graders ( $M_{age} = 12.88$  years,  $SD = .95$ ) and their parents (82% biological mothers) and teachers (81% of teacher-reports obtained) participated in this study. The sample of preadolescents included 47.5% males and 59% Caucasian, 35% African American, and 6% other races/ethnicities, consistent with demographics of the communities from which participants were recruited. The mean family income was between \$35,001 and \$50,000; 10.5% of families reported an income of less than \$20,000; and 28.4% reported an income of more than \$75,000. There were no significant differences between participants with and without teacher data on age, sex, race, income, social anxiety, peer victimization, or physiological or behavioral variables in the present study.

#### **Procedures**

Participants were recruited via flyers sent home with fifth and sixth grade students at five elementary schools in the southeastern United States. Parents who responded to the school flyers were given information about the study over the phone and were scheduled for a research visit during the spring. Permission to contact the participants' teachers was obtained via mail, and teachers were contacted in the spring to participate. Teacher consent was obtained, and teachers completed questionnaires about participants' social, academic, and psychological adjustment; teachers were compensated monetarily. Preadolescents and their parents visited the research lab during the summer; consent to participate was obtained and preadolescents and parents were compensated monetarily. All study procedures were approved by the University Institutional Review Board.

## **Measures**

### *Bullying*

Bullying was reported by preadolescents, parents, and teachers. Preadolescents rated the 12 items which were adapted by Little, Jones, Henrich, and Hawley (2003) from measures used by Dodge and Crick to assess instrumental overt and relational aggression (e.g., “I often threaten others to get what I want”, Little et al., 2003). Participants rated how true each item was for them on a 4-point scale from "not at all true" to "completely true." The scales showed good internal consistency ( $\alpha = .87$ ). Parent and teacher separately rated eight items from the Social Behavior Rating Scale (e.g., “taunts or teases other children,” and “threatens or bullies other children,” Schwartz, Farver, Chang, & Lee-Shin, 2002), rated on a 5-point scale (1= never true to 5= always true). Internal consistency was high for teacher reports ( $\alpha = .94$ ) and parent reports ( $\alpha = .86$ ).

### *Peer Victimization*

In assessing peer victimization, preadolescents rated seven items from the Social Experiences Questionnaire (e.g., “How often do you get pushed or shoved by other peers at school?” and “How often do you get hit by another kid at school?”; Crick & Grotpeter, 1996), rated on a 5-point scale (1=Almost never to 5=Almost always). Internal consistency was high ( $\alpha = .89$ ). Parents rated seven items that are commonly used to assess children’s peer victimization experiences (e.g., “my child is picked on by other children” and “other children try to hurt my child’s feelings by excluding him or her”; Ladd & Kochenderfer-Ladd, 2002; Schwartz et al., 2005), on a 5-point scale (0 = never to 4 = almost always). In addition, teacher rated six items (e.g., “other kids hit or push this child”; “other children tease or make fun of this child”; Crick &

Grottpeter, 1995) on a 5-point scale (1 = never true to 5 = always true). Both parent and teacher reported measures were highly reliable ( $\alpha = .94$ ).

### *Hostile Parenting*

Parents rated eight items (e.g., “I constantly remind my child of things that he/she is not allowed to do” , “I lose my temper with my child if he/she does not help out around the house”, and “I want to control everything my child does”) from Parental Behavior Inventory (CRPBI; Schaefer, 1965), on a 3-point scale (1 = not like (false) to 3 = like (true). The Internal consistency is reliable ( $\alpha = .68$ ).

### *Psychological Control*

Parents rated the eight items of Parental Behavior Inventory (CRPBI; Schaefer, 1965). One scale examines psychological control: control through guilt (e.g., “feeling hurt if my child does not follow my advice”; El-Sheikh et al., 2010), The CRPBI has demonstrated reliability and convergent and discriminate validity (Schwarz, Barton-Henry, & Pruzinsky, 1985). In this sample, internal consistency was modest for parents’ reports of psychological control ( $\alpha = .76$ ). Moreover, preadolescents completed the Child Development Project questionnaires (CDP, Pettit et al., 2001). Participant rated 10 items on a 3-point scale from 1(not like) to 3 (a lot like) about their mother (e.g., “change the subject whenever I have something to say,” “blames me for other family members’ problem”). The measure is reliable ( $\alpha = .71$ ).

### *Externalizing*

This was obtained through the parallel teacher and mother forms of the Achenbach questionnaires: the Teacher Rating Form and the Child Behavior Checklist (Achenbach, 1991). The broad-band externalizing score consists of two subscales: aggression and rule-breaking. To minimize overlap with items in the bullying measures, only the rule-breaking subscale was used

in current study (e.g., breaks rules at home, school, or elsewhere). Thus, parents rated 17 items about the rule-breaking subscales. The items were presented on a three-point scale ranging from 0 (not true) to 2 (very true). We derived externalizing scores by calculating the mean across the 17 items on this scale. Internal consistency for this study was high ( $\alpha = .92$ ). Teachers completed the well-validated TRF, in which 11 items of rule-breaking were used to generate the externalizing scores. The measures are highly reliable ( $\alpha = .91$ ).

### *Internalizing*

Similar to externalizing, internalizing was obtained through the parallel teacher and mother forms of the Achenbach questionnaires: the Teacher Rating Form and the Child Behavior Checklist (Achenbach, 1991), as well as preadolescent reported Depression Inventory. Parents rated 31 items, whereas teachers rated 32 items from anxious, depressed and withdrawal subscales. The items were presented on a three-point scale ranging from 0 (not true) to 2 (very true). The measures are reliable for both parent reports ( $\alpha = .85$ ) and teacher reports ( $\alpha = .84$ ). Preadolescent rated 27 items from Revised Manifest Anxiety Scale (e.g., “I get nervous when things do not go the right way for me”, Reynolds & Richmond, 1978). The items were presented on a 2-point scale (0 = no, 1 = yes). Internal consistency for this study was high ( $\alpha = .87$ ).

## IV. Results

The presentation of results is organized as follows. First, descriptive statistics are presented for all study variables, followed by bivariate correlations. Of special interest are links between the same construct reported by different informants. Second, results of regression analyses are presented where the specific linkages between peer relationship difficulties, parenting style, and adjustment problems were tested. Analyses controlled for one type of problem (e.g., victimization) when examining links between the other type of problem (e.g., bullying) and each adjustment problems outcomes (e.g., externalizing). Then the order of entry switched to test whether the problem still significantly predicts the outcome. Gender also was controlled. In these analyses, different informants' reports on predictors and outcomes were used where possible. Next, results of regression analyses are presented in which the unique and additive impact of parenting style and peer relationship difficulties on adjustment problems were also tested. Order of entry of parenting style and peer relationship difficulties was switched in separate analyses and the unique and redundant predictive effects were calculated.

### **Descriptive Statistics**

Descriptive analyses were conducted to determine the ranges, means, and standard deviations of the study variables for the total sample (Table 1). In addition, distributional properties of each variable were examined. All variable were normally distributed except bullying, Internalizing and externalizing which are somewhat skewed toward lower values.

**Socio-demographic variables.** The descriptive information for the socio-demographic variables, including gender, race, and SES can be found in Tables 1. On average, the age of the sample is 12.4, ranging from 11 to 14 ( $N=100$ ). 51% of the sample is female. As for race, 59.6% of the total sample is classified as Caucasian, and 34.3% are classified as African American.

Finally, with respect to income status, the average income of the total sample is around \$38000; 16.7% participant reported low income (less than \$20000).

Descriptive information on the main variables is presented in Table 1. On average, self- and teacher-reported victimization was higher than parent-reported victimization. Similarly, teacher-reported bullying was higher than self- or parent-reported bullying. In general, relatively low levels of internalizing and externalizing problems were reported. On average, participants' parents were relatively low in using psychological control and hostile parenting.

### **Correlations within and between Variable Domains**

**Peer relationship difficulties.** Correlations were computed for different informants' reports of bullying and victimization (Table 2). Modest (for child report) to moderate (for teacher- and parent-report) correlations between bullying and victimization were found. In terms of cross-informant correlations for each type of peer relationship difficulty, there was significant convergence across informants for bullying ( $r$ s range from .24 to .47). Significant correlations also were found between parent-reported and both child- and teacher-reported victimization. The correlation between child- and teacher-reported victimization was not significant.

**Parenting style.** As shown in Table 2, parent-reported psychological control was significantly correlated with child-reported psychological control. Also, parent-reported hostile parenting was moderately, significantly correlated with both parent- and child-reported psychological control.

**Adjustment problems.** Correlations between externalizing and internalizing problems are presented in Table 2. All correlations are significant. Correlations among parents', children's, and teachers' reports on child internalizing are of modest magnitude; the correlation



between parents' and teachers' reports of externalizing was moderately strong. Correlations between externalizing and internalizing also were significant.

### **Correlation across Variable Domains**

With respect to gender, girls were reported as higher in bullying by parents and as lower in victimization by teachers (see Table 2). No other gender differences were found.

**Peer relationship difficulties and adjustment problems.** Generally, within informant, victimization was more strongly associated with internalizing than externalizing, and bullying was more strongly associated with externalizing than internalizing (See Table 2-a). The correlation between teachers' reports of child bullying and externalizing is noteworthy because it is quite high ( $r = .76$ ). Significant cross-informant correlations were found between child-reported bullying and both parent- and teacher-reported externalizing, between teacher-reported bullying and parent-reported externalizing and internalizing, and between teacher-reported victimization and parent-reported internalizing.

**Parenting style and peer relationship difficulties.** Hostile parenting was associated with higher levels of bullying and victimization irrespective of informant (See Table 2-b). Parent-reported psychological control was not significantly related to any peer relationship difficulty measure. Child-reported psychological control was significantly correlated with parent- and child-reported bullying and with child-reported victimization.

**Parenting style and adjustment problems.** Hostile parenting was positively and significantly correlated with all adjustment measures. Parent-reported psychological control was significantly correlated with child-reported internalizing problems (and marginally significantly with parent-reported internalizing) and with parent-reported externalizing. Higher levels of

child-reported psychological control were associated with more parent- and teacher-reported externalizing problems and with more child-reported internalizing problems.

### **Regression Analysis**

A series of regression analyses were conducted to test for specificity in links between parenting, peer relationship problems, and behavior problems. In each analysis, gender and the “alternate” within-domain construct were controlled. For example, in examining links between victimization and internalizing, bullying was controlled (i.e., entered in the first step). Then the analyses were re-run with the “alternate” construct entered in the second step and the main predictor entered in the first step. There are a total of three models per outcome based on combinations of different informants’ report.

#### **Predicting externalizing problems from peer relationship difficulties**

Three models were used to predict parent- and teacher-reported externalizing problems. For each model we conducted two analyses. The first analysis, where gender and victimization were entered in step 1 and bullying was entered in step 2, was to determine if bullying continued to predict externalizing when controlled for victimization. The second analysis, where gender and bullying were entered in step 1 and victimization on step 2, was to determine if victimization continued to predict externalizing when controlled for bullying.

Results for parent-reported externalizing problems were presented in Table 3. The first model includes parent reports as predictors (mono-informant) and the second and third models include child and teacher reports, respectively, as predictors (cross-informant). In the first analysis of model 1, results of the first step revealed that victimization was a significant predictor of externalizing ( $\beta = .31; p < .01$ ) and accounted for a significant amount of the variance (10%). When bullying was entered in the second step, it accounted for an additional significant amount

(18%) of the unique variance in externalizing problems ( $\beta = .50; p < .001$ ). In total, parent-reported bullying and victimization explained 28% of variance in externalizing problems. In the second analysis of model 1, results of the first step revealed that bullying was a significant predictor of externalizing ( $\beta = .54; p < .001$ ) and accounted for a significant amount of the variance (28%). However, when victimization was entered in the second step, it no longer significantly predicted externalizing problems.

For models 2 and 3, results of the first analysis show that victimization was not a significant predictor, but both child- and teacher-reported bullying were significant predictors for externalizing problems even controlling for victimization ( $\beta = .24; p < .05, \beta = .37; p < .01$  respectively) and accounted for 6% and 9% unique variance for externalizing problems. In the second analysis of model 2 and 3, both child- and teacher-reported bullying were significant predictors for externalizing problems ( $\beta = .27, p < .01, \beta = .33; p < .01$  respectively) and accounted for 8% and 11% unique variance for externalizing problems, while victimization was not a significant predictor after controlling for bullying.

Results for teacher-reported externalizing problems were presented in Table 4. In the first analysis, parent-, child- and teacher-reported victimization was a significant predictor for externalizing problems ( $\beta = .26; p < .05; \beta = .20, p < .05; \beta = .45; p < .001$ ; respectively) and accounted for 10%, 7% and 23% of the variance. Besides, child- and teacher- reported bullying also significantly predicted externalizing when controlling for victimization ( $\beta = .42; p < .001; \beta = .75, p < .001$ ; respectively) and accounted for additional 16% and 37% of the unique variance for explaining externalizing problems. Parent-reported bullying did not account for significant variance in teacher-rated externalizing after controlling for parent-reported victimization. In the second analysis, all informants' reported bullying were significant predictors and accounted for

8%, 26%, 60% of the variance for externalizing problems respectively ( $\beta = .22$ ;  $p < .05$ ;  $\beta = .44$ ,  $p < .001$ ;  $\beta = .76$ ;  $p < .001$ ). However, victimization was no longer a significant predictor after controlling for bullying. In sum, there exists some specificity in the linkage between bullying and externalizing problems, and bullying accounted for more unique variance in externalizing problems. The results are consistent with our expectations.

### **Predicting internalizing problems from peer relationship difficulties**

Similar with predicting externalizing problems, a series of regression analyses were conducted to examine whether victimization and bullying predict parent-, child- and teacher-reported internalizing problems. Similarly, three models were used based on different informants. For each model, there were two analyses. The first analysis, where gender and bullying were entered in step 1 and victimization was entered in step 2, was to determine if victimization continued to predict internalizing after controlling for bullying. The second analysis, where gender and victimization were entered in step 1 and bullying in step 2, was to determine if bullying continued to predict internalizing after controlling for victimization.

Results for parent-reported internalizing problems were presented in Table 5. In the first analysis, the first step revealed that both parent- and teacher-reported bullying were significant predictors of internalizing ( $\beta = .37$ ;  $p < .01$ ;  $\beta = .29$ ,  $p < .01$ ; respectively) and accounted for a significant of 13% and 9% of the variance. When parent- or teacher-reported bullying was entered in the second step, it accounted for an additional significant of 14% and 7% of the unique variance in internalizing problems ( $\beta = .43$ ;  $p < .001$ ;  $\beta = .34$ ,  $p < .05$ ; respectively). In the second analysis, the first step revealed that parent- and teacher- reported victimization was a significant predictor of internalizing ( $\beta = .50$ ,  $p < .001$ ;  $\beta = .40$ ,  $p < .001$ ; respectively) and accounted for a significant amount of 25% and 16% of the variance. However, when bullying

was entered in the second step, it no longer significantly predicted internalizing problems after controlling for victimization.

Results for teacher-reported internalizing problems are presented in Table 6. In the first step, neither parent-, child-, or teacher-reported bullying predicted teacher-rated internalizing. Both child- and teacher-reported victimization did predict teacher-rated internalizing ( $\beta = .24, p < .05$ ;  $\beta = .40, p < .001$ ; respectively). Only teacher-reported victimization remained a significant predictor after controlling for bullying, and accounted for 13% of the unique variance ( $\beta = .45; p < .001$ ).

Results for preadolescent-reported internalizing problems are presented in Table 7. For model 1 and 2, in the first analysis, results of the first step revealed that parent-reported bullying was marginally significantly predicted internalizing problem ( $\beta = .19, p < .10$ ), and child-reported bullying were significant predictors of internalizing ( $\beta = .22, p < .05$ ), accounted for 3% and 5% of the variance. When parent- and child-reported victimization were entered in the second step, they accounted for 3% and 22% of the unique variance in internalizing problems ( $\beta = .22, p < .10$ ;  $\beta = .48, p < .001$ ). In the second analysis, the first step revealed that parent- and child-reported victimization were significant predictors of internalizing ( $\beta = .26, p < .05$ ;  $\beta = .51, p < .001$ ) and accounted for a significant of 7% and 25% of the variance. However, when bullying was entered in the second step, it no longer significantly predicted internalizing problems after controlling for victimization. For model 3, it is the curious that teacher-reported victimization was only marginally significant when entered on the first step ( $\beta = .21, p < .10$ ), but significantly predicted internalizing after controlling for bullying ( $\beta = .27, p < .05$ ). In sum, there exists some specificity in the linkage between victimization and internalizing problems,

and victimization accounted for more unique variance in explaining internalizing problems. The results are consistent with our expectations.

### **Predicting bullying from parenting style**

Similarly, a series of regression analyses were conducted to examine whether hostile parenting and psychological control are associated with bullying. The measure of hostile parenting only comes from parent report, so the models are contrasting parent report of psychological control and hostile parenting (Model 1) and child report of psychological control and parent report of hostile parenting (Model 2). For each model, there were two analyses. The first analysis, where gender and psychological control were entered in step 1 and hostile parenting was entered in step 2, was to determine if hostile parenting continued to predict bullying after controlling for psychological control. Note that step 2 will always be the same since we only used parent-reported hostile parenting. The second analysis, where gender and hostile parenting were entered in step 1 and psychological control in step 2, was to determine if psychological control continued to predict bullying after controlling for hostile parenting. Note that step 1 would always be the same because of the same measure.

Results for parent-reported bullying were presented in Table 8. In the first step, child-reported but not parent-reported psychological control significantly predicted bullying ( $\beta = .25; p < .05$ ), and it accounted for 11% of the variance. Hostile parenting in both models did predict bullying ( $\beta = .31; p < .01$ ) and accounted for 13-14% of the variance. In the second step, hostile parenting also significantly predicted parent-reported bullying when controlling for parent- and child-reported psychological control ( $\beta = .33, p < .01; \beta = .24; p < .05$ ; respectively) and accounted for 8% and 5% of the unique variance. However, neither parent- nor child-reported

psychological control significantly predicted bullying after controlling for hostile parenting. The results are consistent with our expectations.

Results for child-reported bullying were presented in Table 9. In the first step, both parent- and child-reported psychological control significantly predicted bullying ( $\beta = .22, p < .05$ ;  $\beta = .46, p < .001$ ; respectively), and attributed for 5% and 21% of the variance. Hostile parenting in both models did predict bullying ( $\beta_{m1} = .33, p < .001, \beta_{m2} = .32, p < .01$ ) and accounted for 10-11% of the variance. In the second step, hostile parenting also significantly predicted bullying when controlled for parent-reported psychological control ( $\beta = .29, p < .01$ ), but marginally significant predicted bullying when controlled for child-reported psychological control ( $\beta = .17, p < .10$ ), and accounted for 7% and 2% of the unique variance. Child-reported psychological control still significantly predicted bullying even controlling for hostile parenting ( $\beta = .39, p < .001$ ), and accounted for 13% of the unique variance. But parent-reported psychological control no longer significantly predicted bullying after controlling for hostile parenting. These findings are less consistent with our expectations.

Results for teacher-reported bullying were presented in Table 10. In the first step, both parent- and child-reported psychological control significantly predicted bullying ( $\beta = .22, p < .05$ ;  $\beta = .22, p < .05$ ; respectively). Hostile parenting in both models did predict bullying ( $\beta_{m1} = .35, p < .001; \beta_{m2} = .34, p < .001$ ) and accounted for 13% and 12% of the variance. In the second step, hostile parenting also significantly predicted teacher-reported bullying when controlled for parent- and child-reported psychological control ( $\beta = .32, p < .01; \beta = .31, p < .01$ ; respectively) and accounted for 8% of the unique variance. However, neither parent- nor child-reported psychological control significantly predicted bullying after controlling for hostile parenting. Therefore, a conclusion can be drawn that there exists a specific linkage between hostile

parenting and bullying, which is consistent with our expectation. And hostile parenting plays a unique role in predicting bullying.

### **Predicting victimization from parenting style**

A series of regression analyses were conducted to examine whether hostile parenting and psychological control are associated with predict parent-, child- and teacher-reported victimization. Similarly, there are two models. For each model, there will be two analyses. The first analysis, where gender and hostile parenting were entered in step 1 and psychological control was entered in step 2, was to determine if psychological control continued to predict victimization after controlling for hostile parenting. The second analysis, where gender and psychological control were entered in step 1 and hostile parenting in step 2, was to determine if hostile parenting continued to predict bullying after controlling for psychological control.

Parent-reported victimization was examined first (Table 11). In the first step, neither parent- nor child-reported psychological control was significant predictors. But in the second step, parent-reported psychological control significant predicted victimization in the opposite directions as we expected even controlled for hostile parenting ( $\beta = -.27, p < .05$ ), and accounted for 6% of the variance. For hostile parenting, in the first step, in both models it did predict bullying ( $\beta_{m1} = .23; p < .05; \beta_{m2} = .22; p < .05$ ). In the second step, it also significantly predicted victimization when controlled for parent- and child-reported psychological control ( $\beta = .35, p < .01; \beta = .26; p < .05$ ; respectively) and accounted for 10% and 6% of the unique variance. These findings are less consistent with our expectations.

Next, child-reported victimization was examined (Table 12). In the first step, hostile parenting in both models did predict victimization ( $\beta = .31; p < .01; \beta = .29; p < .01$ ), and accounted for 8% and 10% of the variance respectively. Child- but not parent-reported



psychological control was significant predicted victimization ( $\beta = .23, p < .05$ ), and accounted for 10% of the variance. In the second step, hostile parenting also significantly predicted victimization when controlled for parent-reported psychological control ( $\beta = .29, p < .05$ ) and accounted for 7% of the unique variance. Whereas hostile parenting marginally significantly predicted victimization when controlled for child-reported psychological control ( $\beta = .20, p < .05$ ) and accounted a marginally significant 3% of the unique variance. Moreover, child- but not parent-reported psychological control significant predicted victimization ( $\beta = .23, p < .05$ ) even controlled for hostile parenting, and accounted for 5% of the variance.

Finally, teacher-reported victimization was examined (Table 13). In sum, parent-reported hostile parenting was a significant predictor irrespective of which step it was entered. But neither parent- nor child-reported psychological control significantly predicted victimization. To be detailed, in the first analysis, hostile parenting and gender were significant predictors ( $\beta_{gender} = -.24, p < .05; \beta = .29, p < .01; \beta_{gender} = -.26, p < .05; \beta = .29, p < .01$ , respectively), together accounting for 15% of the variance. In the second analysis, result of first step revealed that gender was a significant predictor ( $\beta_{m1} = -.26, p < .05$ ), and accounted for 7% of the variance. Hostile parenting, which was entered in step 2, was a significant predictor even after controlling for psychological control ( $\beta_{m1} = .34, p < .01; \beta_{m2} = .31, p < .01$ ) and accounted for 10% and 8% of the variance. Thus, little evidence was found for specificity in the link between parenting and peer victimization. Four of six analyses revealed a positive association between hostile parenting and victimization.

### **Predicting internalizing problems from parenting style**

A series of regression analyses were conducted to examine whether hostile parenting and psychological control are associated with predict parent-, child- and teacher-reported

internalizing. There are two models. For each model, there will be two analyses. The first analysis, where gender and hostile parenting were entered in step 1 and psychological control was entered in step 2, was to determine if psychological control continued to predict internalizing problems after controlling for hostile parenting. The second analysis, where gender and psychological control were entered in step 1 and hostile parenting in step 2, was to determine if hostile parenting continued to predict internalizing problems after controlling for psychological control.

First, parent-reported internalizing problems were examined (Table 14). Hostile parenting was a significant predictor with ( $\beta = .50, p < .001$ ) or without ( $\beta_{m1} = .53, p < .001; \beta_{m2} = .52, p < .001$ ) controlling for parent- and child-reported psychological control, and accounted for a significant amount of the variance (1<sup>st</sup> analysis: 25%, 25%; 2<sup>nd</sup> analysis: 22%, 23%). In sum, parent-reported hostile parenting was significant predictor irrespective of which step it entered. But neither parent- nor child-reported psychological control was significantly predicted internalizing problems. These findings are less consistent with our expectations.

Similar results were found in teacher-reported internalizing problems (Table 15). Hostile parenting is a significant predictor with ( $\beta_{m1} = .21, p < .05; \beta_{m2} = .22, p < .05$ ) or without ( $\beta_{m1} = .28, p < .05; \beta_{m2} = .26, p < .05$ ) controlling for parent- and child-reported psychological control, and accounted for a significant amount of the variance (1<sup>st</sup> analysis: 5%; 2<sup>nd</sup> analysis: 6%). Thus, parent-reported hostile parenting was significant predictor irrespective of which step it entered. But neither parent- nor child-reported psychological control was significantly predicted internalizing problems.

Last, child-reported internalizing problems were examined (Table 16). In the first analysis, hostile parenting is a significant predictor ( $\beta_{m1} = .39, p < .001; \beta_{m2} = .37, p < .001$ ) and

accounted for 15% and 14% of the variance. Child-reported psychological control was a marginally significant predictor of internalizing problems after controlling for hostile parenting ( $\beta = .20, p < .10$ ). In the second analysis, parent- and child-reported psychological control were significant predictors ( $\beta_{parent} = .27, p < .05; \beta_{child} = .31, p < .01$ ) and accounted for 7% and 10% of the variance, whereas hostile parenting was still a significant predictor ( $\beta_{m1} = .33, p < .01; \beta_{m2} = .30, p < .01$ ) even after controlling for psychological control, and accounted for 9% and 8% of the variance. In summary, hostile parenting and internalizing problems were consistently associated, but psychological control and internalizing were not. This pattern is not consistent with expectation.

### **Predicting externalizing problems from parenting style**

A series of regression analyses were conducted to examine whether hostile parenting and psychological control are associated with predict parent- and teacher-reported externalizing. There are two models based on combination of different informants' reports. For each model, there were two analyses. The first analysis, where gender and psychological control were entered in step 1 and hostile parenting was entered in step 2, was to determine if hostile parenting continued to predict externalizing after controlling for psychological control. The second analysis, where gender and hostile parenting were entered in step 1 and psychological control in step 2, was to determine if psychological control continued to predict externalizing after controlling for hostile parenting.

First, parent-reported externalizing problems were examined (Table 17). Hostile parenting was a significant predictor with ( $\beta_{m1} = .41, \beta_{m2} = .35, p < .001$ ) or without ( $\beta_{m1} = .42, \beta_{m2} = .40, p < .001$ ) controlling for psychological control, and accounted for a significant amount of the variance (1<sup>st</sup> analysis: 15%, 14%; 2<sup>nd</sup> analysis: 9%, 8%) of the variance. Child-reported

psychological control was a significant predictor without controlling for hostile parenting and accounted for 7% of the variance ( $\beta = .26, p < .05$ ). As we expected, both parent- and child-reported psychological control is not a significant predictor after controlling for hostile parenting.

Similar results are represented in teacher-reported externalizing problems (Table 15). Hostile parenting was a significant predictor with ( $\beta_{m1} = .49, \beta_{m2} = .42, p < .001$ ) or without ( $\beta_{m1} = .49, \beta_{m2} = .47, p < .001$ ) controlling for psychological control, and accounted for an average of 21% of the variance. Child-reported psychological control was a significant predictor and accounted for 7% of the variance ( $\beta = .29, p < .01$ ). As we expected, both parent- and child-reported psychological control were not significant predictors after controlling for hostile parenting. In conclusion, there exists specificity in linkage between hostile parenting and externalizing problems.

### **Additive Model Examination**

A series of regression analyses are presented in which the additive model of parenting style and peer relationship difficulties on adjustment problems were tested. As the regression results shown above: hostile parenting shown stronger and consistent result than psychological control to predict adjustment problems, bullying shown stronger and consistent result than victimization to predict externalizing problems, and victimization shown stronger and consistent result than bullying to predict internalizing problems. Therefore, we used bullying and hostile parenting to predict externalizing problems, while used victimization and hostile parenting to predict internalizing problems. There are a total of three models based on combination of different informants' report.

Parent-reported externalizing problems were examined first (Table 19). In the first analysis, bullying was entered in step 1 and hostile parenting was entered in step 2, to determine if hostile parenting continued to predict externalizing problems after controlling for bullying. The first step revealed that bullying was a significant predictor of externalizing problems ( $\beta_{m1} = .53, p < .001$ ;  $\beta_{m2} = .42, p < .01$ ;  $\beta_{m3} = .33, p < .01$ ) and accounted for 28%, 8%, 11% (respectively) of the variance. When hostile parenting was entered in the second step, it accounted for an additional significant amount of 7%, 11%, 13% (respectively) of the unique variance in externalizing problems ( $\beta_{m1} = .28, p < .01$ ;  $\beta_{m2} = .35, p < .001$ ;  $\beta_{m3} = .38, p < .001$ )

An analysis was then run in which the hostile parenting were entered first and bullying was entered in the second step to determine if bullying continued to predict externalizing problems after controlling for hostile parenting. Hostile parenting entered in the first step accounted for a significant of 17%, 16%, 20% (respectively) of variance in parent-reported externalizing problems ( $\beta_{m1} = .41, p < .001$ ;  $\beta_{m2} = .40, p < .001$ ;  $\beta_{m3} = .45, p < .001$ ). When bullying was entered in the second step, parent-reported bullying explained a significant portion of 18% of the variance in externalizing problems ( $\beta_{m1} = .45, p < .001$ ). Neither child- nor teacher-reported bullying significantly incremented the prediction of parent-reported externalizing problems.

Similar analysis was conducted to predict teacher-reported externalizing problems (Table 20). The first step revealed that child and teacher-reported bullying were significant predictors of externalizing problems ( $\beta_{m2} = .45, p < .01$ ;  $\beta_{m3} = .77, p < .01$ ) and accounted for 20% and 59% (respectively) of the variance, but parent-reported bullying was not a significant predictor. When hostile parenting was entered in the second step, it accounted for an additional significant 20%, 11%, 5% (respectively) of the unique variance in externalizing problems ( $\beta_{m1} = .48, p < .01$ ;  $\beta_{m2}$

= .36,  $p < .001$ ;  $\beta_{m3} = .24, p < .001$ ). In the second analysis, hostile parenting entered in the first step accounted for a significant portion of 23%, 23%, 24% (respectively) of the variance in teacher-reported externalizing problems ( $\beta_{m1} = .48, p < .001$ ;  $\beta_{m2} = .49, p < .001$ ;  $\beta_{m3} = .48, p < .001$ ). When bullying was entered in the second step, child- and teacher-reported bullying explained a significant portion of 8% and 41% variance in externalizing problems. In general, it can be concluded from these analyses that whereas hostile parenting and bullying contribute additively to the prediction of externalizing problems, the predictive relations are stronger for parenting style than for peer relationship difficulties.

Parent-reported internalizing problems were examined (Table 21). In the first analysis, victimization was entered in step 1 and hostile parenting was entered in step 2, to determine if hostile parenting continued to predict internalizing problems after controlling for victimization. The first step revealed that victimization was a significant predictor of internalizing problems ( $\beta_{m1} = .51, p < .001$ ;  $\beta_{m2} = .35, p < .001$ ) and accounted for 26%, 13% (respectively) of the variance. When hostile parenting was entered in the second step, it accounted for an additional significant portion of 15% and 18% (respectively) of the unique variance in internalizing problems ( $\beta_{m1} = .40, p < .001$ ;  $\beta_{m2} = .45, p < .001$ ). In the second analysis, hostile parenting, which was entered in the first step, accounted for a significant portion of 25%, 26% (respectively) of the variance in parent-reported internalizing problems ( $\beta_{m1} = .50, p < .001$ ;  $\beta_{m2} = .51, p < .001$ ). When victimization was entered in the second step, it explained a significant portion of 16% and 4% of the variance in internalizing problems. In sum, hostile parenting and victimization contribute additively to the prediction of parent-reported internalizing problems, the predictive relations are very similar for parenting style and parent-reported victimization, but are stronger for parenting style than teacher-reported victimization.

Similar analysis conducted to predict child-reported internalizing problems (Table 22). In the first analysis, results show that victimization was a significant predictor of internalizing problems ( $\beta = .51, p < .001$ ) and accounted for 26% of the variance. When hostile parenting was entered in the second step, it accounted for an additional significant amount of 6% of the unique variance in internalizing problems ( $\beta = .25, p < .001$ ). In the second analysis, hostile parenting, which was entered in the first step, accounted for a significant portion of 15% of the variance in child-reported internalizing problems ( $\beta = .38, p < .001$ ). When victimization was entered in the second step, it explained a significant portion of 17% of the variance ( $\beta = .43, p < .001$ ). Thus, one can conclude that hostile parenting and victimization contribute additively to the prediction of child-reported internalizing problems; the predictive relations are stronger for child-reported victimization than hostile parenting.

Last, similar analysis was conducted to predict teacher-reported internalizing problems (Table 23). In the first analysis, result shown victimization was a significant predictor of internalizing problems ( $\beta = .38, p < .001$ ) and accounted for 15% of the variance. When hostile parenting was entered in the second step, it did not significantly predict teacher rated internalizing problems. In the second analysis, hostile parenting, which was entered in the first step, accounted for a significant portion of 5% of the variance in child-reported internalizing problems ( $\beta = .22, p < .05$ ). When victimization was entered in the second step, it explained a significant portion of 11% of the variance ( $\beta = .35, p < .01$ ). Therefore, one can conclude that teacher-reported victimization is accounted for more teacher-reported internalizing problems than hostile parenting does.

**Summary.** Of the total ten sets of analyses, six of them provide evidence constructed with additive effects. Of the remaining four sets of analyses, peer problems remained significant

but parenting did not. Among them, three of these were when bullying was used to predict externalizing problems and one was where victimization was used to predict internalizing problems.



## V. Discussion

The overarching goals of this study were to examine whether specificity exists in the linkage between peer relationship difficulties, parenting style and adjustment problems, and whether parenting and peer relationship had additive effects on adjustment problems in preadolescents. Hypotheses were tested using multiple informants for each variable. Findings revealed that both parenting and peer relationship difficulties predicted preadolescents' adjustment problems. More specifically, higher levels of hostile parenting and peer bullying predicted higher level of externalizing problems; higher level of hostile parenting and victimization predicted higher level of internalizing problems irrespective of informant. Additionally, evidence was consistent with specificity in linkages between bullying and externalizing problems and between victimization and internalizing problems. Less consistent evidence was found for parenting. Hostile parenting more strongly predicted peer difficulties and adjustment problems than did psychological control. Each of these findings will be discussed in the sections that follow. Limitations will be noted and future directions for research on specificity testing will be discussed.

Before turning to a discussion of specific findings, it is important to provide some context about categories of bullying and victimization and the current study's approach to studying them. Previously, researchers considered bullying and victimization to be distinct peer relationship problems; more recently, scholars have noted overlap between these two groups. Bullies also may be victims (e.g., bully-victims), or aggressive victims (Cook et al., 2010; Schwartz, 2000). A large body of studies shows that bullying is highly correlated with victimization, similar to results found in the current study. Bully-victims tend to have the worst outcomes, including different kinds of adjustment problems when compared to "pure bullying" and "pure victims"

(Espelage & Swearer, 2003; Ivarsson, et al., 2005). In the analysis of the current study, due to the high correlation between bullying and victimization, controlling bullying when examining victimization, and controlling victimization when examining bullying, would yield the "pure" outcome and predictor of bullying or victimization. Similarly, controlling for hostile parenting when examining psychological control, and controlling psychological control when examining hostile parenting, would also yield the "pure" outcome and predictor of hostile parenting and psychological control.

### **Peer Relationship Difficulties and Adjustment Problems**

Results showed that bullying significantly predicted externalizing problems with and without controlling for victimization. In the current study, we conceptualized externalizing problems by only using a rule-breaking subscale in order to get a true variance and prediction, due to the highly correlated bullying and aggression subscale. The bullying finding is consistent with previous studies (e.g., Cook et al., 2010; Ladd & Troop-Gordan, 2003), suggesting that early adolescents who bully others are usually more aggressive, impulsive, have lower self-control and have more rule-breaking behavior problems than non-bullied adolescents. On the other side, it is also possible that preadolescents who had externalizing problems were more likely to attribute hostile intention to the behavior of peers in ambiguous situations and expected bullying as a controlled strategy for reaching instrumental and social goals, such as popularity or peer group domination (Schwartz, 2000), as would be suggested by social-information processing theory (Crick & Dodge, 1994). It also is possible that social learning processes such as modeling and reinforcement increase the likelihood that bullying will further the development of rule-breaking and other externalizing behaviors (Bandura, 1978). However, some of the previous studies reported that bullying was also associated with internalizing problems (e.g.,

O'Brennan, 2008; Rose & Swenson, 2009), and similar results can also be found in the current study only when victimization was not controlled. When victimization was controlled, bullying no longer significantly predicted internalizing behaviors. This finding might be due to the overlap in measurement, or alternatively, that bullies had some social skills deficits that invite others' bullying, which contributes to their subsequent victimization. This explanation is consistent with a previous meta-analysis reported by Cook and colleagues (2010) that bully-victims had both high levels of externalizing and internalizing symptoms. However "pure bullying" only exhibited behavioral problems in the current study, not emotional problems.

Similarly, consistent with previous studies (e.g., Dejardins & Leadbeater, 2011; Hawker & Boulton, 2000), in the current study, victimization significantly predicted internalizing problems with and without controlling for bullying. The experience of being bullied is painful and humiliating, which may cause preadolescents to feel depressed, anxious, to have lower self-esteem and to fear or avoid social interactions (Reijntjes, 2010). However, several researchers suspect that the relationship between victimization and internalizing problem is a reciprocal process (e.g., Hawker & Boulton, 2000). Because of feelings of anxiety and fear of social interaction, victims are more likely to evoke further bullying and view themselves as deserving these attacks, which contributes to increased internalizing symptoms. However, scholars also have suggested that some victimized adolescents may feel a sense of injustice and use aggression to defend their maltreatment (Cook et al., 2010). Supportive results were found in the current study, in which victimization was associated with externalizing problems when bullying was not controlled. This finding might be for adolescents who were both bullying and victimized, so they had both internalizing and externalizing problems, which is consistent with previous research on bully-victims (Espelage & Swearer, 2003; Ivarsson, et al., 2005). After controlling for bullying,

victimization no longer significantly predicted externalizing behaviors. In this case, victimization-only might have emotional problems (internalizing problems), but are unlikely to be characterized by marked rule-breaking (externalizing problems).

The inconsistency and mixed evidence of previous results might be due to an empirical overlap between bullying and victimization. Because few studies controlled for one of the peer relationship difficulties when examining the other one, it is highly likely that the findings from these previous studies might be different if authors had controlled for one difficulty when examining another. In the current study, this potential overlap was taken into account and ruled out, bringing in stronger “pure and unique” results—specificity. Moreover, this specificity remained regardless of the source of the informants. Although a stronger relationship exists within the same informant, significant results were also replicated using multi-informant’s reports (e.g., child-reported peer difficulties with teacher-reported adjustment problem), which is the most conservative approach because it minimizes error variance and possible biases evident in the single informant’s report (Salmivalli & Peets, 2009). Findings of specificity may have implications for interventions to be discussed in greater detail later. For example, because of bullying’s unique contribution towards externalizing problems, it suggests bullying has a direct impact on externalizing problems for the preadolescents and thus might be the most effective and useful intervention target if the goal is to reduce rule-breaking behavior.

### **Parenting Style and Peer Relationship Difficulties**

Although negative parenting has been linked with peer relationship difficulties (Ladd & Pettit, 2002), few studies have tested for specificity in these links. Doing so might provide evidence that could inform the development of more effective intervention strategies for use with

parents. The current study provides some support for specificity with respect to hostile parenting, but little evidence of specificity for psychological control.

In the literature on parenting and peer relationship problems, researchers measured negative parenting through multiple constructs. Of the literature examined, nearly one third tested emotional control, and the remaining two third tested hostility. Among hostility, the most common type was physical discipline, in which parents used a physical power assertive disciplinary style (Ladd & Pettit, 2002). It is possible that physical discipline is an extreme side of hostility, and the items used to measure it are very clear to present the meaning (e.g, beating your kids, spanking), so the strength of the relationship might be stronger than other measures of hostility. In the current study, we use hostile parenting, another form of a power assertive disciplinary style, where parents control children's behavior, are strict about their daily issues and unhappy or lose their temper if the child is not doing well. In this case, children had less opportunity to learn prosocial interaction styles, and have a deficit in social skills (Ladd & Ladd, 1998).

#### *Hostile Parenting and Peer Relationship Difficulties*

A consistent result was that experiencing higher level of hostile parenting was associated with higher level of aggressive behavior with and without controlling for psychological control, irrespective of different informants. These findings are consistent with previous results (e.g., Curtner-Smith, 2000; Xu et al., 2009), and supported by social-information-processing theory and social-learning theory, according to which preadolescent's characteristic ways of interacting with peers are shaped by past experiences observing and participating in social transactions with parents, which in turn form the basis of a generalized representational structure that serve as a strategies for guiding social behaviors (Bandura, 1978; Dodge et al., 1990; Pettit et al., 1991).

The disciplinary style experienced within the family is transferred by the child from family to peer relationships; the social interactions experienced in the family contribute to the quality of the child's interactions within the peer environment (Pettit et al., 1991). Thus, parents who rely on power assertive strategies draw children's attention to a theme of control and compliance, which may encourage their children to develop outcome expectations that are more focused on achieving or satisfying one's own needs. As stated earlier, some early adolescents use aggressive behavior as a way to gain popularity and dominance. Preadolescents who experienced hostile parenting are turning the "control," which they learned from their family, into "aggression" directed at their peers at school. However, aggression itself could be indicative of difficult temperament and regulatory deficits that are placing the bullies at risk for more hostile parenting at home, and evoke victimization at school. The results from the current study provided some support for this idea in that maternal hostility shows unique and important roles in predicting victimization even after controlling for parent- and child-reported psychological control according to four out of six models. This result is consistent with the study from Schwartz and colleagues (2000), who found that restrictive discipline was associated with both victimization and aggression. Similar results were found in Duong and colleagues (2009)'s study, which demonstrated hostile parenting was significantly associated with both victimization and aggression. Possibly, hostile parents who always "control" the child make the child dependent and lacking in social skills, which are needed to effectively cope with their own peer relationship difficulties. Failing to do so would place them at a risk for further bullying.

In general, results showed that hostile parenting consistently predicted both form of peer relationship difficulties, failing to show either form of specificity. However, there may be overlapping pathways linking these parenting behaviors to peer relationship difficulties, which

need further explanations. These findings have substantial implications for teachers, clinicians, and others who work directly with aggressive or victimized preadolescents. The professionals should pay attention not only to the preadolescents' behavior but also might be including their parents, especially mothers, in the intervention program.

### *Psychological Control and Peer Relationship Difficulties*

The current study found higher level of psychological control was associated with higher level of bullying without controlling for hostile parenting. These findings were consistent with previous results reported by Kuppens and colleagues (2009), in which they found that psychological control was associated with relational aggression at school, but after controlling for harsh parenting, psychological control no longer significantly predicted relational aggression. By love withdrawal and guilty induction, psychological controlling parents interfere with the acquisition of social skills, which are important to management during peer conflict and may facilitate the adoption of manipulative behaviors, such as aggression towards peers (Barber et al., 2005). It is noted that in the current study, mother's psychological control was measured by child-report, thus it is likely that a mother who was aware of her children's misbehavior at school were more likely to control the child using guilt induction. However, one of the six models showed that psychological control still significantly predicted bullying beyond hostile parenting. Thus, those results were not as consistent as the results for hostile parenting and bullying, which indicated that stronger evidence existed for a relationship between hostile parenting and bullying.

Furthermore, in contrast with what was expected, four of the six models showed that psychological control was not a significant predictor of victimization after controlling for hostile parenting. These findings were consistent with previous study reported by Ma and Bellmore (2012), in which they found that peer victimization was predictive of increases in mother's

psychological control but parental psychological control did not predict subsequent peer victimization. Although the remaining two models showed that psychological control was a significant predictor of victimization controlling for hostile parenting, the direction of the prediction was opposite of each other. One showed that more child-reported psychological control was associated with higher level of child-reported victimization, whereas the other showed that more parent-reported psychological control was associated with lower level of parent-reported victimization. Previous studies consistently have found that psychological control was positively associated with adolescents' victimization (e.g., Finnegan et al., 1998). Psychological control intruded on adolescent's emotional and psychological autonomy, and did not allow the child to develop as an independent individual from their parents, which may lead adolescents to display either passive or dependent behaviors, which then placed them at increased risk for victimization (Ladd & Ladd, 1998). Alternately, adolescents' experience of victimization may further exacerbate such fragile parent-adolescent relationships by bringing forth more maternal psychological control because mother would view the victimized adolescent as not being "ready and safe" to gain autonomy, so kept the adolescents' dependence and reliance by psychological control (Ma & Bellmore, 2012).

However, the reason for the negative results is unclear. One explanation for this unexpected finding may involve the components of the psychological control measure. A study by Barber and Harmon (2002) listed the examples of psychological control as inducing guilt, instilling anxiety, withdrawing love, constricting verbal interaction and invalidating the child's perspective. Barber and Harmon (2002) suggest measures of psychological control should include as many factors as possible. However, due to research design, the measure used in this current study only used an 8-item scale that mainly measured inducing guilt. Additionally, there



is some evidence acknowledging that children and their parents have very different views on psychological control. In the current study, there is a moderate association between parent- and child-reported psychological control ( $r = .38, p < .01$ ). However, strong conclusions are not available at this time, which prompt the need for further study.

## **Parenting Style and Adjustment Problems**

### *Hostile parenting*

As expected, hostile parenting significantly predicted externalizing problems within and without controlling for psychological control. These results of externalizing problem were consistent with a large number of previous studies (e.g., Landford et al., 2004; Patterson, 2002), in which parents using hostile control to gain compliance from their children when confronting their misbehavior, inadvertently fostered further hostile attributions and rule-breaking behaviors. Alternately, some researchers view hostile parenting not only as a form of behavior control, but also a form of displeasure and disappointed communication. Its effect on children occurs both directly through behavior problems (e.g., Rothbaum & Weisz, 1994) and indirectly via emotional dysfunction. This perspective on hostile parenting was supported by the result of the current study. Hostile parenting was found to predict significantly internalizing problems even after controlling for psychological control. These results were not expected since we hypothesized psychological control was associated with internalizing problem even after controlling for hostile parenting, but it was consistent with other studies, such as McLoyn and colleagues (2011), who found harsh parenting was significantly associated with adolescent' depressive symptom and distress. Similarly, Manongdo and Ramirez-Garcia (2011) found that harsh parenting significantly predicted internalizing problems over a longer period of time. Except for strict control and powerful assertiveness, another main characteristic of hostile parenting is threaten,

which may make the adolescents fear their parents (e.g., I do not quickly forget the bad things that my child has done). Possibly, long-term daily fear and nervousness leads the preadolescents to feel depressed, worthless, and anxious. Although there is an overwhelmingly consistent result in the literature, one should note that no known studies have controlled for psychological control when examining hostile parenting and adjustment problems. Such controls were performed in the current study, which provides more confidence in the results found. In sum, similar as the result between hostile parenting and peer relationship difficulties, the consistent results showed that maternal hostility predicted both forms of adjustment problems, but failed to show specificity. It might be concluded that hostile parenting may exacerbate both internalizing and externalizing problems. Thus, future intervention designs should consider the parenting style and include both parents and preadolescents. Special training should be provided to mothers if they use hostile parenting.

### *Psychological Control*

As was expected, psychological control did not predict externalizing problems after controlling for hostile parenting. In other words, psychological control did not explain any further variance in externalizing problem. But without controlling for hostile parenting, two out of four models showed that child-reported psychological control significantly predicted externalizing problems. This finding might be because of the overlap between hostile parenting and psychological control, which are moderately correlated in current study ( $r_{child-report} = .38, p < .01$ ;  $r_{parent-report} = .44, p < .01$ ). This is consistent with previous study reported by Pettit and colleagues (2001), in which they found psychological control was a significant predictor for externalizing problem but earlier harsh parenting was associated with psychological control. Pettit and colleagues (2001) argued that mothers who were harsh and punitive in disciplinary in

early childhood were more likely to be psychological control in the early adolescent years. Thus, it is highly likely that by ruling out the overlap between hostile parenting and psychological control, psychological control would no longer predict externalizing problem, which was supported by current study.

Psychological control did not predict internalizing problem after controlling for hostile parenting regardless of informants, which was not expected. Hostile parenting, also not expected, played an important and unique role in adolescent's victimization. Without controlling for hostile parenting, two out of four models showed that parent- and child-reported psychological control significantly predicted internalizing problems. These results were consistent with a previous meta-analysis (Barber & Harmon, 2002), and a large number of studies (e.g., Loukas, 2009). Pettit and Laird (2003) stated that psychological controlling parents could insult the child, promote unrealistic perfectionism, and limit independent expression, and identity exploration. Therefore, more internalizing symptoms were developed, such as increased guilt and worthlessness, physiological arousal, and lower levels of self-worth. Reciprocally, adolescents who had internalizing problems may place themselves in poorer parent-adolescent interactions by eliciting more psychological control over time (Ma & Bellmore, 2012). However, the reason for why hostile parenting seems more essential in predicting internalizing problem as opposed to psychological control was not clear by results of the current study. Further research therefore is needed. It is possible hostile parenting is a stronger daily stressor than psychological control, which increases the child's psychological distress, feelings of hopelessness and worthlessness.

### **Do Peer Relationship Difficulties and Negative Parenting Predict Adjustment Problems?**

Although both parenting style (particularly negative parenting) and peer relationship difficulties have been linked with higher levels of adjustment problems (Criss et al., 2009; Ladd

& Pettit, 2002; Sentse & Laird, 2010), few studies have included them simultaneously. As discussed in the preceding section, hostile parenting predicted peer relationship difficulties as well as behavioral and psychological problems. Peer relationships difficulties likewise predicted adjustment problems. Of interest, therefore, is whether parent or peer relationship difficulties make unique or redundant contribution to behavior and psychological problems. Sorting this out could help in specifying whether there are distinct pathways through which adjustment problems develop or whether a single path (parenting through peers) best explains this developmental pattern. Another way to think about the combined vs. overlapping links between negative parenting, peer relationship difficulties, and adjustment problems is in terms of cumulative risk. That is, the likelihood that adjustment problems is heightened by the presence of multiple risk factors.

The current study provided more support of an additive effect, in that both hostile parenting and peer relationship difficulties contributed uniquely to adjustment problems. This finding is in concordance with a study by Criss and colleagues (2009) in which family and peer relationship factors were found to be incrementally related to anti-social behavior in adolescence. Criss et al. (2009) argued that this finding may indicate that relationships with parents and peers provide unique socialization and learning experiences. However, the current study also found when hostile parenting was entered first, bullying became non-significant or marginally significant at predicting externalizing problems; whereas when victimization was entered first; hostile parenting became non-significant at predicting internalizing problems. Hostile parenting and peer relationship difficulties are correlated, and, thus, it is important to disentangle their effects. The current findings suggest that although hostile parenting was significantly predictive of peer relationship difficulties, as would be expected, they were nonetheless non-redundantly

predictive of adjustment problems. Interestingly, however, parenting seems to play a more unique and major role than does peer relationship in adolescents' externalizing problems, whereas peer relationship accounted for more and unique variance than did parenting in explaining adolescent's internalizing problems. Because an interaction between parenting and peer relationship was not tested, it is difficult explaining adjustment problems, whether there is a buffer role of these two variables are unknown. However, according to Sentse and Laird's (2010) study, experiences in one relationship domain can be offset by experiences in the other and that the two relationship contexts provide complimentary experiences. It is clear that more hostile parenting and poorer peer relationships would yield the worst outcomes. It is possible that lower levels of hostile parenting may offset bullying's effect on externalizing problems, and lower levels of victimization may offset psychological control's effect on internalizing problems. Future studies need to test the interplay of the parent and peer's relationship in adjustment problems. However, there are still important implications for future intervention and prevention programs. For preadolescent who had externalizing problems, more emphasis should put on their mothers' hostile parenting, as well as their aggressive behavior with peers. Training parents to use the right way to educate and communicate is in the first priority, and then teaching preadolescent the proper social skills would be also helpful. For preadolescent who had internalizing problems, training the right social strategy to dealing with peer relationship difficulties is the first priority, but also involving parenting could increase the effectiveness of the training program.

### **Limitations and Future Directions**

While the results from the current study contribute to furthering our knowledge about early adolescents' adjustment problems, especially by providing new information about

specificity in links between how peer relationship difficulties, negative, and internalizing and externalizing problems, there were also several limitations of the present study. First, it was beyond the scope of the current study to examine racial differences in the predictive links between parenting, peer relationship difficulties, and adjustment problems. Future research should consider possible differences in these linkages for Caucasian and African Americans. Some previous studies have reported main-effect differences across racial groups. For example, African Americans children are often perceived as more aggressive (Graham & Juvonen, 2002) and less likely to be victimized than their peers (Hanish & Guerra, 2000). Other research has shown that harsh discipline and other forms of negative parenting are more strongly associated with aggressive outcomes for Caucasian youth than for African-American youth (e.g., Lansford et al., 2004). Furthermore, it is possible that, owing to socialization practices and discrimination experiences, peer victimization may not be internalized (i.e., result in internalizing problems) for African-American youth compared to Caucasian youth. Thus, both theory and research suggest the importance of considering how parenting, peer relationship difficulties, and adjustment problems may be linked and whether specificity in these linkages exists for different ethnic and racial groups.

Secondly, the current study was cross-sectional, therefore we cannot conclude that hostile parenting or bullying affects early adolescents' externalizing problem and, hostile parenting or victimization affects their internalizing problem over time, or vice versa. We also cannot be certain about the specificity linkage will still significant at earlier (or later) developmental period. However, there appears to be evidence from several longitudinal studies that supports the notion that both negative parenting and peer relationship may have long-term effects on early adolescents' adjustment problems (e.g., Locus, 2009; Manongdo & Ramirez-Garcia, 2011; Roger

et al., 2003). Moreover, as noted by Pettit and Arsiwalla (2008), child and youth adjustment problems have been found to contribute to declines in parent-child relationship quality over time just as negative parenting contributes to increases in child and youth adjustment difficulties over time. Future research should consider a longitudinal research design in order to determine the directionality and change of specificity linkage in peer relationship difficulties, negative parenting, and early adolescent adjustment outcomes over time.

Furthermore, complete specificity examination was impossible in the current study because, first, the measure of hostile parenting was based only on parent report; second, the distinction between hostile parenting and psychological control was not as clear as would have been the case for physical discipline and psychological control. Additionally, the measure of hostile parenting in the current study was sort of “hybrid” measure in the sense that it measured the broader aspect of negative parenting control, some of which reflected intrusive parenting, thus overlapping with psychological control. Third, the measurement of psychological control did not completely represent the construct because we only use items reflecting inducing guilty instead of using the multi-subscale including not only inducing guilty, but also love withdrawal, persistent anxious, etc. Also, from a developmental perspective, it may be that the participants in this study were too young for the negative impact of psychological control to be observed. Psychological control typically has been construed as a parenting practice that is especially pernicious in early-to-middle adolescence, when autonomy and identity issues are salient (Barber et al., 2005; Pettit et al., 2001). Furthermore, the current study focused on only one parent---the mother. It is probable that fathers also may be important socialization influences, perhaps complementing (or overlapping) with mothers’ socialization influence. Future studies should include both mothers and fathers to examine these possibilities. Finally, it should be pointed out

that bullying was assessed in the current study in terms of instrumental aggression. Bullying also reflects an imbalance of power, which should be incorporated into future research to provide a more comprehensive assessment of bullying.

No gender differences were found in the current study, except for the parent-reported bullying and teacher-reported victimization. Girls are found to more likely to involve in bullying than boys, whereas boys were more likely than girls to be victimized. Previous results reported by Wang and colleagues found that boys were more involved in physical or verbal bullying, whereas girls were more involved in relational bullying (Wang et al., 2009). In the current study, we did not distinguish the types of aggressive behavior, so we could not draw a conclusion yet. However, it should be noted that in the current study preadolescent-reported bullying consisted of items tapping both relational and physical instrumental aggression. Moreover, findings in previous studies showed that boys are more likely to have externalizing problem than girls did not replicate in the current study. This might be due to the fact that we only used rule-breaking subscale instead of the aggression subscale in constructing externalizing problems. No gender differences were found in negative parenting and adjustment problems. Based on findings about younger individuals, Ladd and Ladd (1998) found that parental intrusive demands were significantly associated with a higher level of victimization in boys. Our result did not find support for a link between mothers and boys. Past research also has shown that girls tend to be higher in internalizing problem and boys in externalizing problems (Prinstein et al., 2009). That was not case here. Future studies might further examine these differences.

Previous research of preadolescent displaying adjustment difficulties has helped educators recognize the effective intervention should necessarily consider both the parent's role and the child's role within a comprehensive developmental framework (e.g., Pettit & Arsiwalla,



2008), and the present work extended this knowledge. Recognition that specificity in linkage between bullying and externalizing problems, and victimization and internalizing problem, and maternal hostility's effects on adjustment problems implies that effective intervention of adjustment problems should not only include both mother and adolescent but extend to priority as well. To be specific, for preadolescent who had externalizing problems, the first priority of intervention should put efforts on helping mothers recognize the negative outcome of hostile parenting, and training them with positive parenting strategy, and then training the preadolescent prosocial skills to dealing with peer relationship difficulties. For preadolescent who had internalizing problems, the first priority of intervention should put effort on preadolescent's social skill to confront victimization, and then focus on training mothers the right instructional strategies.

### **Conclusion**

In conclusion, the current study examined the specificity of linkages between peer relationship difficulties, negative parenting style, and adjustment problems. The findings suggested that indeed specificity exists between bullying and externalizing problems, and between victimization and internalizing problems. Hostile parenting seems more harmful than psychological control for both types of peer relationship difficulties and both forms of adjustment problems. Additionally, findings support an additive (cumulative risk) effect of hostile parenting and peer relationship difficulties on preadolescent's adjustment problems. The implications are two-fold: reducing peer relationship problems and adjustment problems by focusing on enhancing positive parent-child relationship, and reducing negative parenting, and decreasing the bullying in schools. Collectively, these findings suggest that programs designed to decrease adjustment problems need to consider relatively importance of negative parenting and

peer relationship difficulties in different kind of adjustment problems and to aim at reducing negative parenting and peer relationship problems approaches.

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Appendix A

Tables

Table 1

*Descriptive statistics for the entire sample (N=99)*

		Mean	Standard Deviation	Range
	Age	12.40	.69	11-14
	SES	4.15	1.6	1-6
	Race/Ethnicity <sup>a</sup>	34.3%		
	Gender <sup>b</sup>	51%		
	victimization	.91	.74	0-3
	bullying	1.31	.45	1-3.25
Parent-reported	psychological control	1.41	.30	1-2.38
	Hostile parenting	1.57	.32	1-2.5
	Internalizing Problem	.20	.18	0-1
	Externalizing Problem	.13	.16	0-.76
Preadolescent-reported	victimization	1.98	.87	1-4.86
	bullying	1.25	.53	1-4
	psychological control	1.49	.34	1-3
	Internalizing Problem	.33	.24	0-1
Teacher-reported	victimization	1.50	.75	1-4.67
	bullying	1.55	.82	1-4.25
	Internalizing Problem	.12	.14	0-.53
	Externalizing Problem	.14	.22	0-1

<sup>a</sup> Denotes percent of sample African American; <sup>b</sup> Denotes percent of sample female

Table 2-1  
Correlation for all Studied Variables (N=100)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Gender	-													
2. PR Victimization	-.09	-												
3. PR Bullying	.21*	.49***	-											
4. PR PC	.12	-.11	.12	-										
5. PR Hostile parenting	-.08	.24*	.29**	.44***	-									
6. PR Internalizing	.05	.50***	.37***	.18~	.49***	-								
7. PR Externalizing	.05	.31**	.53***	.20*	.41***	.52***	-							
8. CR Victimization	.03	.39***	.29**	.17~	.30**	.19	.19	-						
9. CR Bullying	-.01	.14	.24*	.21*	.33***	.07	.27**	.21*	-					
10. CR PC	0	-.01	.25*	.38***	.38***	.15	.25*	.31**	.46***	-				
11. CR Internalizing	.04	.25*	.18	.27*	.38**	.26*	.23*	.51***	.21	.31**	-			
12. TR Victimization	-.25*	.35***	.17	0	.30**	.35***	.14	.15	.23*	.02	.19	-		
13. TR Bullying	.06	.33***	.25*	.20~	.36**	.29**	.33**	.17	.47***	.21	.06	.58***	-	
14. TR Internalizing	.03	.19	.16	-.04	.21*	.21*	.21*	.23*	.14	-.03	.26*	.39***	.16	-
15. TR Externalizing	-.20	.27*	.17	.14	.48***	.24*	.44***	.18	.45***	.27*	.15	.48***	.76***	.32**

Note: Gender: 0=male, 1=female; PR = parent-report, CR = child-report, TR = teacher-report, PC = psychological control  
~  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$



Table 2-2

(a). Correlation between Peer Relationship difficulties and Adjustment Problems

		Parent		Teacher		Child
		EXT	INT	EXT	INT	INT
Parent-reported	victim	.31**	.50***	.27*	.19	.25*
	bully	.53***	.37***	.17	.16	.18
Child-reported	victim	.19	.19	.18	.23*	.51***
	bully	.27**	.07	.45***	.14	.21
Teacher-reported	victim	.14	.35***	.48***	.39***	.19
	bully	.33**	.29**	.76***	.16	.21

(b). Correlation between Parenting Style and Adjustment Problems

		Parent		Teacher		Child
		EXT	INT	EXT	INT	INT
Parent-reported	hostile	.41***	.49***	.48***	.21*	.38**
	PC	.20*	.18	.14	-.04	.27*
Child-reported	PC	.25*	.15	.27*	-.03	.31**

(c). Correlation between Parenting Style and Peer Relationship Difficulties

		Parent		Teacher		Child	
		bully	victim	bully	victim	bully	victim
Parent-reported	hostile	.29**	.24*	.36**	.30**	.33***	.30**
	PC	.12	-.11	.14	-.04	.21*	.17
Child-reported	PC	.25*	-.01	.21	.02	.46***	.31**

Note: PC = psychological control, EXT= externalizing problems, INT = internalizing problems

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Table 3

*Predicting Parent-reported Externalizing Problem from different-informant reported Bullying/Victimization Controlled by Victimization/Bullying.*

Predictors	$\beta$	$\Delta R^2$
<b>Model 1</b>		
Step 1		.10**
Gender	.08	
Parent-reported victimization	.31**	
Step 2		.18****
Parent-reported bullying	.50****	
Step 1		.28****
Gender	-.05	
Parent-reported bullying	.54****	
Step 2		.003
Parent-reported victimization	.06	
<b>Model 2</b>		
Step 1		.04
Gender	.06	
Child-reported victimization	.19	
Step 2		.06*
Child-reported bullying	.24*	
Step 1		.08**
Gender	.07	
Child-reported bullying	.27**	
Step 2		.02
Child-reported victimization	.14	
<b>Model 3</b>		
Step 1		.03
Gender	.07	
Teacher-reported victimization	.16	
Step 2		.09**
Teacher-reported bullying	.37**	
Step 1		.11**
Gender	.06	
Teacher-reported bullying	.33**	
Step 2		.002
Teacher-reported victimization	-.06	

~  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Table 4

*Predicting Teacher-reported Externalizing Problem from different-informant reported Bullying/Victimization Controlled by Victimization/Bullying.*

Predictors	$\beta$	$\Delta R^2$
<b>Model 1</b>		
Step 1		.10*
Gender	-.18	
Parent-reported victimization	.26*	
Step 2		.01
Parent-reported bullying	.11	
Step 1		.08*
Gender	-.24*	
Parent-reported bullying	.22*	
Step 2		.03~
Parent-reported victimization	.20~	
<b>Model 2</b>		
Step 1		.07*
Gender	-.21	
Child-reported victimization	.20*	
Step 2		.16****
Child-reported bullying	.42****	
Step 1		.23****
Gender	-.17	
Child-reported bullying	.44****	
Step 2		.01
Child-reported victimization	.09	
<b>Model 3</b>		
Step 1		.23****
Gender	-.09	
Teacher-reported victimization	.45****	
Step 2		.37****
Teacher-reported bullying	.75****	
Step 1		.60****
Gender	-.15	
Teacher-reported bullying	.76****	
Step 2		
Teacher-reported victimization	0.08	

~  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Table 5  
*Predicting Parent-reported Internalizing Problem from different-informant reported Bullying/Victimization Controlled by Victimization/Bullying.*

Predictors	$\beta$	$\Delta R^2$
<b>Model 1</b>		
Step 1		.13**
Gender	-.03	
Parent-reported bullying	.37**	
Step 2		.14****
Parent-reported victimization	.43****	
Step 1		.25****
Gender	.10	
Parent-reported victimization	.50****	
Step 2		.01
Parent-reported bullying	.14	
<b>Model 2</b>		
Step 1		.01
Gender	.05	
Child-reported bullying	.07	
Step 2		.03
Child-reported victimization	.17	
Step 1		.04
Gender	.05	
Child-reported victimization	.18~	
Step 2		
Child-reported bullying	.03	
<b>Model 3</b>		
Step 1		.09*
Gender	.11	
Teacher-reported bullying	.29**	
Step 2		.07*
Teacher-reported victimization	.34*	
Step 1		.16**
Gender	.19~	
Teacher-reported victimization	.40****	
Step 2		.01
Teacher-reported bullying	.10	

~  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*\*  $p < .001$

Table 6

*Predicting Teacher-reported Internalizing Problem from different-informant reported Bullying/Victimization Controlled by Victimization/Bullying.*

Predictors	$\beta$	$\Delta R^2$
<b>Model 1</b>		
Step 1		.03
Gender	-.07	
Parent-reported bullying	.18	
Step 2		.01
Parent-reported victimization	.14	
Step 1		.04
Gender	-.02	
Parent-reported victimization	.19~	
Step 2		.01
Parent-reported bullying	.1	
<b>Model 2</b>		
Step 1		.02
Gender	.03	
Child-reported bullying	.14	
Step 2		.04~
Child-reported victimization	.21~	
Step 1		.06
Gender	-.06	
Child-reported victimization	.24*	
Step 2		.01
Child-reported bullying	.09	
<b>Model 3</b>		
Step 1		.03
Gender	-.02	
Teacher-reported bullying	.16	
Step 2		.13***
Teacher-reported victimization	.45**	
Step 1		.15**
Gender	.07	
Teacher-reported victimization	.40***	
Step 2		.01
Teacher-reported bullying	-.10	

~  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Table 7

*Predicting Child-reported Internalizing Problem from different-informant reported Bullying/victimization Controlled by Victimization/bullying.*

Predictors	$\beta$	$\Delta R^2$
<b>Model 1</b>		
Step 1		.03~
Gender	-.04	
Parent-reported bullying	.19~	
Step 2		.03~
Parent-reported victimization	.22~	
Step 1		.07*
Gender	.05	
Parent-reported victimization	.26*	
Step 2		.01
Parent-reported bullying	.07	
<b>Model 2</b>		
Step 1		.05*
Gender	.04	
Child-reported bullying	.22*	
Step 2		.22***
Child-reported victimization	.48***	
Step 1		.25***
Gender	.02	
Child-reported victimization	.51***	
Step 2		.01
Child-reported bullying	.11	
<b>Model 3</b>		
Step 1		.01
Gender	.06	
Teacher-reported bullying	.06	
Step 2		.05*
Teacher-reported victimization	.27*	
Step 1		.05~
Gender	.11	
Teacher-reported victimization	.21~	
Step 2		.01
Teacher-reported bullying	-.09	

~  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Table 8

*Predicting Parent-reported Bullying from Different Informant Reported Parenting Style.*

Predictors	$\beta$	$\Delta R^2$
<b>Model 1</b>		
Step 1		.05~
Gender	.20*	
Parent-reported psychological control	.10	
Step 2		.08**
Parent-reported hostile parenting	.33**	
Step 1		.14***
Gender	.23*	
Parent-reported hostile parenting	.31**	
Step 2		
Parent-reported psychological control	-.04	
<b>Model 2</b>		
Step 1		.11**
Gender	.20*	
Child-reported psychological control	.25*	
Step 2		.05*
Parent-reported hostile parenting	.24*	
Step 1		.13**
Gender	.23*	
Parent-reported hostile parenting	.31**	
Step 2		.02
Child-reported psychological control	.16	

~  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Table 9

*Predicting Child-reported Bullying from Different-informant Reported Parenting Style.*

Predictors	$\beta$	$\Delta R^2$
<b>Model 1</b>		
Step 1		.05*
Gender	-.05	
Parent-reported psychological control	.22*	
Step 2		.07**
Parent-reported hostile parenting	.29**	
Step 1		.11**
Gender		
Parent-reported hostile parenting	.33***	
Step 2		
Parent-reported psychological control	.09	
<b>Model 2</b>		
Step 1		.21***
Gender	-.03	
Child-reported psychological control	.46***	
Step 2		.02~
Parent-reported hostile parenting	.17~	
Step 1		.10**
Gender	-.01	
Parent-reported hostile parenting	.32**	
Step 2		.13***
Child-reported psychological control	.39***	

~  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$



Table 10.

*Predicting Teacher-reported Bullying from Different-informant Reported Parenting Style*

Predictors	$\beta$	$\Delta R^2$
<b>Model 1</b>		
Step 1		.05
Gender	-.11	
Parent-reported psychological control	.22*	
Step 2		.08**
Parent-reported hostile parenting	.32**	
Step 1		.13**
Gender	-.05	
Parent-reported hostile parenting	.35**	
Step 2		.01
Parent-reported psychological control	.09	
<b>Model 2</b>		
Step 1		.05
Gender	-.09	
Child-reported psychological control	.22*	
Step 2		.08**
Parent-reported hostile parenting	.31**	
Step 1		.12**
Gender	-.06	
Parent-reported hostile parenting	.34**	
Step 2		.01
Child-reported psychological control	.12	

~  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Table 11.

*Predicting Parent-reported Victimization from Different-informant Reported Parenting Style*

Predictors	$\beta$	$\Delta R^2$
<b>Model 1</b>		
Step 1		.06~
Gender	-.06	
Parent-reported Hostile parenting	.23*	
Step 2		.06*
Parent-reported psychological control	-.27*	
Step 1		.02
Gender	-.07	
Parent-reported psychological control	-.11	
Step 2		.10**
Parent-reported hostile parenting	.35**	
<b>Model 2</b>		
Step 1		.05
Gender	.02	
Parent-reported Hostile parenting	.22*	
Step 2		.01
Child-reported psychological control	-.11	
Step 1		
Gender	-.04	
Child-reported psychological control	-.01	
Step 2		.06*
Parent-reported hostile parenting	.26*	

~  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Table 12.

*Predicting Child-reported Victimization from Different-informant Reported Parenting Style*

Predictors	$\beta$	$\Delta R^2$
<b>Model 1</b>		
Step 1		.10**
Gender	.06	
Parent-reported Hostile parenting	.31**	
Step 2		.0
Parent-reported psychological control	.05	
Step 1		.03
Gender	.01	
Parent-reported psychological control	.17~	
Step 2		.07*
Parent-reported hostile parenting	.29*	
<b>Model 2</b>		
Step 1		.08*
Gender	.05	
Parent-reported Hostile parenting	.29**	
Step 2		.05*
Child-reported psychological control	.23*	
Step 1		.10*
Gender	.03	
Child-reported psychological control	.31**	
Step 2		.03~
Parent-reported hostile parenting	.20~	

~  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Table 13.

*Predicting Teacher-reported Victimization from Different-informant Reported Parenting Style*

Predictors	$\beta$	$\Delta R^2$
<b>Model 1</b>		
Step 1		.15***
Gender	-.24*	
Parent-reported Hostile parenting	.29**	
Step 2		.01
Parent-reported psychological control	-.11	
Step 1		.07~
Gender	-.26*	
Parent-reported psychological control	.04	
Step 2		.09**
Parent-reported hostile parenting	.34**	
<b>Model 2</b>		
Step 1		.15***
Gender	-.26*	
Parent-reported Hostile parenting	.29**	
Step 2		.0
Child-reported psychological control	-.06	
Step 1		.07*
Gender	-.27*	
Child-reported psychological control	.04	
Step 2		.08**
Parent-reported hostile parenting	.31**	

~  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Table 14

*Predicting Parent-reported Internalizing Problem from Parent-reported and Child-reported**Parenting Style.*

Predictors	$\beta$	$\Delta R^2$
<b>Model 1</b>		
Step 1		.25***
Gender	.08	
Parent-reported Hostile parenting	.50***	
Step 2		.01
Parent-reported psychological control	-.06	
Step 1		.03
Gender	.02	
Parent-reported psychological control	.18~	
Step 2		.22***
Parent-reported hostile parenting	.53***	
<b>Model 2</b>		
Step 1		.25***
Gender	.08	
Parent-reported Hostile parenting	.50***	
Step 2		.01
Child-reported psychological control	-.05	
Step 1		.02
Gender	.04	
Child-reported psychological control	.15	
Step 2		.23***
Parent-reported hostile parenting	.52***	

~  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Table 15

*Predicting Teacher-reported Internalizing Problem from Parent-reported and Child-reported**Parenting Style.*

Predictors	$\beta$	$\Delta R^2$
<b>Model 1</b>		
Step 1		.05*
Gender	-.02	
Parent-reported Hostile parenting	.21*	
Step 2		.02
Parent-reported psychological control	-.15	
Step 1		
Gender	-.03	
Parent-reported psychological control	-.04	
Step 2		.06*
Parent-reported hostile parenting	.28*	
<b>Model 2</b>		
Step 1		.05*
Gender	-.02	
Parent-reported Hostile parenting	.22*	
Step 2		.01
Child-reported psychological control	-.12	
Step 1		.01
Gender	-.05	
Child-reported psychological control	-.03	
Step 2		.06*
Parent-reported hostile parenting	.26*	

~  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Table 16.

*Predicting Child-reported Internalizing Problem from Parent-reported and Child-reported*

*Parenting Style*

Predictors	$\beta$	$\Delta R^2$
<b>Model 1</b>		
Step 1		.15***
Gender	.07	
Parent-reported Hostile parenting	.39***	
Step 2		.01
Parent-reported psychological control	.12	
<hr/>		
Step 1		.07*
Gender	.01	
Parent-reported psychological control	.27*	
Step 2		.09**
Parent-reported hostile parenting	.33**	
<hr/>		
<b>Model 2</b>		
Step 1		.14***
Gender	.05	
Parent-reported Hostile parenting	.37***	
Step 2		.03~
Child-reported psychological control	.20~	
<hr/>		
Step 1		.10**
Gender	.01	
Child-reported psychological control	.31**	
Step 2		.08**
Parent-reported hostile parenting	.30**	

~  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Table 17

*Predicting Parent-reported Externalizing Problem from Parent-reported and Child-reported**Parenting Style*

Predictors	$\beta$	$\Delta R^2$
<b>Model 1</b>		
Step 1		.04
Gender	.02	
Parent-reported psychological control	.20~	
Step 2		.13***
Parent-reported hostile parenting	.41***	
Step 1		.17***
Gender	.07	
Parent-reported hostile parenting	.42***	
Step 2		
Parent-reported psychological control	.02	
<b>Model 2</b>		
Step 1		.07*
Gender	.02	
Child-reported psychological control	.26*	
Step 2		.11***
Parent-reported hostile parenting	.35***	
Step 1		.16***
Gender	.06	
Parent-reported hostile parenting	.40***	
Step 2		.01
Child-reported psychological control	.12	

~  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$



Table 18

*Predicting Teacher-reported Externalizing Problem from Parent-reported and Child-reported Parenting Style.*

Predictors	$\beta$	$\Delta R^2$
<b>Model 1</b>		
Step 1		.07~
Gender	-.22	
Parent-reported psychological control	.17	
Step 2		.19***
Parent-reported hostile parenting	.49***	
Step 1		.26***
Gender	-.17	
Parent-reported hostile parenting	.49***	
Step 2		.01
Parent-reported psychological control	-.03	
<b>Model 2</b>		
Step 1		.12**
Gender	-.22	
Child-reported psychological control	.29**	
Step 2		.16***
Parent-reported hostile parenting	.42***	
Step 1		.26***
Gender	-.18	
Parent-reported hostile parenting	.47***	
Step 2		.02
Child-reported psychological control	.15	

~ $p \leq .10$ , \* $p \leq .05$ , \*\* $p \leq .01$ , \*\*\* $p \leq .001$

Table 19  
*Predicting Parent-reported Externalizing problem from Bullying and Hostile Parenting*

Predictors	$\beta$	$\Delta R^2$
<b>Model 1</b>		
<b>A. Bullying entered first</b>		
Step 1		.28***
Parent-reported bullying	.53***	
Step 2		.07**
Parent-reported hostile parenting	.28**	
<b>B. Hostile parenting entered first</b>		
Step 1		.17***
Parent-reported Hostile parenting	.41***	
Step 2		.18***
Parent-reported bullying	.45***	
<b>Model 2</b>		
<b>A. Bullying entered first</b>		
Step 1		.08**
Child-reported bullying	.28**	
Step 2		.11***
Parent-reported hostile parenting	.35***	
<b>B. Hostile parenting entered first</b>		
Step 1		.16***
Parent-reported hostile parenting	.40***	
Step 2		.02
Child-reported bullying	.16	
<b>Model 3</b>		
<b>A. Bullying entered first</b>		
Step 1		.11**
Teacher-reported bullying	.33**	
Step 2		.13***
Parent-reported hostile parenting	.38***	
<b>B. Hostile parenting entered first</b>		
Step 1		.20***
Parent-reported hostile parenting	.45***	
Step 2		.03~
Teacher-reported bullying	.20~	

~ $p \leq .10$ , \*\* $p \leq .01$ , \*\*\*  $p \leq .001$

Table 20

*Predicting Teacher-reported Externalizing problem from Bullying and Hostile Parenting*

Predictors	$\beta$	$\Delta R^2$
<b>Model 1</b>		
<b>A. Bullying entered first</b>		
Step 1		.03
Parent-reported bullying	.17	
Step 2		.20***
Parent-reported hostile parenting	.48***	
<b>B. Hostile parenting entered first</b>		
Step 1		.23***
Parent-reported hostile parenting	.48***	
Step 2		
Parent-reported bullying	.01	
<b>Model 2</b>		
<b>A. Bullying entered first</b>		
Step 1		.20***
Child-reported bullying	.45***	
Step 2		.11***
Parent-reported hostile parenting	.36***	
<b>B. Hostile parenting entered first</b>		
Step 1		.23***
Parent-reported hostile parenting	.49***	
Step 2		.08**
Child-reported bullying	.31**	
<b>Model 3</b>		
<b>A. Bullying entered first</b>		
Step 1		.59***
Teacher-reported bullying	.77***	
Step 2		.05***
Parent-reported hostile parenting	.24***	
<b>B. Hostile parenting entered first</b>		
Step 1		.24***
Parent-reported hostile parenting	.48***	
Step 2		.41***
Teacher-reported bullying	.69***	

\*\* $p \leq .01$ , \*\*\*  $p \leq .001$

Table 21

*Predicting Parent-reported Internalizing problem from Victimization and Parent-reported Hostile Parenting*

Predictors	$\beta$	$\Delta R^2$
<b>Model 1</b>		
<b>A. Victimization entered first</b>		
Step 1		.26***
Parent-reported victimization	.51***	
Step 2		.15***
hostile parenting	.40***	
<b>B. Hostile parenting entered first</b>		
Step 1		.25***
Parent-reported hostile parenting	.50***	
Step 2		.16***
Parent-reported victimization	.42***	
<b>Model 2</b>		
<b>A. Victimization entered first</b>		
Step 1		.13***
Teacher-reported victimization	.35***	
Step 2		.18***
Parent-reported hostile parenting	.45***	
<b>B. Hostile parenting entered first</b>		
Step 1		.26***
Parent-reported hostile parenting	.51***	
Step 2		.04*
Teacher-reported victimization	.22*	

\* $p \leq .05$ , \*\*\*  $p \leq .001$

Table 22

*Predicting Child-reported Internalizing problem from Child-reported Victimization and Parent-reported Hostile Parenting*

Predictors	$\beta$	$\Delta R^2$
<b>A. Victimization entered first</b>		
Step 1		.26***
Victimization	.51***	
Step 2		.06**
hostile parenting	.25**	
<b>B. Hostile parenting entered first</b>		
Step 1		.15***
Hostile parenting	.38***	
Step 2		.17***
Victimization	.43***	

\* $p \leq .05$ , \*\*\*  $p \leq .001$

Table 23

*Predicting Teacher-reported Internalizing problem from Teacher-reported Victimization and Parent-reported Hostile Parenting*

Predictors	$\beta$	$\Delta R^2$
<b>A. Victimization entered first</b>		
Step 1		.15***
Victimization	.38***	
Step 2		.01
hostile parenting	.11	
<b>B. Hostile parenting entered first</b>		
Step 1		.05*
Hostile parenting	.22*	
Step 2		.11**
Victimization	.35**	

\* $p \leq .05$ , \*\* $p \leq .01$ , \*\*\*  $p \leq .001$

## Appendix B

### Data Collection Instruments

#### **Bullying**

##### *Parent-reported*

For the following items, please circle the number that best describes your child.

	Almost never true of my child	2	Sometimes true of my child	4	Almost always true of my child
1. Taunts or teases other children.	1	2	3	4	5
2. Threatens or bullies other children.	1	2	3	4	5
3. Starts fights by hitting or pushing other children.	1	2	3	4	5
4. Uses force to obtain other children's possessions.	1	2	3	4	5
5. Starts arguments with other children.	1	2	3	4	5
6. Tries to get other children to stop playing with another peer.	1	2	3	4	5
7. Tries to hurt other children's feelings by excluding them.	1	2	3	4	5
8. Gossips or says mean things about other children.	1	2	3	4	5

##### *Preadolescent-report*

Please rate how true the following statements are of you.

	Not at all true	2	3	Completely true
1. I often tell my friends to stop liking someone to get what I want.	1	2	3	4
2. To get what I want, I often gossip or spread rumors about others.	1	2	3	4
3. I often keep others from being in my group of friends to get what I want.	1	2	3	4
4. I often say mean things about others to my friends to get what I want.	1	2	3	4
5. To get what I want, I often tell others I won't be their friend anymore.	1	2	3	4
6. To get what I want, I often ignore or stop talking to others.	1	2	3	4
7. I often start fights to get what I want.	1	2	3	4
8. I often threaten others to get what I want.	1	2	3	4
9. I often hit, kick, or punch others to get what I want.	1	2	3	4
10. To get what I want, I often put others down.	1	2	3	4

11. To get what I want, I often say mean things to others.	1	2	3	4
12. To get what I want I often hurt others.	1	2	3	4

*Teacher-report*

For each of the following statements, please circle the number that best describes this child.

		Almost never true of the child		Sometimes true of the child		Almost always true of the child
1	Taunts or teases other children.	1	2	3	4	5
2	Threatens or bullies other children.	1	2	3	4	5
3	Starts fights by hitting or pushing other children.	1	2	3	4	5
4	Uses force to obtain other children's possessions.	1	2	3	4	5
5	Starts arguments with other children.	1	2	3	4	5
6	Tries to get other children to stop playing with another peer.	1	2	3	4	5
7	Tries to hurt other children's feelings by excluding them.	1	2	3	4	5
8	Gossips or says mean things about other children.	1	2	3	4	5

**Victimization**

*Parent-reported*

Please rate the extent to which each description applies to your child's experiences with other children.

		Never		Sometimes		Almost always
1	My child is picked on by other children	0	1	2	3	4
2	My child is called names by other children	0	1	2	3	4
3	Other children say negative or mean things about my child to other children	0	1	2	3	4
4	My child is teased or made fun of by peers	0	1	2	3	4
5	Other children hit or push my child	0	1	2	3	4
6	Other children ignore my child to be	0	1	2	3	4

mean

7	Other children try to hurt my child's feelings by excluding him or her	0	1	2	3	4
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*Preadolescent-report*

Please answer the following questions about how often you have these experiences at school.

		Almost never		Sometimes		Almost always
1	How often do you get pushed or shoved by other peers at school?	1	2	3	4	5
2	How often does another peer exclude you when they want to get back at you for something?	1	2	3	4	5
3	How often does another kid say they won't like you unless you do what they want you to do?	1	2	3	4	5
4	How often do you get hit by another kid at school	1	2	3	4	5
5	How often are you left out on purpose when it's time to do an activity?	1	2	3	4	5
6	How often have other kids told lies about you to make other kids not like you anymore?	1	2	3	4	5
7	How often have other kids said mean things about you to keep other people from liking you?	1	2	3	4	5

*Teacher-report*

For each of the following statements, please circle the number that best describes this child.

		Almost never true of the child		Sometimes true of the child		Almost always true of the child
1.	Other children hit or push this child.	1	2	3	4	5
2.	Other children tease or make fun of this child.	1	2	3	4	5
3.	Other children pick on or bully this child.	1	2	3	4	5
4.	Other children gossip or say mean things about this child.	1	2	3	4	5
5.	Other children ignore this child to be mean.	1	2	3	4	5
6.	Other children try to hurt this	1	2	3	4	5



child's feelings by excluding him/her.

### **Hostile Parenting**

*Parent-reported*

Please rate how much the following statements are true.

	Not like (False)	Somewhat like (somewhat true)	Like (True)
1. I decide what friends my child can go around with.	1	2	3
2. I constantly remind my child of things that he/she is not allowed to do.	1	2	3
3. I tell my child exactly how to do his/her works.	1	2	3
4. I do not quickly forget the bad things that my child has done.	1	2	3
5. I am unhappy that my child is not better in school.	1	2	3
6. I lose my temper with my child if he/she does not help out around the house.	1	2	3
7. I want to control everything my child does.	1	2	3
8. I don't let my child do things for him/herself.	1	2	3

### **Psychological Control**

*Parent-reported*

Please rate how much the following statements are true.

	Not like (False)	Somewhat like (somewhat true)	Like (True)
1. I feel hurt if my child does not follow my advice.	1	2	3
2. I think that my child is ungrateful if he/she does not obey me.	1	2	3
3. I feel hurt by the things that my child does.	1	2	3
4. I tell my child how much I have suffered for him/her.	1	2	3
5. I often say to my child that if he/she loved me, he/she would do what I say.	1	2	3
6. I tell my child about all of the things that I have done for him/her.	1	2	3
7. If my child really cared about me, he/she would not do things to cause me to worry.	1	2	3

8. When my child does not do what I want, I say that he/she is not grateful for all that I have done for him/her.	1	2	3
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*Preadolescent-report*

How much are the following statements like your mother/guardian.

	Not like mother	Somewhat like mother	A lot like mother
<b>My mother is a person who:</b>			
1. Changes the subject whenever I have something to say	1	2	3
2. Finishes my sentences whenever I talk	1	2	3
3. Acts like she knows what I'm thinking or feeling	1	2	3
4. Would like to be able to tell me how to feel or think about things all the time	1	2	3
5. Blames me for other family members' problems	1	2	3
6. Tells me that I'm not a loyal or good member of the family	1	2	3
7. Often changes her moods when with me	1	2	3
8. Goes back and forth between being warm and critical towards me	1	2	3
9. Is always trying to change how I feel or think about things	1	2	3
10. Brings up my past mistakes when she criticizes me	1	2	3

## **Externalizing Problems**

### *Parent-reported*

Below is a list of items that describe children and youths. For each item that describes your child **now or within the past 6 months**, please circle the appropriate number. Please answer all items as well as you can, even if some do not seem to apply to your child.

	<b>Not true (as far as you know)</b>	<b>Somewhat or Sometimes true</b>	<b>Very true or Often true</b>
1. Drinks alcohol without parents' approval	0	1	2
2. Doesn't seem to feel guilty after misbehaving	0	1	2
3. Breaks rules at home, school, or elsewhere	0	1	2
4. Hangs around with others who get in trouble	0	1	2
5. Lying or cheating	0	1	2
6. Prefers being with older kids	0	1	2
7. Runs away from home	0	1	2
8. Sets fires	0	1	2
9. Sexual problems	0	1	2
10. Steals at home	0	1	2
11. Steals outside the home	0	1	2
12. Swearing or obscene language	0	1	2
13. Thinks about sex too much	0	1	2
14. Smokes, chews, or sniffs tobacco	0	1	2
15. Truancy, skips school	0	1	2
16. Uses drugs for nonmedical purposes (don't include alcohol or tobacco)	0	1	2
17. Vandalism	0	1	2

*Teacher-report*

Below is a list of items that describe students. For each item that describes the **student now or within the past 2 months**, please circle the appropriate number. Please answer all the items as well as you can, even if some do not seem to apply to this student.

	Not true (as far as you know)	Somewhat or Sometimes true	Very true or Often true
1. Doesn't seem to feel guilty after misbehaving	0	1	2
2. Breaks school rules	0	1	2
3. Hangs around with others who get in trouble	0	1	2
4. Lying or cheating	0	1	2
5. Prefers being with older children or youths	0	1	2
6. Steals	0	1	2
7. Swearing or obscene language	0	1	2
8. Smokes, chews, or sniffs tobacco	0	1	2
9. Truancy or unexplained absence	0	1	2
10. Uses alcohol or drugs for nonmedical purposes (don't include tobacco)	0	1	2
11. Tardy to school or class	0	1	2

**Internalizing problems**

*Parent-reported*

Below is a list of items that describe children and youths. For each item that describes your child **now or within the past 6 months**, please circle the appropriate number. Please answer all items as well as you can, even if some do not seem to apply to your child.

	<b>Not true (as far as you know)</b>	<b>Somewhat or Sometimes true</b>	<b>Very true or Often true</b>
1. There is very little he/she enjoys	0	1	2
2. Cries a lot	0	1	2
3. Fears certain animals, situations, or places other than school	0	1	2
4. Fears going to school	0	1	2
5. Fears he/she might think or do something bad	0	1	2
6. Feels he/she has to be perfect	0	1	2
7. Feels or complains that no one loves him/her	0	1	2
8. Feels worthless or inferior	0	1	2
9. Would rather be alone than with others	0	1	2
10. Nervous, high strung, or tense	0	1	2
11. Nightmares	0	1	2
12. Constipated, doesn't move bowels	0	1	2
13. Too fearful or anxious	0	1	2
14. Feels dizzy or lightheaded	0	1	2
15. Feels too guilty	0	1	2
16. Overtired without good reason	0	1	2
17. Physical problems without known medical cause: Aches or pains (not stomach or headaches)	0	1	2
18. Headaches	0	1	2
19. Nausea, feels sick	0	1	2
20. Problems with eyes (not if corrected by glasses)Rashes or other skin problems	0	1	2
21. Stomachaches	0	1	2
22. Vomiting, throwing up	0	1	2
23. Refuses to talk	0	1	2
24. Secretive, keeps things to self	0	1	2
25. Self-conscious or easily embarrassed	0	1	2
26. Too shy or timid	0	1	2
27. Talks about killing self	0	1	2
28. Underactive, slow moving, or lacks energy	0	1	2

29. Unhappy, sad, or depressed	0	1	2
30. Withdrawn, doesn't get involved with others	0	1	2
31. Worries	0	1	2

*Teacher-report*

Below is a list of items that describe students. For each item that describes the **student now or within the past 2 months**, please circle the appropriate number. Please answer all the items as well as you can, even if some do not seem to apply to this student.

	Not true (as far as you know)	Somewhat or Sometimes true	Very true or Often true
1. There is very little that he/she enjoys	0	1	2
2. Cries a lot	0	1	2
3. Fears certain animals, situations, or places other than school	0	1	2
4. Fears going to school	0	1	2
5. Fears he/she might think or do something bad	0	1	2
6. Feels he/she has to be perfect	0	1	2
7. Feels or complains that no one loves him/her	0	1	2
8. Feels worthless or inferior	0	1	2
9. Would rather be alone than with others	0	1	2
10. Nervous, high-strung, or tense	0	1	2
11. Too fearful or anxious	0	1	2
12. Feels dizzy or lightheaded	0	1	2
13. Feels too guilty	0	1	2
14. Overtired without good reason	0	1	2
15. Physical problems without known medical cause: Aches or pains (not stomach or headaches)	0	1	2
16. Headaches	0	1	2
17. Nausea, feels sick	0	1	2
18. Eye problems (not if corrected by glasses)	0	1	2
19. Rashes or other skin problems	0	1	2
20. Stomachaches	0	1	2
21. Vomiting, throwing up	0	1	2
22. Refuses to talk	0	1	2
23. Secretive, keeps things to self	0	1	2
24. Self-conscious or easily embarrassed	0	1	2
25. Too shy or timid	0	1	2

26. Feels hurt when criticized	0	1	2
27. Underactive, slow moving, or lacks energy	0	1	2
28. Unhappy, sad, or depressed	0	1	2
29. Overly anxious to please	0	1	2
30. Withdrawn, doesn't get involved with others	0	1	2
31. Worries	0	1	2
32. Is afraid of making mistakes	0	1	2

*Preadolescent-report*

Read each question carefully. Put a circle around the number 0 if you think it is **not true** about you. Put a circle around the number 1 if you think it is **true** about you.

	No	Yes
1 I have trouble making up my mind.	0	1
2 I get nervous when things do not go the right way for me.	0	1
3 Others seem to do things easier than I can.	0	1
4 Often I have trouble getting my breath.	0	1
5 I worry a lot of the time.	0	1
6 I am afraid of a lot of things.	0	1
7 I get mad easily.	0	1
8 I worry what my parents will say to me.	0	1
9 I feel that others do not like the way I do things.	0	1
10 It is hard for me to get to sleep at night.	0	1
11 I worry about what other people think about me.	0	1
12 I feel alone even when there are people around me.	0	1
13 Often I feel sick in my stomach.	0	1
14 My feelings get hurt easily.	0	1
15 I am tired a lot.	0	1
16 I worry about what is going to happen.	0	1
17 Other children are happier than me.	0	1
18 I have bad dreams.	0	1
19 My feelings get hurt easily when I am fussed at.	0	1
20 I feel someone will tell me I do things the wrong way.	0	1
21 I wake up scared some of the time.	0	1
22 I worry when I go to bed at night.	0	1
23 It is hard for me to keep my mind on schoolwork.	0	1
24 I wiggle in my seat a lot.	0	1
25 I am nervous.	0	1
26 A lot of people are against me.	0	1
27 I often worry about something bad happening to me.	0	1