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# Bullying and victimization: The role of parenting and childhood behavior across time

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**Bullying and victimization:**  
**The role of parenting and childhood behavior across time**

by

Lisa Mae Ryherd

A dissertation submitted to the graduate faculty  
In partial fulfillment of the requirements for the degree of  
**DOCTOR OF PHILOSOPHY**

Major: Human Development and Family Studies

Program of Study Committee:  
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Ames, Iowa

2014

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## ABSTRACT

This dissertation evaluated harsh parenting practices and child behaviors in early childhood that lead to bullying and victimization in preadolescence. Specifically, Chapter 2 examined harsh parenting, child's externalizing and internalizing behavior problems, and child's angry and fearful temperament beginning at age 5 predicting to bullying and victimization behavior in preadolescence (age 8-13). Results suggest that harsh parenting was associated with bullying while child externalizing behavior was predictive of later victimization. The child's internalizing behavior problems and angry and fearful temperament were not predictors of bullying or victimization in preadolescence.

Chapter 3 built upon the study conducted in Chapter 2, by examining the stability of parenting and child behavior problems across two developmental time points: early childhood (age 2-3) and middle childhood (age 5) predicting to bullying and victimization behavior in preadolescence (age 8-13). This study also examined the bidirectional relationship between parenting behavior and child behavior as they predicted to bullying and victimization in preadolescence. This study found harsh parenting during middle childhood was associated with bullying in preadolescence. While externalizing behavior problems was stable from early childhood to middle childhood it was not significantly associated with later bullying behaviors. On the other hand, when predicting to victimization, harsh parenting and externalizing behavior problems produced different results. That is, externalizing behavior problems was significantly associated with victimization in preadolescence and harsh parenting was moderately associated with victimization. This study did not find a bidirectional relationship between parenting behavior and child behavior as they predicted bullying and victimization in preadolescence.

## DISSERTATION ORGANIZATION

The organization of this dissertation follows the alternative dissertation format with two chapters. Chapter 2 is titled “Bullying and Victimization in Preadolescence: The Role of Parenting and Child Behavior in Early Childhood.” Chapter 3 is titled, “Predictors of Bullying and Victimization: Parenting and Child Behavior across Time.” Chapter 2 utilized Structural Equation Modeling to examine predictors that have been identified in the literature beginning at age five that can lead a child to becoming a bully or a victim in preadolescence. Chapter 3 builds upon Chapter 2 to examine whether harsh parenting and externalizing behaviors are stable across two developmental time points (i.e. early childhood and middle childhood) and lead to bullying or victimization in preadolescence. It also examined whether child externalizing behavior at age 2-3 predicts harsh parenting at age five, and whether harsh parenting experienced at age 2-3 leads to child externalizing behavior at age five. Path Analysis was used to examine the influence of parenting practices and child behaviors beginning in early childhood on the outcome of bullying or victimization in preadolescence.

## CHAPTER 1:

## GENERAL INTRODUCTION

The transition from elementary to middle school is an important developmental task for early adolescents. It is characterized by increased social stressors and the transition from adult-focused to peer-focused relationships (Eccles, 1999; Nansel, Haynie, & Simons-Morton, 2003). An important component of adaptation to middle school is the youth's development of healthy social relationships with peers. Difficulties in peer relationships are associated with negative changes in self-concept and feelings of self-worth that may impair school adjustment (Fenzel, 2000; Nansel et al., 2003). As such, a common maladaptive type of peer interaction among middle-school youth is that of bullying.

Bullying is a universal phenomenon that is affecting school aged children from around the world. Bullying is a conscious, willful, and deliberate hostile activity intended to harm, induce fear, and create terror (Olweus, 1993). According to Olweus (1993) bullying is defined as a behavior that is intentionally carried out by one or more individuals and repeatedly targeted toward a person who cannot easily defend him- or herself. Eighty-six percent of children between the ages of twelve and fifteen report they get teased or bullied at school- making bullying more prevalent than tobacco, alcohol, or drug use among the same age group (Coloroso, 2008).

Indeed, many children fail to report bullying for fear of embarrassment or rejection; therefore, the number of children being bullied may be greater than what is reported (Powell & Ladd, 2010; Unnever & Cornell, 2004). A study conducted by Petrosino, Guckenburg, DeVoe, and Hanson (2010) noted 64 percent of teen respondents who experienced bullying did not report it. When bullying is underreported, administrators are likely to receive an incomplete picture of

bullying behaviors in their school (Petrosino et al., 2010). In order to develop and implement effective bullying prevention and intervention programs in schools, we must understand the social ecology that establishes and maintains bullying and victimization behaviors. Most prevention and intervention programs are implemented in middle school and high school; however research shows bullying behavior is present beginning in kindergarten (Payley, 1993). Therefore, it is important to examine the home environment and early childhood behaviors that predispose a child to bullying or becoming a victim of bullying. This dissertation examined various early childhood predictors that have been found to increase the likelihood of becoming a bully or victim of bullying in the preadolescent years.

The child's family is often viewed as the important factor that fosters development. Although genetics are shown to play an important role in a child's behavior, family characteristics are also important as children learn through their interactions with parents and siblings. At school, children often imitate behaviors they have witnessed at home. If young children enter school engaging in aggressive behaviors, it is possible they have been exposed to negative interactions in the home environment. A lack of positive parent-child interactions can leave a child with psychosocial problems that may hinder their social-emotional development, and thus predicting their involvement in bullying and victimizing activities (Dekovic, Janssens, & Van As, 2003). This dissertation examined harsh parenting which has been associated with both child bullying and victimization of bullying behavior.

The first paper of this dissertation prospectively evaluated harsh parenting practices and child behaviors that may lead to later bullying and victimization. To date, bullying research has been predominately cross-sectional, which provides insight into factors related to bullying and victimization but has very limited ability to predict behavior over time. In addition, research that

is longitudinal has been across a minimal time span (i.e. two to three grade levels beginning in elementary school). This study advances the literature by examining both parent and child characteristics in early childhood as they relate to bullying and victimization in preadolescence. Specifically, as shown in Figure 1, this study examined harsh parenting, child's externalizing and internalizing behavior problems, and child's angry and fearful temperament beginning at age 5 predicting to bullying or being a victim of bullying beginning at age 8-13.

The second paper of this dissertation extends the literature in two specific ways. First, this study examined the stability of parenting and child behavior problems across two developmental time points: early childhood (age 2-3) and middle childhood (age 5) predicting to bullying and victimization in preadolescence (age 8-13). Second, this study examined the bidirectional relationship between parenting behavior and child behavior as they predict to bullying and victimization in preadolescence (see Figure 2).

There are limitations of this dissertation that need to be considered. First, the results of this study are limited by the sample it was derived from which consisted of mostly Caucasian adolescents from a rural population. Very few minorities were included in the sample and information on adolescents living in a primarily urban setting was not assessed. Second, this dissertation examined individuals who reported any type of bullying and victimization behavior separately, it does not take into account those youth that reported being both a bully and a victim of bullying which is termed bully/victim.

In conclusion, this dissertation is one of the first to prospectively evaluate both bullying and being a victim of bullying within a longitudinal design. The first paper evaluated early childhood predictors of bullying and victimization, while the second paper examined stability of

behavior across time. Results from this dissertation will help to target prevention and intervention programs aimed at reducing the prevalence of bullying within our nation's schools.

## CHAPTER 2:

BULLYING AND VICTIMIZATION IN PREADOLESCENCE: THE ROLE OF PARENTING  
AND CHILD BEHAVIOR IN EARLY CHILDHOOD

To be submitted to the *Journal of Family Psychology*

Concern for children who are involved in school bullying has increased dramatically during the last decade. Bullying is defined as a behavior that is intentionally carried out by one or more individuals that repeatedly targets a victim who cannot easily defend him- or herself (Olweus, 1993). Most empirical attention related to bullying and victimization has been on proximal factors such as school and classroom environments where most bullying occurs (Swearer, Espelage, Vaillancourt, & Hymel, 2010). Progress toward understanding how a child becomes a bully or victim has led to the identification of child behavioral characteristics as well as parent-child relationship factors that may underlie these bullying patterns. Parent-child relationship factors may include parenting practices or features of the parent-child relationship that may foster behaviors that place children at risk for bullying or being a victim of bullying during the school years.

Specifically, research has shown that children who experience harsh parenting are likely to develop externalizing problems and have low self-esteem (Barber, 1996) which can result in either peer aggression and bullying (Salzinger, Feldman, Hammer, & Rosario, 1993), or victimization as the child may internalize parental rejection (Schwartz, Dodge, Coie, 1993). While studies have demonstrated that both child characteristics and parenting behavior contribute to bullying and victimization, few studies have examined these relationships over time. That is, few studies have longitudinally examined early childhood predictors of bullying or victimization that manifests during the school years. Therefore, the purpose of the current study

is to examine the relationship between parenting and child behaviors in early childhood on bullying and victimization in preadolescence.

### *Bullying and Victimization*

The transition from elementary to middle school is important developmentally as early adolescents face increased social stressors and shift from adult-focused to more peer-focused relationships (Eccles, 1999; Nansel, Haynie, & Simons-Morton, 2003). The development of healthy social relationships with peers is one component of a successful adaptation to middle school. Difficulties in peer relationships (i.e. bullying and victimization) are associated with negative changes in self-concept and feelings of self-worth that may impair school adjustment (Fenzel, 2000; Nansel et al., 2003). A meta-analysis by Cook and colleagues (2010) summarized 153 journal articles which defined the characteristics of a bully and a victim of bullying. Based on this meta-analysis, the typical *bully* is one who exhibits significant externalizing behavior (i.e. defiant, aggressive, disruptive, and noncompliant responses), has internalizing symptoms (i.e. withdrawn, depressive, anxious, and avoidant responses), has social competency challenges, and comes from a family environment characterized by conflict and poor parental monitoring.

The typical *victim* is described as one who is likely to demonstrate internalizing symptoms, engages in externalizing behavior, lacks adequate social skills, has lower social competence, is rejected by peers, and comes from a negative family environment (Cook, Williams, Guerra, Kim, & Sadek, 2010). Indeed, there are many overlapping characteristics found in both bullies and victims. By examining characteristics of both bullying and victimization within the same model, we can determine whether there are specific early childhood predictors that lead a child to become either a bully or a victim. Moreover, in addition to child characteristics that may lead to bullying or victimization, another contributing factor to

these adolescent behaviors is the type of parenting experienced in childhood (Hong & Espelage, 2012). Therefore, the next section describes the role of harsh parenting on bullying and victimization.

### *Harsh Parenting and Bullying and Victimization*

According to Patterson et al. (1990), antisocial behavior appears to be a developmental trait that begins early in life and often continues into adolescence and adulthood. A large body of research supports the notion that harsh parenting practices are related to children's externalizing behaviors (Gershoff, 2002). Indeed, parents of children who display externalizing behavior are characterized by utilizing harsh and inconsistent discipline practices, limited positive child involvement, psychosocial control (i.e. yelling, withdrawal of love), and poor monitoring and supervision of their child's activities (Barber, 1996; Loeber & Dishion, 1983; Patterson et al., 1990). These parental practices are thought to harm the child's self-esteem which may, in turn, lead to elevated levels of externalizing behaviors (Barber, 1996).

There is evidence to suggest that these harsh parenting practices lead to preadolescent bullying. For example, parents who use physically aggressive discipline to gain control are more likely to have children who engage in more severe forms of aggressive behavior (Duncan, 2004; Salzinger et al., 1993). Parents of bullies fail to place limits on their children's aggressive behavior and are generally permissive of aggression toward others (Olweus, 1994). Bullies also report poor relationships with their parents (Rigby, 1993) and rate their families as high in negative affect while providing little emotional support (Rigby, 1994).

While research on the association between harsh parent-child relationships and bullying is fairly consistent, other studies suggest that abusive family conditions may also be associated with vulnerability to peer victimization. Specifically, mothers of female victims are described as

being emotionally abusive, controlling, and rejecting (Finnegan et al., 1998) which may lead to depression, anxiety, or other internalizing symptoms that hinder the child's ability to cope with stressful situations, such as being a victim of bullying. Schwartz, Dodge, and Coie (1993) found that aggressive male victims had family histories that included harsh disciplinary styles and exposure to violence in the home. For these reasons, it is important to not only examine the relationship between harsh parenting and bullying but also harsh parenting and victimization. In addition to the association between harsh parenting and child bullying and victimization, there is also evidence to suggest that child characteristics may play a role on such behavior. Therefore, we turn to the role of early childhood characteristics and bullying and victimization.

#### *The Role of Childhood Behaviors and Characteristics*

Several cross-sectional studies (e.g., Craig & Harel, 2004; Nansel, Overpeck, Pilla, Ruan, Simons-Morton, & Schedit, 2001) provide evidence that antecedents to bullying and victimization include child characteristics such as externalizing and internalizing problems and child's temperament. Moreover, many of the same childhood behaviors have been associated with both bullying and victimization. For this reason, it is important to examine both parenting and child behaviors as possible predictors of later bullying or victimization within the same model.

*Externalizing behavior problems.* Research shows that toddlers who display high levels of externalizing behaviors such as hyperactivity and aggression continue to display behavior problems into adolescence (Campbell, Shaw, & Gilliom, 2000; Mesman, Bongers, & Koot, 2001). Indeed, Olweus (1979) found that the correlation between aggression in early childhood and aggression in later childhood was .63 (.79 when corrected for attenuation). This finding has been replicated in many subsequent longitudinal studies (e.g. Caspi et al 1987; Farrington, 1991;

Pulkkinen, 1992). Research shows that one distinctive characteristic of the typical bully is his or her aggressive behavior toward peers (Olweus, 1993). Moreover, externalizing behaviors such as being antisocial and breaking the rules are common characteristics of children who bully (Olweus, 1993). Therefore, aggression in early childhood may lead a child to bully his or her peers during the preadolescent years.

On the other hand, some victims of bullying are characterized by a combination of both anxious and aggressive reaction patterns, and may also exhibit externalizing behavior problems. These victims behave in such a way as to cause irritation and tension around them. They are characterized as being hyperactive and it is not uncommon that their external behavior problems provoke negative reactions from their peers, which may lead to being a victim of bullying (Olweus, 1993). Therefore, externalizing behavior problems may also lead to victimization.

*Internalizing behavior problems.* With the exception of aggressive victims, the majority of children who are targeted for victimization tend to exhibit more internalizing behavior symptoms (i.e. anxiety, withdrawal, submission, and isolation) (Costello et al., 1988; Kearney, Eisen & Schaefer, 1995; Swearer, Grills, Hays, & Cary, 2004). As such, bullying peers may view these internalizing behaviors as an indication that the victim is weak or less likely to receive support from others (Swearer et al., 2004). Therefore, internalizing behavior problems, such as anxiety, withdrawal, and isolation may lead a child to be a victim of bullying.

In the same way that victimization is associated with internalizing behavior, there is evidence to suggest that there may also be a relationship between bullying and internalizing behavior. For example, Craig (1998) found that middle school children who bullied were more anxious. Kaltiala-Heino, Rimpela, Rantanen, and Rantanen, (2000) and Duncan (1999) also found similarly elevated rates of anxiety in bullies; however, others have reported no evidence of

increased anxiety in bullies (Olweus, 1994). Taken together, the literature is mixed regarding the role of internalizing behavior problems as a precursor to bullying. Therefore, it is important to examine the role that internalizing behavior may have on both bullying and victimization.

*Temperament.* Temperament is one way of conceptualizing consistency in how children respond to their environment. Individual differences in temperament are thought to influence many developmental outcomes (Rothbart & Bates, 2006; Shiner & Caspi, 2003; Sanson et al., 2004). For example, research has shown that proneness to anger and low tolerance of frustration influence the extent to which toddlers take part in aggressive conflict (Calkins, Gill, Johnson, & Smith, 1999). Similarly, children who exhibit signs of high negative emotionality have more social difficulties and higher levels of externalizing behavior problems (Caspi & Shiner, 2008; Eisenberg et al., 1996; Eisenberg et al., 1997; Rothbart & Bates, 2006). On the other hand, children who exhibit an inhibited or fearful temperament are more likely to display shyness with peers (Rubin, Burgess, & Hastings, 2002). Specifically, Henderson, Marshall, Fox, and Rubin (2004) found children who were identified as socially fearful at two years of age remained unoccupied and withdrawn with peers at age four. Therefore, just as with externalizing and internalizing behavior, it may be that children with an angry temperament will be more likely to display bullying behavior, while those with a more fearful temperament will become a victim. We test this possibility in the proposed study.

### *Present Investigation*

The aim of the present study was to prospectively investigate the effects of parenting and child characteristics as assessed in early childhood on the likelihood of being a bully or victim during preadolescence. Much of the research to date on bullying and victimization has been cross-sectional (e.g., Craig & Harel, 2004; Nansel et al., 2001). While these studies provide

insight into the prevalence of bullying as it differs by age, longitudinal studies are required to examine the dynamic processes involved in the development of bullying and victimization across time. Another limitation with cross-sectional studies is they do not rule out the possibility that childhood behaviors and characteristics precede rather than follow bullying and victimization. Therefore, the present investigation measures the child's externalizing and internalizing behavior problems and temperament prior to the report of bullying and victimization. This study also examined harsh parenting and bullying and victimization across time (see Figure 1).

This study further expands the literature in two important ways. First, parenting was assessed through observational interactions between parents and children in their homes. This method provides a more naturalistic and direct assessment of the targeted parent-child relationship than in past research on bullying and victimization which included only a survey method. Second, previous studies have used parent or teacher report for bullying or victimization. This study used child report as the child has firsthand knowledge of bullying that may be unknown to others. The self-report measure is more sensitive to relational and physical forms of aggression and victimization that is better in understanding the child's private experiences in bullying and victimization (Crick & Grotpeter, 1995; Ladd & Kochenderfer-Lass, 2002; Olweus, 1993).

Based upon the literature that describes harsh parenting, as well as child characteristics as potential precursors to bullying and victimization, the current study proposes the following hypotheses. First, the preadolescent bully will have experienced harsh parenting practices, exhibited high levels of externalizing behavior, and displayed an angry temperament in the early childhood years. Second, children who exhibited high levels of internalizing behavior and a

fearful temperament in early childhood will be associated with being a victim of bullying as a preadolescent.

## **Method**

### *Participants*

Data came from the Family Transitions Project (FTP), a longitudinal study of 559 target youth and their families. The FTP began as a continuation of two existing studies that were originally designed to assess the impact of family and economic stress during the farm crisis in Iowa in the late 1980s: the Iowa Youth and Families Project (IYFP) and the Iowa Single Parent Project (ISPP). The IYFP began in 1989, and recruited 451 rural families. The IYFP data sampled white, primarily middle-class families, which included two parents, a seventh-grade adolescent, and a sibling within four years of age of the seventh grader. The families resided in one of eight adjacent counties in Iowa in an area heavily dependent on agriculture with a population under 6,500. The IYFP data set consisted of 34% families residing on a farm, 12% in rural areas but not on a farm, and 54% in rural communities. Families were recruited through 34 public and private schools and were sent a letter explaining the project then contacted by telephone and asked to participate. All family members were interviewed at the first visit then videotaped participating in family interaction tasks at the second visit.

Approximately 78% of the eligible families agreed to participate in the initial wave of data collection in 1989 (Conger et al., 1992). Family median income for this study was \$33,700 in 1988, the year before the first wave of data collection and 11% of the families had incomes below the federal poverty line (Conger et al., 1992). The median education for mothers and fathers was 13 years with median ages of 39 (fathers) and 37 (mothers) years (Conger et al., 1992). Family size ranged from 4 to 13 persons, with a median of 5.

The ISPP began in 1991, which included the target adolescent, their single-parent mothers, and a sibling within four years of age of the target adolescent ( $N= 108$ ). Telephone screeners identified families headed by a mother who had experienced divorce within two years prior to the start of the study. The participants were Caucasian, primarily lower middle- or middle-class, one parent families that lived in the same general geographic area as the IYFP families. Measures and procedures for the IYFP and ISPP studies were identical with the exception that ISPP fathers did not participate in the in-home interviews. These families participated in three waves of data collection (1991, 1992, 1993) (Neppl, Conger, Scaramella, & Ontai, 2009).

Beginning in 1994, the two studies were merged to create the Family Transitions Project (FTP). During this time, the target adolescents from both studies were in 12<sup>th</sup> grade. Then in 1995, the target adolescent (one year after completion of high school) participated in the study along with their romantic partner or friend. The study expanded in 1997 to include the first born child of the target adolescent, now grown to adulthood. By 2010, the first born child of the target parent ranged in age from 18 months to 17 years old. The present study included approximately 273 target parents who had an eligible child participating in the study by 2010. There were two developmental time periods included in the current study: early childhood (i.e. 5 years of age) and preadolescence (i.e. 8-13 years of age). At the first developmental timepoint, there were 149 male and 124 female children and parents averaged 27 years of age (112 men and 161 women). The data for time two were analyzed from the first assessments of each child during that age range.

### *Procedures*

Each target parent and his or her child were visited once each year in their home by trained interviewers. During that visit, parents completed a series of questionnaires which addressed parenting behaviors and child characteristics. Beginning at age eight, children also completed questionnaires that were developmentally appropriate for their age level. In addition to questionnaires, parents and their children participated in two separate videotaped interaction tasks: a puzzle task and a cleanup task. This study used the puzzle task where parents and their children were presented with a puzzle that was too difficult for children to complete alone and were given five minutes to complete the task. Parents were instructed that the child complete the puzzle alone but they could offer any help that was necessary. This interaction task created a stressful environment for the parent and child. Trained observers coded the quality of the behaviors in the puzzle task between parents and children using the Iowa Family Interaction Rating Scales which has shown to have adequate validity and reliability (Melby & Conger, 2001).

### *Measures*

*Harsh parenting.* Observed harsh parenting was measured from three subscales assessed during the puzzle task. Specifically, high levels of antisocial, hostility, and angry coercive behaviors were used as measures of observed harsh parenting toward their child. The antisocial scale measures parent self-centered, egocentric, and insensitivity toward their child. The hostility scale measures hostile, angry, critical, disapproving, or rejecting behavior. Angry coercion measures control attempts that include hostile, contemptuous, threatening or blaming behavior. Each rating was scored on a 9-point Likert scale, ranging from (1) “no evidence of the behavior” to (9) “the behavior is highly characteristic of the parent”. The three subscales were averaged to

create a manifest variable. Cronbach's alpha coefficient indicated very good internal consistency ( $\alpha = .89$ ) and interrater reliability was substantial (.94).

*Externalizing Behavior Problems.* Externalizing problems was assessed using parent report of their child's behavior on the Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2000). Specifically, the aggressive behavior subscale was used. Aggressive behavior is defined as a behavior that causes physical or emotional harm to others (e.g., "cruelty, bullying, or meanness to others" or "gets in many fights"). Parents rated each item of the subscale on a 3-point Likert scale, ranging from (0) "not true" to (2) "very true". There were 18 items which were averaged with higher score indicating higher levels of child externalizing behavior problems. Cronbach's alpha coefficient indicated very good internal consistency ( $\alpha = .82$ ).

*Internalizing Behavior Problems.* Internalizing behavior characteristics were assessed using parent report on the Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2000). Specifically, the anxious/depressed subscale was used. Anxious/depressed is defined as the tendency to maintain focus during challenging tasks (e.g., "feels or complains that no one loves him/her" or "fears he/she might think or do something bad"). Parents rated each item on a 3-point Likert scale, ranging from (0) "not true" to (2) "very true". Twelve of the 13 items were used (one item was dropped due to zero responses) and items were averaged with higher scores indicating higher levels of child internalizing behavior problems. Cronbach's alpha coefficient indicated acceptable internal consistency ( $\alpha = .62$ ).

*Child Temperament.* Temperamental characteristics were assessed using parent report on the Child Behavior Assessment Questionnaire (CBAQ; Goldsmith, 1996). The CBAQ measures several temperamental dimensions but only the anger proneness and social fearfulness subscales were used in this analysis. Anger proneness is defined as any sign of anger in situations

involving conflict with others, such as crying, protesting, or hitting (Goldsmith, 1996). Parents responded to 28 items regarding how likely their children were to react with negative emotions to a variety of situations (e.g. “when you turned off the television set because it was bedtime, dinnertime, or time to leave, how often did your child throw a tantrum” or “when you removed something your child should have been playing with, how often did she/he scream”). Social fearfulness is defined as inhibition, distress, withdrawal, or signs of shyness in novel or uncertainty-provoking situations of a social nature and included 12 items (e.g. “when you child has been approached by an unfamiliar adult while shopping or out walking, how often did your child show distress or cry”) (Goldsmith, 1996). All CBAQ items were rated on a 7-point Likert scale, (1) never to (7) almost always. All items within each scale were averaged to indicate high levels of angry and fearful temperament. Cronbach’s alpha coefficient indicated very good internal consistency ( $\alpha = .84$ ) for anger temperament and ( $\alpha = .76$ ) for fearful temperament.

*Bullying.* During preadolescence (i.e., 8-13 years of age), bullying was assessed using child report (adapted from Ladd & Ladd, 1998). The child rated each bullying item on a 3-point Likert scale, ranging from (1) “no, never” to (3) “yes, a lot”. Four questions were included in the scale and asked the child, do you: a) “hit, kick, push, shove, or lock your classmates indoors”, b) call your classmates mean names, make fun, or tease them”, c) “leave out, ignore, or exclude your classmates from the group”, and d) “tell lies or spread false rumors to try to make others dislike your classmates”. Items were averaged and the higher score indicated more bullying. Cronbach’s alpha coefficient indicated very good internal consistency ( $\alpha = .83$ ).

*Victimization.* During preadolescence (i.e., 8-13 years of age), bullying victimization was assessed using child report (adapted from Ladd & Ladd, 1998). The child rated each victimization item on a 3-point Likert scale, ranging from (1) “no, never” to (3) “yes, a lot”. Four

questions were included in the scale and asked the child, do your peers: a) “hit, kick, push, shove, or lock you indoors”, b) “call you mean names, make fun, or tease you”, c) “leave you out, ignore, or exclude you from the group”, and d) “tell lies or spread false rumors to try to make others dislike you”. Items were averaged with higher scores indicating more bullying victimization. Cronbach’s alpha coefficient indicated very good internal consistency ( $\alpha = .75$ ).

*Control variables.* To determine whether any of the relationships within the model were due to outside background characteristics, this study controlled for gender of both the parent and child. Studies show that parent-child relationships have a differential impact on children depending on the gender of the parent and child (Finnegan et al., 1998; Olweus, 1993). For example, mothers of male victims have been characterized as being overprotective and controlling (Finnegan et al., 1998; Nansel et al., 2001) while fathers of male victims are distant and critical (Olweus, 1993) or absent (Fosse & Holen, 2002). On the other hand, females who reported a high level of parental control and a low level of parental care were likely to bully others (Rigby, 2002) and females who reported a high level of parental control only (i.e. being emotionally abusive, controlling, and rejecting; Finnegan et al., 1998) were more likely to be victims. For these reasons, this study controlled for gender which was measured where 0=male and 1=female. The range, mean, standard deviation, and minimum and maximum scores for all study variables, are provided in Table 1.

## **Results**

The current study used Structural Equation Modeling (SEM) to assess the predictors from early childhood as they influence bullying and victimization in preadolescence. SEM was used as it reduces the impact of measurement error and can analyze the two time points in one succinct causal model. The computer software program Amos version 18 (Arbuckle, 1997) was utilized to

estimate standardized and unstandardized coefficients for all paths in the SEM model. Missing data was handled by Full Information Maximum Likelihood (FIML; Arbuckle, 1997), one of the most widely recommended approaches to dealing with missing data in longitudinal research, as it provides better estimation of model parameters for listwise and pairwise deletion (Allison, 2003; Arbuckle, 2003; as cited in Neppel et al., 2009).

### *Correlation Analyses*

Table 2 provides the correlation coefficients among all study variables. As hypothesized, harsh parenting as experienced in early childhood was significantly correlated with bullying ( $r=.22$ ,  $p<.01$ ) and victimization ( $r=.15$ ,  $p<.05$ ) in preadolescence. Early childhood externalizing problems was significantly correlated with later victimization ( $r=.25$ ,  $p<.01$ ); however was not significantly correlated with bullying ( $r=.07$ ). Internalizing behavior problems was significantly correlated with victimization ( $r=.13$ ,  $p<.05$ ); however was not significantly correlated with bullying ( $r=.09$ ). Angry Temperament was also significantly correlated with victimization ( $r=.19$ ,  $p<.05$ ); however was not significantly correlated with bullying ( $r=-.03$ ). Finally, fearful temperament was not significantly correlated with either bullying ( $r=.08$ ) or victimization ( $r=.11$ ). The dependent variables, bullying and victimization, were significantly correlated ( $r=.34$ ,  $p<.01$ ) indicating that some children who reported bullying their peers were also victims of bullying themselves.

The three control variables included parent age, parent gender, and child gender. Specifically, parent age was not significantly correlated with bullying ( $r=-.01$ ) or victimization ( $r=-.02$ ). Parent gender was also not significantly correlated with bullying ( $r=-.16$ ) or victimization ( $r=-.03$ ). Finally, child gender was marginally significantly correlated with

bullying ( $r=-.10$ ,  $p<.10$ ), meaning males reported bullying their peers more, but not with victimization ( $r=.08$ ).

#### *Test of the Structural Equation Model*

The operationalized model had a  $\chi^2$  of (0.00) with 0 degrees of freedom. The  $p$ -value associated with this  $\chi^2$  was statistically significant which suggests that there may be a better fitting model that exists. The comparative fit index ( $CFI$ ) was 1.00 and the Root Mean Squared Error of Approximation ( $RMSEA$ ) equaled .13. A  $CFI$  value of 1.00 falls within the suggested range of 0.95 or higher, indicating this model is a good fit of the data (Schumacker & Lomax, 2010). However, the  $RMSEA$  of .13 falls outside of the suggested range of .05 to .08 for a good model fit (Schumacker & Lomax, 2010).

The SEMs were estimated in two ways. First, the model was tested with the control variables in the analyses: parent and child gender and parent age. Then, the model was re-estimated excluding these demographic characteristics. Both sets of models generated the same pattern of results; therefore, we review the detailed results without the inclusion of the control variables (see Figure 2). Model fit information was calculated using *Chi-Square*, *Root Mean Squared Error Approximation* ( $RMSEA$ ), and *Comparative Fit Indices* ( $CFI$ ). Although not depicted in Figure 2 all of the endogenous variables were correlated.

Consistent with the study hypotheses, harsh parenting during early childhood predicted bullying behavior toward peers during preadolescence ( $\beta= .22$ ,  $p= .01$ ) and marginally predicted victimization of bullying ( $\beta= .15$ ,  $p= .08$ ). Early childhood externalizing behavior was not statistically significant in predicting later bullying ( $\beta= .11$ ,  $p= .26$ ) however it significantly predicted victimization during preadolescence ( $\beta= .22$ ,  $p= .02$ ). Contrary to study hypotheses, early childhood internalizing behavior did not predict later bullying ( $\beta= .04$ ,  $p= .67$ ) or

victimization ( $\beta = .03, p = .75$ ). Similarly, early childhood angry temperament was not statistically significant in predicting bullying ( $\beta = -.10, p = .34$ ) or victimization ( $\beta = .04, p = .73$ ). And finally childhood fearful temperament did not predict bullying ( $\beta = .12, p = .20$ ) or victimization ( $\beta = .06, p = .55$ ).

### **Discussion**

This study contributes to the body of literature on bullying and victimization by simultaneously examining both parent and child behaviors as early predictors of bullying and victimization in preadolescence. Specifically, the current study examined harsh parenting, child externalizing and internalizing behavior, and child angry and fearful temperament during early childhood predicting to bullying and victimization during the preadolescent years. Results suggest that harsh parenting was associated with bullying while child externalizing behavior was predictive of later victimization.

#### *Harsh Parenting on Bullying and Victimization*

It has been established that children who have parents who display harsh parenting likely have children who engage in more severe forms of aggressive behavior (Barber, 1996; Loeber & Dishion, 1983; Patterson et al., 1990; Salzinger et al., 1993). Likewise, there is evidence that harsh parenting may also predict victimization (Finnegan et al., 1998; Schwartz, Dodge, & Coie, 1993). Therefore, results from the current study lend support for the association between harsh parenting and bullying. In addition, while not statistically significant, there was a trending effect for the association between harsh parenting and victimization. One possible explanation may be that parental responsiveness to the child's needs helps them feel more secure and increases their self-esteem. When the child does not experience such positive parental relationships in early childhood, they internalize the parental rejection and may emulate this rejection behavior in

attempts to make peer friendships. Bullying peers may view these internalizing behaviors as an indication that the individual is weak or less likely to receive support from others (Swearer et al., 2004) which results in victimization of bullying behavior.

#### *Externalizing Behavior on Bullying and Victimization*

In addition to harsh parenting, there is evidence that children's externalizing behaviors also contribute to bullying. However, while the correlation between externalizing and bullying was significant in this study, there was not a significant relationship between externalizing behaviors in early childhood and bullying in preadolescence within the model. One possible reason may be that once taking harsh parenting into account within the model, early externalizing behavior is no longer predictive of bullying.

In addition, externalizing behavior was parent reported in early childhood while bullying behavior in preadolescence was child-reported. While child report of bullying and victimization is a strong measure by itself as it accounts for firsthand knowledge of such behavior, future research may incorporate both self- and peer-report in order to better determine to what extent the child sees him or herself as a bully or victim. For example, Branson and Cornell (2009) conducted a study using both self- and peer-report surveys of bullying and found a low correspondence between the two reporters. It was concluded that one possible reason for the low correspondence is that students may be reluctant to admit that they are bullies because of the stigma associated with bullying (Branson & Cornell, 2009). This is important as bullying prevention efforts rely heavily on student self-report to evaluate program effectiveness (Smith, Schneider, & Smith, 2004). Therefore, future longitudinal studies should use both self- and peer-report surveys for bullying rather than just self-report, to examine externalizing behaviors and bullying across time.

On the other hand, there was a significant relationship between externalizing behaviors and victimization. This result supports other research that shows children who often exhibit behaviors such as aggression and disruptiveness provoke their peers, which may invite bullying. However, other studies have observed no such association. For example, Dhimi et al. (2005) found no support for a linkage between externalizing problems and victimization. A noted limitation of previous studies that have not found a linkage between externalizing behavior problems and victimization is that the time frame ranged from 6 months- 2 years. The current study covered a time frame of 3+ years and found a significant relationship between externalizing behavior problems beginning at age five or six leading to victimization in preadolescence. Therefore, it may be important to examine this relationship over a longer period of time to capture externalizing behaviors in victims.

#### *Internalizing Behavior on Bullying and Victimization*

Research has shown that children who exhibit internalizing behavior symptoms (i.e. anxiety, withdrawal, submission, and isolation) are more likely to be targets for bullies (Costello et al., 1988; Kearney, Eisen & Schaefer, 1995; Swearer, Grills, Haye, & Cary, 2004). However, this study did not find a significant relationship between internalizing behaviors in early childhood and victimization in preadolescence. Also, despite previous research that shows children with elevated anxiety are more likely to bully others (Duncan, 1999; Kaltiala-Heino et al., 2000), the current study did not find a significant association between internalizing behaviors and bullying.

The lack of findings between internalizing behaviors and bullying and victimization may be due to several factors. First, this study used parent report of the child's internalizing behaviors at the age of five. Asking parents to report how their child is feeling may be difficult to detect at

such a young age. Second, Reijntjes et al. (2010) conducted a meta-analysis on longitudinal studies examining prospective linkages between peer victimization and internalizing problems. The studies in the meta-analysis covered a time frame of 6 months- 2 years between two time points. Results showed significant associations between internalizing behaviors both prior to victimization and post victimization. As Reijntjes et al. (2010) stated, these reciprocal influences suggest a vicious cycle that contributes to the high stability of peer victimization. However, the current study covered a 3+ year timeframe between internalizing behavior and victimization and did not find a significant relationship. Thus, it could be concluded that internalizing behavior is more evident within two years of becoming a victim of bullying. In the future, longitudinal studies that have with more than a two year time frame are needed to examine internalizing behaviors prior to victimization.

#### *Temperament on Bullying and Victimization*

Children who exhibit signs of high negative emotionality or anger have more social difficulties and higher levels of externalizing behavior problems (Caspi & Shiner, 2008; Eisenberg et al., 1996; Eisenberg et al., 1997; Rothbart & Bates, 2006). In addition, children who exhibit an inhibited or fearful temperament are more likely to display shyness with peers (Rubin, Burgess, & Hastings, 2002). However, in the current study, both angry and fearful temperament did not predict bullying or victimization. Overall, there has been a general agreement that temperament consists of individual differences in behavioral and emotional style that is present early in life and is consistent over time and across situations. However, the ties between temperament and children's social adjustment or maladjustment at school, like bullying and victimization, may depend on a variety of processes. Bacchini, Affuso, and Trotta (2008) stated that rarely do temperamental traits exert a direct effect on behavior but rather more of an

interaction effect—for instance, via harsh parenting. While the current study did not examine the moderational effect of temperament and harsh parenting on bullying and victimization, it could be that the child's temperament is a contributor to interactions with his or her parent. Even though parents have the power to enforce compliance in children, differences in children's temperament can lead to differences in parental response (Bell & Harper, 1977).

### **Limitations and Future Research**

Results of this study are limited by the sample in that they were mostly Caucasian from a rural population. Very few minorities were included in the sample and information on youth living in an urban setting was not assessed. However, a nationally representative study of adolescents found a modest racial/ethnic variation in the association between bullying and family, peer and school factors (Spriggs et al., 2007). While this study does suggest that harsh parenting was associated with bullying and externalizing behavior was predictive of later victimization for a primarily rural, Midwestern sample, future research should incorporate a more diverse sample from various ethnic backgrounds and include both rural and urban settings to improve the generalizations from this study.

Another limitation is this study could not take into account whether the child reported only bullying, only victimization, or both bullying and victimization (coined bully-victim). Future studies should examine these three possible outcomes separately. Evidence suggests that children who are the victims of bullying and who also bully their peers (i.e. bully-victims) may exhibit the poorest functioning in comparison with either victims or bullies (e.g. Nansel et al., 2004). Therefore, it is important to examine predictors in early childhood that may lead to children being a bully-victim in the later years.

Despite these limitations, this study expands our understanding about the relationship between harsh parenting and early childhood characteristics that may predict bullying and victimization in preadolescence. Overall, the results indicated that harsh parenting and externalizing behavior in early childhood were predictors of bullying and victimization in preadolescence whereas internalizing behavior and temperamental characteristics were not. The current findings highlight both the importance of addressing the issue of bullying and victimization in preadolescence, as well as the value of capitalizing on developmental assets in preventing such negative outcomes.

### **Conclusions and Implications**

Several studies within the bullying research have focused on the school environment, however based on the findings of this longitudinal study, characteristics that lead a child to either be a bully or a victim of bullying may begin prior to primary school. This study found that harsh parenting at the age of five or six leads to both bullying and victimization in preadolescence. Therefore, future research should examine other early childhood characteristics that may influence the child's social interactions in middle school.

This study shows that while parenting in early childhood is a predictor of bullying and victimization as well as externalizing behavior and victimization, child characteristics (i.e. internalizing behavior and temperament) in early childhood were not related to bullying and victimization in preadolescence. More longitudinal studies are needed in order to clarify when the child's behavioral characteristics are most influential on later bullying and victimization. It may be that parenting is a predictor before the child enters primary school but once the child has more interactions with his or her peers, the child's behavioral characteristics become a significant predictor in bullying and victimization.

This study adds to the literature on family parameters of bullying and victimization experiences at school by proposing that school intervention programs encompass parent involvement. These findings could be useful to educators, school psychologists, and social workers dealing with bullying and victimization. These practitioners could improve the effectiveness of their intervention and prevention strategies by including parents in the effort. By including parents in these programs, they could learn ways build a healthy parent-child relationship that encompasses warmth, empathy, kindness, and compassion which children emulate in their peer relations and could reduce or eliminate bullying and victimization in schools.

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Table 1. Sample Descriptives (n= 273)

Construct	Range	Min.	Max.	Mean	Standard Deviation
Harsh Parenting	1-9	1.00	6.00	1.84	0.99
Child Externalizing Behavior	0-2	0.00	1.09	0.29	0.23
Child Internalizing Behavior	0-2	0.00	0.89	0.23	0.21
Child Angry Temperament	1-7	1.54	6.38	4.66	0.79
Child Fearful Temperament	1-7	1.25	5.80	3.99	0.84
Bullying	1-3	1.00	3.00	1.15	0.33
Victimization	1-3	1.00	3.00	1.54	0.49

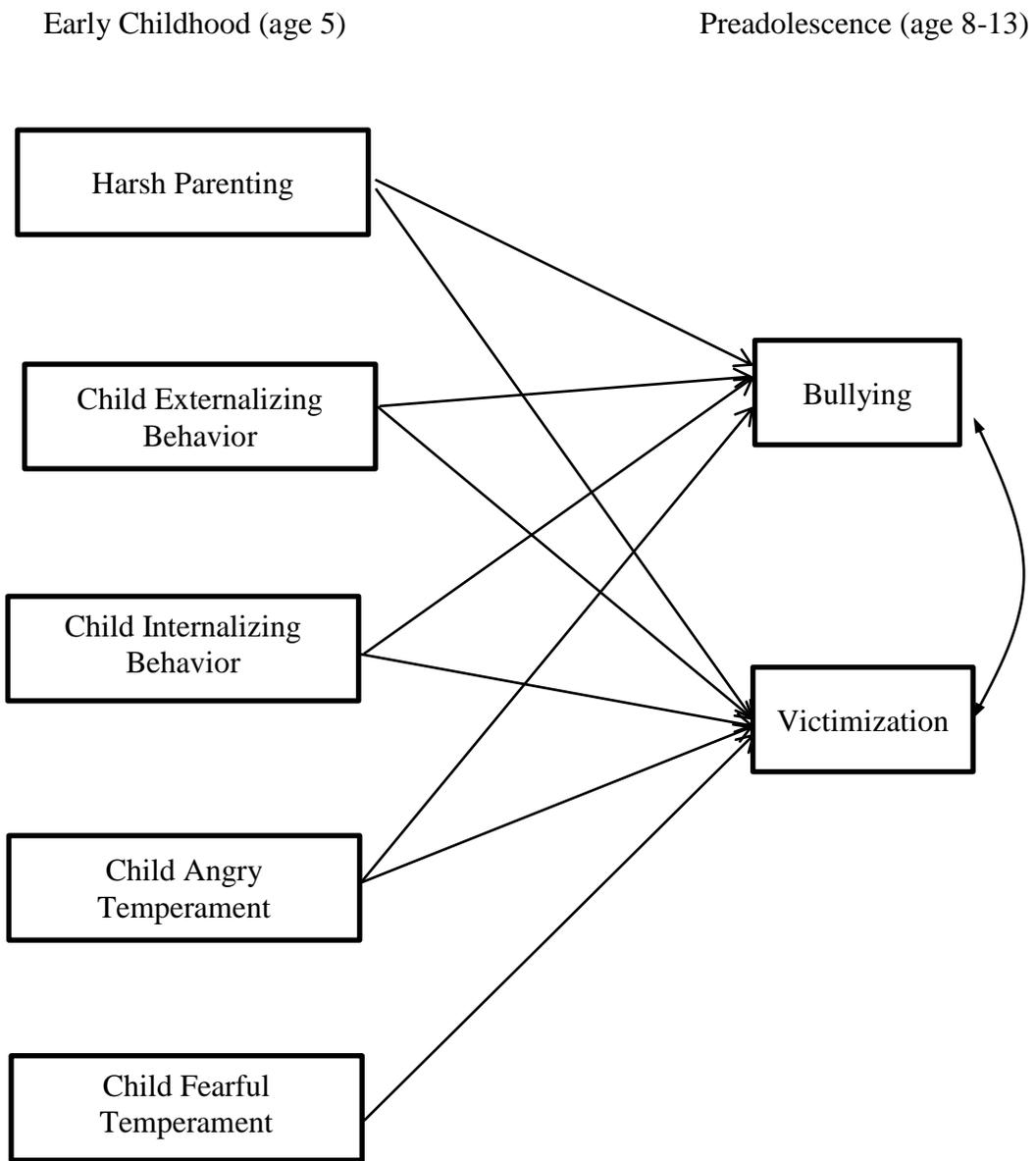
Table 2. Sample Correlations (n= 273)

Construct	1.	2.	3.	4.	5.	6.	7.	8.	9.	10
1. Harsh Parenting	-									
2. Child Externalizing Behavior	-.03	-								
3. Child Internalizing Behavior	.03	.36**	-							
4. Child Angry Temp.	-.01	.53**	.28**	-						
5. Child Fearful Temp.	-.05	.12 <sup>†</sup>	.35**	.24**	-					
6. Bullying	.22**	.07	.09	-.03	.11	-				
7. Victimization	.15*	.25**	.13*	.17*	.08	.34**	-			
8. Parent Age	-.13 <sup>†</sup>	-.14*	-.12*	-.03	.02	-.01	-.02	-		
9. Parent Gender	.14	.10 <sup>†</sup>	-.00	-.05	.02	-.16	-.03	-.15*	-	
10. Child Gender	-.13 <sup>†</sup>	-.11 <sup>†</sup>	.03	.01	.17*	-.10 <sup>†</sup>	.08	.14*	.04	-

Note: <sup>†</sup> $p < .10$  \* $p < .05$  \*\* $p < .01$

Figure 1. *Conceptual Model*

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## CHAPTER 3:

PREDICTORS OF BULLYING AND VICTIMIZATION: PARENTING AND CHILD  
BEHAVIOR ACROSS TIME

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Extensive empirical work links parenting practices to child problem behavior (e.g. Broidy et al. 2003; Patterson, 1986; Tremblay, 2007). Moreover, studies have shown that parenting and child behavior are both related to childhood bullying and victimization. Indeed, children who experience harsh parenting are likely to develop externalizing behavior problems and lower self-esteem (Barber, 1996) which can result in aggressive and bullying behavior (Salzinger, Feldman, Hammer, & Rosario, 1993). Furthermore, these behaviors may cause irritation and tension to others thereby provoking negative reactions from their peers resulting in victimization. Most studies linking parenting, child problem behavior, and childhood bullying examine these behaviors over a short time span, often beginning in the elementary school years (Finnegan & Perry 1995; Ladd & Ladd, 1998). Yet, it is likely that the emergence of bullying behavior and victimization develops well before the child enters school. As such, researchers have become more interested in the potential role of early parent-child interactions on the cause of bullying and victimization in middle and later childhood (Ladd & Ladd, 1998; Olweus, 1993).

In addition, there is growing consensus that the association between harsh parenting and child externalizing behavior may be bidirectional (Bell & Harper, 1977; Conger & Simons, 1997). However, few studies have tested competing hypotheses about the direction of these relationships ultimately predicting bullying and victimization over time. Therefore, this study examined relationships between harsh parenting and childhood behavior problems

across childhood as they predict to bullying and victimization in preadolescence. This study specifically examined whether or not harsh parenting leads to child externalizing behavior, which in turn leads to bullying in preadolescence and whether harsh parenting leads to child externalizing behavior which leads to victimization. In addition, we examined if the proposed relationships were linear or bidirectional. That is, we tested whether child externalizing in early childhood leads to harsher parenting in middle childhood which then leads to either bullying or victimization in preadolescence (see Figures 1a and 1b). We begin with a discussion on harsh parenting and externalizing behavior problems that are related to bullying.

#### *Harsh Parenting and Externalizing Behavior Problems Related to Bullying*

A range of parenting behaviors have been linked to children's externalizing behaviors at an early age. Families of antisocial children are characterized by harsh and inconsistent discipline, little positive parental involvement with the child, and poor monitoring and supervision of the child's activities (Loeber & Dishion, 1983; Patterson et al., 1990). Parental use of psychosocial control (i.e. yelling, withdrawal of love) is thought to harm the child's self-esteem which may, in turn, lead to elevated levels of externalizing behaviors (Barber, 1996). Specifically, parental use of physical punishment and exertion of power have been related to children's bullying behavior (Olweus, 1994; Rigby, 1993). Olweus (1980) found that both mothers' and fathers' use of power assertive discipline and in particular physical punishment and strong affective reactions was directly related to aggression in adolescent boys. These findings are consistent with Patterson's developmental model of antisocial behavior noting that poor parental discipline and lack of monitoring were instigating factors in the development of childhood aggression (Patterson, DeBaryshe, & Ramsey, 1989).

Vissing, Straus, Gelles, and Harrop (1991) further concluded that harsh and coercive discipline practices in early childhood led to or escalated conduct behavior problems in later adolescence. Therefore, consistent with the literature which proposes that harsh parenting is associated with preadolescent bullying, the current study examined the relationship between harsh parenting in early childhood and high levels of externalizing behavior problems in middle childhood leading to bullying behavior toward peers in preadolescence.

#### *Harsh Parenting and Externalizing Behaviors Related to Victimization*

Research has consistently shown that harsh parenting leads to preadolescent bullying and there is evidence that harsh parenting also may lead to victimization. Specifically, mothers of female victims are described as emotionally abusive, controlling, and rejecting of their daughters (Finnegan et al., 1998) which may lead females to develop depression, anxiety, or other internalizing symptoms that hinder the child's ability to cope with stressful situations, thus making them a target for bullying. Victims of bullying may be characterized by a combination of both anxious and aggressive reaction patterns, as well as exhibit externalizing behavior problems (e.g. Olweus, 1993). Schwartz, Dodge, and Coie (1993) found that aggressive male victims had family histories that included harsh disciplinary styles, physical harm by family members, and exposure to violence in the home. For these reasons, it is important to not only examine the relationship between harsh parenting and bullying but also harsh parenting and victimization. We turn now to the potential bidirectional parent-child relationship of harsh parenting and externalizing behavior as it relates to subsequent bullying and victimization.

#### *Bidirectional Parent-Child Relationships*

A long history of research on parent-child relationships have been based on the assumption that parents influence their children to a greater extent than children influence their parents (Pettit & Lollis, 1997). As discussed above, it is proposed that parents who use harsh discipline will have children who have higher levels of externalizing behavior. However, this unidirectional view of the parent-child relationship has given way to a bidirectional process with the idea that children may elicit certain types of parenting responses (Bell & Harper, 1977; Conger & Simons, 1997; Pettit & Lollis, 1997). For example, Bell (1981) found that children who displayed externalizing behaviors continued to experience harsh parenting as parents attempted to restore control in the home environment.

Following the coercive model proposed by Patterson and colleagues (Patterson, 1982), irritable and angry exchanges in the parent's attempt to coerce compliance from their oppositional child may either be ignored by the child resulting in passive noncompliance (Campbell, 1990), or may elicit more aggressive acts of defiance. Parents who perceive they have little control in their child's behavior may maintain the punitive discipline style which can lead to further childhood aggression (Patterson, 1982). Given that the parent-child relationship is bidirectional, it is anticipated that children who exhibit high levels of externalizing behavior in early childhood will elicit harsher parenting practices in middle childhood, which in turn will lead to bullying and victimization in preadolescence.

#### *Present Investigation*

Much of the research examining bullying has either been cross-sectional or assessed over a short developmental time period. Cross-sectional studies on bullying provide insight into the prevalence of bullying as it differs by age; however, they do not rule out the possibility that childhood behaviors and characteristics precede rather than follow bullying

and victimization. Using a longitudinal design, this study was able to measure the child's externalizing behavior prior to the report of bullying and victimization. This study also examined parenting and externalizing behaviors as a bidirectional relationship across time. Most longitudinal studies on bidirectional parent-child influences have focused on brief temporal periods of a year or less, making it unclear whether bidirectional effects are stable or systematically change across development. This study examined three developmental time periods: early childhood (2-3 years old), middle childhood (5 years old), and preadolescence (between 8-13 years old). The aim of the present study was to investigate the bidirectional effects of harsh parenting and externalizing behavior across early and middle childhood as related to bullying and victimization in preadolescence.

Another limitation in previous studies is the use of the same informant to provide information about parenting practices and child behavior (as stated in Pardini, 2008). The current study addressed this limitation by using three different reporters: parent report, child report, and an observational assessment of parenting. The observational method provides a more direct assessment of the parent-child relationship than has been used in past bullying and victimization research. Previous studies have used self-report to measure externalizing and internalizing behavior problems as much of the bullying research begins in late elementary to middle school. This study used parent-report for measuring the child's externalizing behavior beginning in early childhood. Finally, previous studies have used parent or teacher report for bullying or victimization. This study will use child report as the child has firsthand knowledge of bullying that may be unknown to others. The self-report measure is more sensitive to relational and physical forms of aggression and victimization

that is better in understanding the child's private experiences in bullying and victimization (Crick & Grotpeter, 1995; Ladd & Kochenderfer-Lass, 2002; Olweus, 1993).

## **Method**

### *Participants*

Data came from the Family Transitions Project (FTP), a longitudinal study of 559 target youth and their families. The FTP began as a continuation of two existing studies that were originally designed to assess the impact of family and economic stress during the farm crisis in Iowa in the late 1980s: the Iowa Youth and Families Project (IYFP) and the Iowa Single Parent Project (ISPP). The IYFP began in 1989, and recruited 451 rural families. The IYFP data sampled white, primarily middle-class families, which included two parents, a seventh-grade adolescent, and a sibling within four years of age of the seventh grader. The families resided in one of eight adjacent Iowa counties with a population under 6,500. The IYFP consisted of 34% families residing on a farm, 12% in rural areas but not on a farm, and 54% in rural communities. Families were recruited through 34 public and private schools and were sent a letter explaining the project then contacted by telephone and asked to participate. All family members were interviewed at the first contact then were videotaped participating in family interaction tasks at the second visit. Approximately 78% of the eligible families agreed to participate in the initial wave of data collection in 1989 (Conger et al., 1992).

The ISPP began in 1991, which included the target adolescent, their single-parent mothers, and a sibling within four years of age of the target adolescent ( $N= 108$ ). Telephone screeners identified families headed by a mother who had experienced divorce within two years prior to the start of the study. The participants were Caucasian, primarily lower middle- or middle-class, one parent families that lived in the same general geographic area as the

IYFP families. Measures and procedures for the IYFP and ISPP studies were identical with the exception that ISPP fathers did not participate in the in-home interviews. These families participated in three waves of data collection (1991, 1992, 1993) (Neppl et al., 2009). Family median income for this study was \$33,700 in 1988, the year before the first wave of data collection and 11% of the families had incomes below the federal poverty line (Conger et al., 1992). The median education for mothers and fathers was 13 years with median ages of 39 (fathers) and 37 (mothers) years (Conger et al., 1992). Family size ranged from 4 to 13 persons, with a median of 5.

Beginning in 1994, the two studies were merged to create the Family Transitions Project (FTP). During this time, the target adolescents from both studies were in 12<sup>th</sup> grade. Then in 1995, the target adolescent (one year after completion of high school) participated in the study along with their romantic partner or friend. The study expanded in 1997 to include the first born child of the target adolescent, now grown to adulthood. By 2010, the first born child of the target parent ranged in age from 18 months to 17 years old. The present study included approximately 273 target parents who had an eligible child participating in the study by 2010. There were three developmental time periods included in this study: early childhood, middle childhood, and preadolescence. At the first developmental timepoint, there were 149 male and 124 female children and parents averaged 27 years of age (112 men and 161 women). The data for time three were analyzed from the first assessments of each child during that age range.

### *Procedures*

Each target parent and his or her child were visited once each year in their home by trained interviewers. During that visit, parents completed a series of questionnaires which

addressed parenting behaviors and child characteristics. Children also completed questionnaires that were developmentally appropriate for their age level. In addition to questionnaires, parents and their children participated in a videotaped interaction task. The target parent and their child were presented with a puzzle that was too difficult for the child to complete alone. They were given five minutes to complete the task and parents were instructed that the child must complete the puzzle alone; however they could provide any assistance necessary. Trained observers coded the quality of the behaviors in the puzzle task between parent and child using the Iowa Family Interaction Rating Scales which has been shown to have adequate validity and reliability (Melby & Conger, 2001).

### *Measures*

*Harsh parenting.* Harsh parenting was measured as a manifest variable which included three subscales from the puzzle task. Specifically, high levels of antisocial, hostility, and angry coercive behaviors were used as a measure of observed harsh parenting toward their child. The antisocial scale measured parent self-centered, egocentric, and insensitivity. The hostility scale measured hostile, angry, critical, disapproving, or rejecting behavior. Angry coercion measured control attempts that include hostile, contemptuous, threatening or blaming behavior. Each rating was scored on a 9-point Likert scale, ranging from (1) “no evidence of the behavior” to (9) “the behavior is highly characteristic of the parent”. The three subscales were averaged with higher scores indicating higher levels of harsh parenting. Cronbach’s alpha coefficient indicated very good internal consistency ( $\alpha = .94$ ) at age 2-3 and ( $\alpha = .89$ ) at age 5, and interrater reliability was substantial (.94).

*Externalizing Behavior Problems.* Externalizing behavior was assessed using parent report on the Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2000). Specifically,

the aggressive behavior subscale was used. Aggressive behavior is defined as a behavior that causes physical or emotional harm to others (e.g., “cruelty, bullying, or meanness to others” or “gets in many fights”). Parents rated each item of the subscale on a 3-point Likert scale, ranging from (0) “not true” to (2) “very true”. There were eighteen items which were averaged and the higher score indicated higher levels of child externalizing behavior problems. Cronbach’s alpha coefficient indicated very good internal consistency ( $\alpha = .84$ ) at age 2-3 and ( $\alpha = .82$ ) at age 5.

*Bullying.* During preadolescence (i.e., 8-13 years of age), bullying was assessed using child report (adapted from Ladd & Ladd, 1998). The child rated each bullying item on a 3-point Likert scale, ranging from (1) “no, never” to (3) “yes, a lot”. Four questions were included in the scale and asked the child, do you: a) “hit, kick, push, shove, or lock your classmates indoors”, b) call your classmates mean names, make fun, or tease them”, c) “leave out, ignore, or exclude your classmates from the group”, and d) “tell lies or spread false rumors to try to make others dislike your classmates”. Items were averaged and the higher score indicated more bullying. Cronbach’s alpha coefficient indicated very good internal consistency ( $\alpha = .83$ ).

*Victimization.* During preadolescence (i.e., 8-13 years of age), bullying victimization was assessed using child report (adapted from Ladd & Ladd, 1998). The child rated each victimization item on a 3-point Likert scale, ranging from (1) “no, never” to (3) “yes, a lot”. Four questions were included in the scale and asked the child, do your peers: a) “hit, kick, push, shove, or lock you indoors”, b) “call you mean names, make fun, or tease you”, c) “leave you out, ignore, or exclude you from the group”, and d) “tell lies or spread false rumors to try to make others dislike you”. Items were averaged with higher scores indicating

more bullying victimization. Cronbach's alpha coefficient indicated very good internal consistency ( $\alpha = .75$ ).

*Control variables.* To determine whether any of the relationships within the model were due to outside background characteristics, this study controlled for gender of both the parent and child. Studies show that parent-child relationships have a differential impact on children depending on the gender of the parent and child (Finnegan et al., 1998; Olweus, 1993). For example, mothers of male victims have been characterized as being overprotective and controlling (Finnegan et al., 1998; Nansel et al., 2001) while fathers of male victims to be distant and critical (Olweus, 1993) or absent (Fosse & Holen, 2002). On the other hand, females who reported a high level of parental control and a low level of parental care were likely to bully others (Rigby, 2002) and females who reported a high level of parental control only (i.e. being emotionally abusive, controlling, and rejecting; Finnegan et al., 1998) were more likely to than their peers to be victims. For these reasons, this study controlled for gender which was measured where 0=male and 1=female.

## **Results**

Prior to testing the hypotheses, descriptive statistics were calculated for all study measures. Table 1 displays the range, mean, standard deviation, and minimum and maximum scores for all study variables. Table 2 shows the correlations among all study variables. Two separate models examined the relationship between parenting, child externalizing behavior, and bullying and victimization. Specifically, Figure 2a examined the association between harsh parenting, externalizing behavior, and bullying; while Figure 2b examined the relationship between harsh parenting, externalizing behavior, and victimization.

Both models examined the unidirectional or additive effects of harsh parenting on changes in externalizing problem behavior across the two developmental time points. This approach is consistent with the idea that the starting point for children's bullying and victimization problems in preadolescence may be manifested by harsh parenting during early childhood. Finally, in order to test whether the parent-child relationship is bidirectional and the child can elicit certain types of parenting from his or her parent (Bell & Harper, 1977; Conger & Simons, 1997; Pettit & Lollis, 1997), the direct path from externalizing behavior to harsh parenting was examined.

#### *Test of the Path Analysis Models*

The current study used path analysis to assess the predictors from early childhood as they influence bullying and victimization in preadolescence. Path analysis was used to evaluate study hypotheses rather than structural equation modeling. When estimating structural models, it is recommended to have a sample size to estimated parameter ratio of 5:1 (e.g., Falk & Miller, 1992) or 10:1 (e.g., Bollen, 1989) with a minimum sample of 100 (Bollen, 1989). By using path analysis, the sample size to parameter ratio will be within acceptable levels (i.e., 10.5:1 with the statistical controls). The computer software program Amos version 18 (Arbuckle, 1997) was utilized to estimate standardized and unstandardized coefficients for all paths in the model. Missing data was handled by Full Information Maximum Likelihood (FIML; Arbuckle, 1997), one of the most widely recommended approaches to dealing with missing data in longitudinal research, as it provides better estimation of model parameters for listwise and pairwise deletion (Allison, 2003; Arbuckle, 2003; as cited in Neppel et al., 2009).

Both models were estimated in two ways. First, in order to rule out the possibility that harsh parenting, child externalizing problem behavior, and bullying and victimization were affected by control variables, both models were estimated by adding the control variables. Next, the models were estimated to exclude these control variables. Both sets of models generated the same pattern of results; therefore, we review the detailed results without the inclusion of the control variables. In addition, although not depicted in Figures 2a and 2b, harsh parenting and child externalizing behavior at age 2-3 were correlated, and harsh parenting and child externalizing behavior residuals were correlated at age 5.

Model fit was calculated using *Chi-Square*, *Root Mean Squared Error Approximation* (RMSEA), and *Comparative Fit Indices* (CFI). The path analysis model for Figure 2a had a  $\chi^2$  of 2.74 with 3 degrees of freedom. The *p*-value associated with this  $\chi^2$  was not statistically significant (.43), indicating little difference between the estimated model and the data. The comparative fit index (CFI) of the operationalized model was 1.00 and the root mean squared error of approximation (RMSEA) equaled .00. A CFI value of 1.00 falls within the suggested range of 0.95 or higher and the RMSEA falls within the suggested range of less than .05, indicating this model is a good fit of the data (Schumacker & Lomax, 2010). Furthermore, direct paths from harsh parenting and externalizing behavior problems in early childhood to bullying in preadolescence were non-significant (not shown). Exclusion of this non-significant path did not significantly affect model fit.

The path analysis model for Figure 2b had a  $\chi^2$  of 4.32 with 3 degrees of freedom. The *p*-value associated with this  $\chi^2$  was not statistically significant (.23), indicating little difference between the estimated model and the data. The comparative fit index (CFI) of the operationalized model was .97 and the root mean squared error of approximation (RMSEA)

equaled .04. Both the CFI value and the RMSEA falls within the suggested ranges, indicating the model is a good fit of the data. Furthermore, a direct path from harsh parenting in early childhood to victimization in preadolescence was statistically significant and a direct path from externalizing behavior problems in early childhood predicting victimization in preadolescence was non-significant (both not shown). Inclusion of these paths significantly affected the model fit and were not included in the final model ( $\chi^2$  of 0.00 with 0 degrees of freedom, *CFI* was 1.00 and the *RMSEA* equaled .110); concluding that the model shown in Figure 2b is the best model fit for the data.

#### *Correlation Analyses*

The correlations provided support for the proposed hypotheses (see Table 2). Harsh parenting at age 2-3 was significantly correlated with harsh parenting at age 5 ( $r=.22$ ,  $p<.01$ ) and child externalizing behavior at age 2-3 was significantly correlated with externalizing behavior at age 5 ( $r=.48$ ,  $p<.01$ ). These correlations support continuity of the measures across Time1 and Time 2. Harsh parenting at age 2-3 was not significantly correlated with bullying ( $r=-.01$ ) however harsh parenting at age 5 was significantly correlated with bullying ( $r=.22$ ,  $p<.01$ ). Harsh parenting at age 2-3 was also not significantly correlated with victimization ( $r=-.06$ ); however harsh parenting at age 5 was correlated with victimization ( $r=.15$ ,  $p<.05$ ). These significant correlations demonstrate an association between harsh parenting at age 5 and subsequent bullying and victimization in preadolescence. Externalizing behavior problems at age 2-3 was marginally correlated with bullying ( $r=.11$ ,  $p<.10$ ) and victimization ( $r=.11$ ,  $p<.10$ ); however externalizing behavior problems at age 5 was not significantly correlated with bullying ( $r=.07$ ) but was significantly correlated with victimization ( $r=.25$ ,  $p<.01$ ). The dependent variables, bullying and victimization were significantly correlated

( $r=.34, p<.01$ ) indicating that some children who reported bullying their peers were also victims of bullying. The three control variables included parent age, parent gender, and child gender. Specifically, parent age was not significantly correlated with bullying ( $r=-.02$ ) or victimization ( $r=-.05$ ). Parent gender was also not significantly correlated with bullying ( $r=-.06$ ) or victimization ( $r=-.02$ ). In addition, child gender was marginally significantly correlated with bullying ( $r=-.10, p<.10$ ), meaning males reported bullying their peers more, but not with victimization ( $r=.07$ ).

### *Results of Path Analyses*

#### *Harsh Parenting, Externalizing Behavior and Bullying*

For the model that examined harsh parenting, child externalizing behavior and bullying (see Figure 2a), results showed continuity of both observed harsh parenting and child externalizing behavior from early childhood to middle childhood ( $\beta= .18, p<.05$  and  $\beta= .48, p<.01$  respectively). In addition, harsh parenting during middle childhood significantly predicted bullying during preadolescence ( $\beta= .07, p<.01$ ), while the relationship between child externalizing behavior and bullying was not significant. Contrary to expectations, there was not a significant bidirectional relationship between harsh parenting at age 2-3 and child externalizing at age 5, or between child externalizing at age 2-3 and harsh parenting at age 5. Finally, the direct path from harsh parenting and child externalizing at age 2-3 did not significantly predict bullying behavior during preadolescence.

For the model that examined harsh parenting, child externalizing behavior and victimization (see Figure 2b), results showed continuity of both observed harsh parenting and child externalizing behavior from early childhood to middle childhood ( $\beta= .18, p<.05$  and  $\beta= .48, p<.01$  respectively). In addition, child externalizing behavior during middle childhood

significantly in predicted victimization during preadolescence ( $\beta = .13, p < .01$ ), while the relationship between harsh parenting and victimization was marginally significant ( $\beta = .08, p < .10$ ). Contrary to expectations, there was not a significant bidirectional relationship between harsh parenting at age 2-3 and child externalizing at age 5, or between child externalizing at age 2-3 and harsh parenting at age 5. Finally, the direct path from harsh parenting and child externalizing at age 2-3 did not significantly predict bullying behavior during preadolescence.

### **Discussion**

This study examined the relationship between harsh parenting and externalizing behaviors at age 2-3 and age 5 predicting bullying and victimization beginning at age eight. This study also examined the unidirectional or additive effects of harsh parenting on changes in externalizing problem behavior across the two developmental time points. When taking into account harsh parenting and externalizing behaviors across a six year developmental timespan, harsh parenting during middle childhood was associated with bullying in preadolescence. While externalizing behavior problems was stable from early childhood to middle childhood it was not significantly associated with later bullying behaviors. On the other hand, when predicting to victimization, harsh parenting and externalizing behavior problems produced different results. That is, externalizing behavior problems was significantly associated with victimization in preadolescence and harsh parenting was moderately associated with victimization.

This study showed significant continuity of harsh parenting and externalizing behavior problems from early childhood (age 2-3) to middle childhood (age 5). This continuity of harsh parenting and externalizing behavior problems gives support to examine

the home environment and early childhood behaviors that predispose a child to bullying or becoming a victim of bullying. Most prevention and intervention programs are implemented in middle school and high school; however research shows that bullying behavior is present beginning in kindergarten (Payley, 1993). In addition, this study found that harsh parenting leads to both bullying and victimization and externalizing behavior problems leads to victimization begins as early as age two. Therefore, prevention and intervention programs need to be implemented in early primary school and distinguish the self-assertion and discipline problems that are common in early childhood (i.e. termed the “terrible twos”) from consistent, angry defiance which is often associated with harsh discipline (Gilliom & Shaw, 2004).

This study found that harsh parenting at the age of five or six leads to both bullying and victimization in preadolescence. Therefore, evidence is becoming more substantial that very young children who are highly aggressive and have experienced harsh parenting are at risk of progressing to involvement in aggressive behavior, such as bullying and victimization. Where several studies in bullying research have focused on the school environment to reduce bullying, the findings from this longitudinal study show that the characteristics that lead a child to either be a bully or a victim of bullying begin prior to primary school. Therefore, indicating a need for preventative programs not only target very young children but also their parents.

The association between externalizing behavior problems and victimization has been unclear with recent studies. Previous results have asserted that externalizing problems can also serve as antecedents of victimization (e.g. Hanish and Guerra, 2000; Hodges et al., 1999). These studies affirm that children who often exhibit behaviors such as aggression and

disruptiveness provoke their peers, which may invite bullying. However, recent studies have observed no such association; for example, Dhami et al. (2005) found no support for a linkage between externalizing problems and victimization. Previous studies that have not found a linkage between externalizing behavior problems and victimization covered time frames ranging from 6 months- 2 years. This study covered a time frame of six years and found a significant relationship between externalizing behavior problems beginning at age 2-3 predicting to externalizing behavior problems at age 5 which led to victimization in preadolescence. Another limitation mentioned in a meta-analysis conducted by Reijntjes et al., (2011) that examined the linkages between peer victimization and externalizing behavior problems was that although they found evidence between externalizing behaviors and victimization, there may have been other variables that lead to victimization (i.e. hostile parenting practices). This study was able to test this limitation across two developmental time points and found a marginally significant relationship between harsh parenting and victimization.

In contrast to expectations and previously published work using the same data as used in the current study (e.g. Scaramella et al., 2008), this study did not find a significant bidirectional relationship between harsh parenting at age two and externalizing behavior at age five, as well as between externalizing behavior at age 2-3 and harsh parenting at age 5. One reason for the inconsistent finding could be that Scaramella et al. (2008) used a different measure of harsh parenting and externalizing behavior than what was used in the current study. Future studies should attempt to examine more similar measures of these behaviors.

### **Limitations and Future Research**

The results of this study are limited by the sample it was derived from in that they consisted of mostly Caucasians from a rural population. However, Spriggs et al. (2007) conducted a national-representative study of 11,033 adolescents concluding only a modest racial/ethnic variation in associations between bullying and family, peer and school factors. Future research should incorporate a more diverse sample from various ethnic backgrounds with both rural and urban settings to improve the generalizations of these results.

Another limitation is this study could not take into account whether the child reported only bullying, only victimization, or both bullying and victimization (coined bully-victim). Future studies should examine these three possible outcomes separately. Evidence suggests that children who are the victims of bullying and who also bully their peers (i.e. bully-victims) may exhibit the poorest functioning in comparison with either victims or bullies as this study tested (e.g. Nansel et al., 2004). Therefore, it is important to look at the predictors in early childhood that may lead to children being a bully-victim.

In addition, the meta-analysis conducted by Reijntjes et al. (2010) found that the majority of the longitudinal studies to date have used time frames of 12 months or less, thereby focusing on children in middle childhood. This study is one of the first studies to examine bullying and victimization with at least a six year time frame between parenting and child behaviors and reporting bullying and victimization. This study however had only two assessment waves of the targeted constructs. Future research should examine three or more assessment points, with bullying and victimization included in at least two of those three or more time points, providing for greater information on the pattern of change over time.

Despite these limitations, the current study expands our understanding about the relationships between harsh parenting and externalizing behavior problems beginning in early childhood predicting to bullying and victimization in preadolescence. Overall, the results indicated that harsh parenting in early childhood was a predictor of bullying in preadolescence whereas externalizing behavior in early childhood was a predictor of victimization in preadolescence. The findings highlight both the importance of addressing the issue of bullying and victimization beginning in early childhood, which is a growing focus of such research, and the value of capitalizing on developmental assets in preventing such negative outcomes.

### **Conclusion and Implications**

In conclusion, this study adds to the literature on the family parameters of bullying and victimization by proposing that school intervention programs focus on parent-child interaction and encompasses parent involvement. These findings could be useful to educators, school psychologists, and social workers dealing with bullying and victimization. Effective bullying intervention or prevention programs should be designed to incorporate all aspects of children's lives which will prevent the efforts of change at one level (e.g. school) from being overshadowed by tendencies at another (e.g. home) (Swearer et al., 2010). These practitioners could improve the effectiveness of their intervention and prevention strategies by including parents as early as preschool as harsh parenting was the one factor in early childhood that had an influence on both bullying and victimization in preadolescence. In addition, the prevention and intervention programs need to incorporate activities and programs that include all adults and students involved. These programs need to be administered every year on the student level, the school personnel level, and parent level to

be effective prevention strategies. By including parents in these programs, they could learn ways to build a healthy parent-child relationship that encompasses warmth, empathy, kindness, and compassion which children may then emulate in their peer relations and decrease and eliminate bullying and victimization in schools.

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Table 1: Sample Descriptives (n=273)

Construct	Range	Min.	Max.	Mean	Standard Deviation
Harsh Parenting age 2-3	1-9	1.00	7.33	2.11	1.26
Harsh Parenting age 5	1-9	1.00	6.00	1.84	0.99
Child Externalizing Behavior age 2-3	0-2	.00	1.26	0.49	0.26
Child Externalizing Behavior age 5	0-2	.00	1.09	0.29	0.23
Bullying	1-3	1.00	3.00	1.15	0.33
Victimization	1-3	1.00	3.00	1.54	0.49

Table 2: Sample Correlations (n=273)

Construct	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Harsh Parenting age 2-3	-								
2. Harsh Parenting age 5	.22**	-							
3. Child Externalizing Behavior age 2-3	.05	-.04	-						
4. Child Externalizing Behavior age 5	.10	-.03	.48**	-					
5. Bullying	-.01	.22**	.11 <sup>†</sup>	.07	-				
6. Victimization	-.06	.15*	.11 <sup>†</sup>	.25**	.34**	-			
7. Parent Age	-.22**	-.10	-.10 <sup>†</sup>	-.12 <sup>†</sup>	-.02	-.05	-		
8. Parent Gender	-.02	.15*	.02	.08	-.06	-.02	-.17**	-	
9. Child Gender	-.12*	-.12 <sup>†</sup>	-.11*	-.09	-.10 <sup>†</sup>	.07	.02	.04	-

Note: <sup>†</sup> $p < .10$  \* $p < .05$  \*\* $p < .01$

Figure 1a. Conceptual Model of directional and additive associations between harsh parenting, externalizing behavior, and bullying.

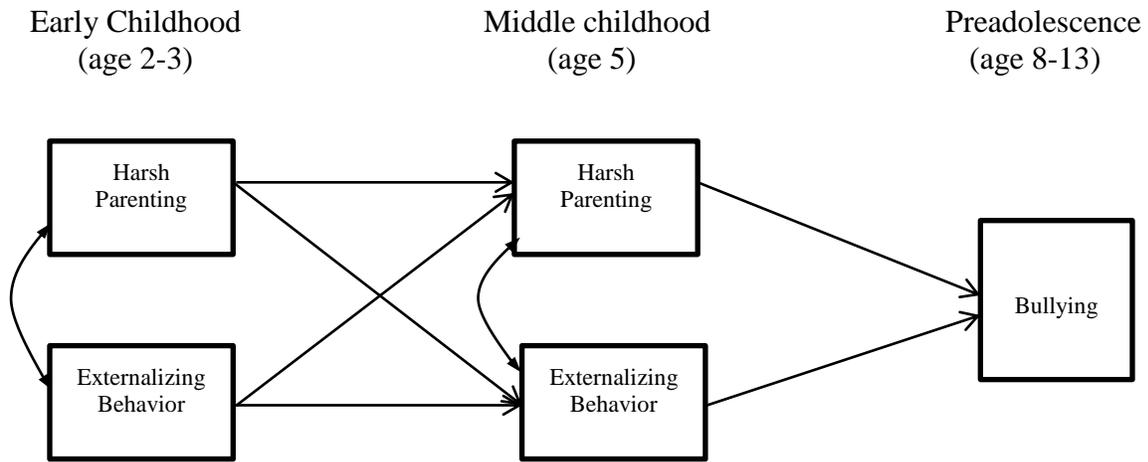


Figure 1b. Conceptual Model of directional and additive associations between harsh parenting, externalizing behavior, and victimization.

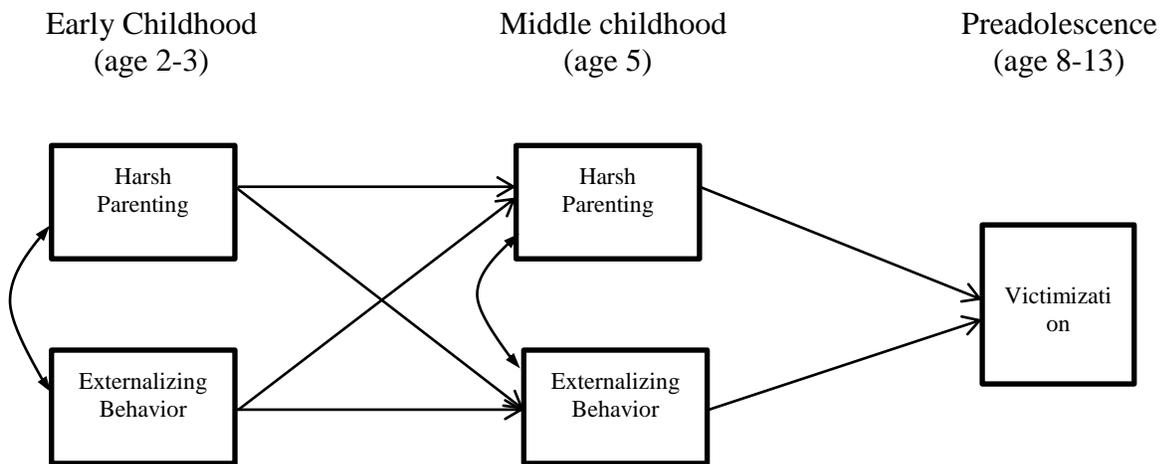
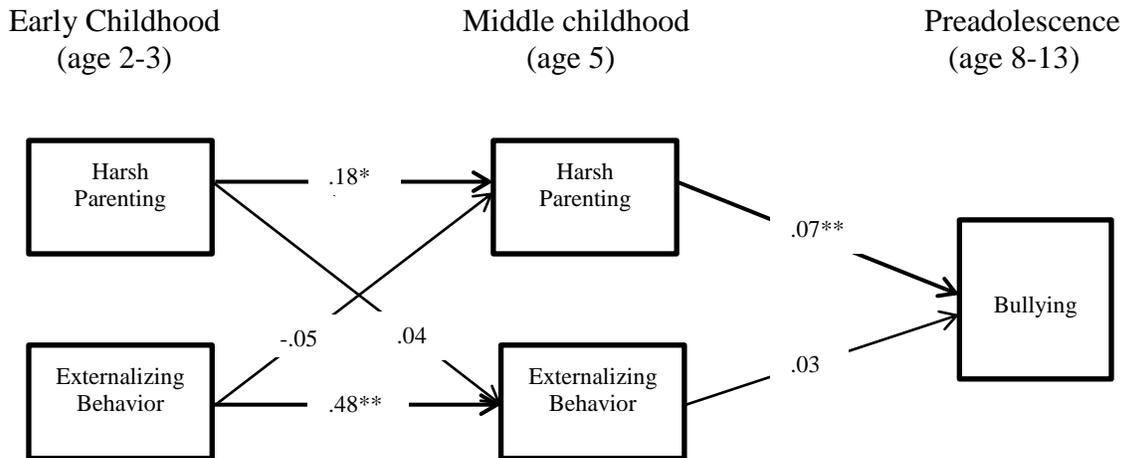
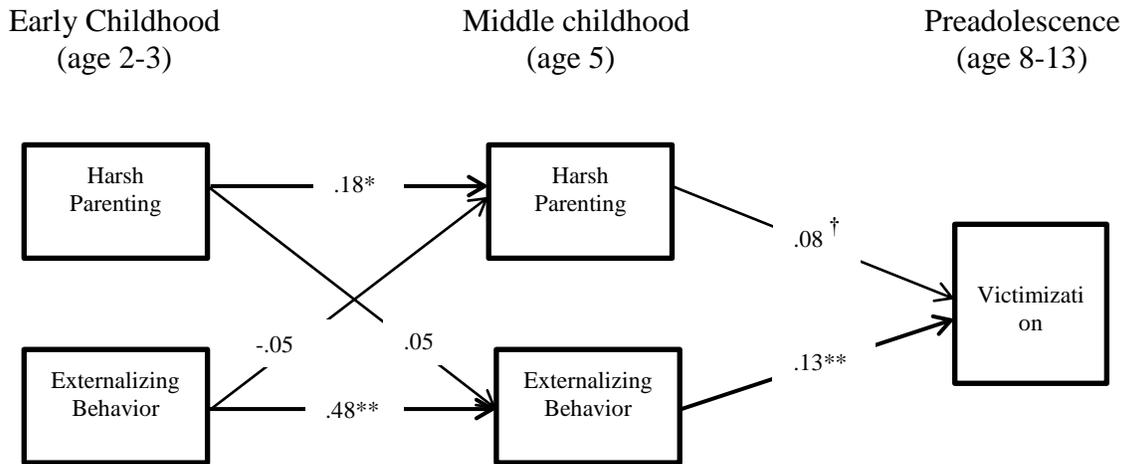


Figure 2a. Analytical model of directional and additive associations between harsh parenting, externalizing behavior, and bullying.



*Note: This Path Analysis model was completed in AMOS and controlled for parent and child gender and parent age. Standardized coefficients are reported.  $N=273$ ;  $\chi^2(2) = 2.52$ ;  $p = .28$ ; CFI = .99; RMSEA = .03;  $pclose = .50$ ; † $p < .10$  \* $p < .05$  \*\* $p < .01$*

Figure 2b. Analytical model of directional and additive associations between harsh parenting, externalizing behavior, and victimization.



Note: This Path Analysis model was completed in AMOS and controlled for parent and child gender and parent age. Standardized coefficients are reported.  $N=273$ ;  $\chi^2(2) = 4.10$ ;  $p = .13$ ; CFI = .96; RMSEA = .06; pclose = .31; <sup>†</sup> $p < .10$  \* $p < .05$  \*\* $p < .01$

## CHAPTER 4:

## CONCLUSION

This dissertation evaluated harsh parenting practices and child behaviors in early childhood that lead to bullying and victimization in preadolescence. Specifically, Chapter 2 examined harsh parenting, child's externalizing and internalizing behavior problems, and child's angry and fearful temperament beginning at age 5 predicting to bullying and victimization behavior in preadolescence (age 8-13). Chapter 3 built upon the study conducted in Chapter 2, by examining the stability of parenting and child behavior problems across two developmental time points: early childhood (age 2-3) and middle childhood (age 5) predicting to bullying and victimization behavior in preadolescence (age 8-13). This study also examined the bidirectional relationship between parenting behavior and child behavior as they predicted to bullying and victimization in preadolescence.

The first study examined predictors of bullying and victimization behavior in preadolescence. Harsh parenting in early childhood significantly predicted bullying behavior and moderately predicted victimization behavior in preadolescence. Child externalizing behavior significantly predicted victimization behavior in preadolescence, however, did not predict bullying behavior. Child internalizing behavior, and angry and fearful temperament did not predict either bullying or victimization behavior across time. Based upon the findings from this study, the next study examined harsh parenting and externalizing behavior both unidirectional and bidirectional across time predicting bullying and victimization behavior in preadolescence. Study two concluded that harsh parenting was a significant predictor in bullying behavior and while externalizing behavior was stable across time, it was not a predictor in bullying behavior. On the other hand, both harsh parenting and externalizing behavior were stable across time with

externalizing behavior significantly predicting victimization and harsh parenting moderately predicting victimization in preadolescence.

These studies support that bullying and victimization behavior problems begin as early as age two. As mentioned in study two, Patterson's (1982) coercive theory suggests that parents reinforce children's oppositional and aggressive behavior. MacKinnon-Lewis, Starnes, Volling, and Johnson (1997) further suggested that the relationship with the parent acts as a "training ground" for the child in that children who are aggressive with peers are "trained" to behave in such a manner through their interpersonal interactions at home. These studies along with many others (e.g. Neppel et al., 2009; Olweus, 1994; Scaramella et al. 2008; Vissing et al., 1991), have laid a strong foundation in that the family is where children develop the skills they will use in their future interactions. The aggressive behaviors learned from parents could help explain the behaviors exhibited in bullying and victimization.

The two studies in this dissertation add to the literature on the family parameters of bullying and victimization. As previously mentioned, a study conducted by Petrosino, et al. (2010) noted 64 percent of teen respondents who experienced bullying did not report it. These children may fail to report bullying or victimization for fear of embarrassment or rejection from their educators or parents (Powell & Ladd, 2010; Unnever & Cornell, 2004). By incorporating a parent-child communication component and an educator-parent partnership in the prevention and intervention curriculum implemented in schools, then the programs should be more aware of the bullying taking place in their school. Once the school personnel become aware of the bullying taking place in their school, they can work with the parents in reducing and even eliminating bullying in preadolescence.

These studies looked specifically at harsh parenting as a predictor of bullying and victimization. The current studies measured harsh parenting with observational data with high levels of antisocial, hostility, and angry coercive behaviors during an interactional parent-child task. Observational data provided a more naturalistic and direct assessment of the targeted parent-child relationship than in past research on bullying and victimization which included only a survey method. Parents with high levels of antisocial, hostility, and angry coercive behaviors increase their child's likelihood of being a bully or a victim as the child may emulate such negative behavior with his or her peers. Both of the studies included in this dissertation have shown parenting and externalizing behaviors in early childhood to be strong predictors of bullying and victimization in preadolescence. Therefore it is important to include parents in prevention and intervention programs that should be implemented in early primary school.

In addition to including the parents in the prevention and intervention programs implemented in schools, there also needs to be an educator-parent partnership in solving the problem of bullying. Roberts (2008) stated that the educator-parent partnership is an alliance based on the belief that both the parent and the educator possess solutions to the problems that both groups are concerned about solving. By working together, educators and parents will increase the chances of finding solutions necessary to improve student behaviors and help decrease or eliminate bullying in schools. Specifically, school teachers and counselors might find that helping the bully and his or her parents find more appropriate outlets for their power needs will decrease the child's level of aggression toward peers. Teaching parents to use alternative (non-hostile) forms of punishment will in turn teach the child to handle discomfort without externalizing behaviors. It would also be beneficial for teachers and counselors to help children who are victims of bullying to learn to respond to bullying in a more controlled and less

emotional manner. Responding to teasing and harassment in a calm, unemotional manner will remove some of the externalizing behaviors which can lead to further bullying.

In conclusion, bullying does not occur in isolation, this phenomenon results from the complex relationships between the individual, family, peer group, school, and community. The findings in this dissertation may help address reducing or eliminating bullying in schools by having parents, children, and school professionals work together as parenting and externalizing behavior problems as early as age two are strong predictors in whether a child is a bully or a victim of bullying in preadolescence.

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## APPENDIX A

**IOWA STATE UNIVERSITY**  
OF SCIENCE AND TECHNOLOGY

**Date:** 9/7/2012

**To:** Dr. Tricia Neppi  
2358 Palmer

**From:** Office for Responsible Research

**Title:** Family Transitions Project, FTP

**IRB ID:** 12-060

**Approval Date:** 9/7/2012                      **Date for Continuing Review:** 2/6/2013

**Submission Type:** Modification                      **Review Type:** Expedited

The project referenced above has received approval from the Institutional Review Board (IRB) at Iowa State University according to the dates shown above. Please refer to the IRB ID number shown above in all correspondence regarding this study.

To ensure compliance with federal regulations (45 CFR 46 & 21 CFR 56), please be sure to:

- Use only the approved study materials in your research, including the recruitment materials and informed consent documents that have the IRB approval stamp.
- Retain signed informed consent documents for 3 years after the close of the study, when documented consent is required.
- Obtain IRB approval prior to implementing any changes to the study by submitting a Modification Form for Non-Exempt Research or Amendment for Personnel Changes form, as necessary.
- Immediately inform the IRB of (1) all serious and/or unexpected adverse experiences involving risks to subjects or others; and (2) any other unanticipated problems involving risks to subjects or others.
- Stop all research activity if IRB approval lapses, unless continuation is necessary to prevent harm to research participants. Research activity can resume once IRB approval is reestablished.
- Complete a new continuing review form at least three to four weeks prior to the date for continuing review as noted above to provide sufficient time for the IRB to review and approve continuation of the study. We will send a courtesy reminder as this date approaches.

Please be aware that IRB approval means that you have met the requirements of federal regulations and ISU policies governing human subjects research. Approval from other entities may also be needed. For example, access to data from private records (e.g. student, medical, or employment records, etc.) that are protected by FERPA, HIPAA, or other confidentiality policies requires permission from the holders of those records. Similarly, for research conducted in institutions other than ISU (e.g., schools, other colleges or universities, medical facilities, companies, etc.), investigators must obtain permission from the institution(s) as required by their policies. IRB approval in no way implies or guarantees that permission from these other entities will be granted.

Upon completion of the project, please submit a Project Closure Form to the Office for Responsible Research, 1138 Pearson Hall, to officially close the project.

Please don't hesitate to contact us if you have questions or concerns at 515-294-4566 or [IRB@iastate.edu](mailto:IRB@iastate.edu).

Assigned IRB ID: 12-060

### INSTITUTIONAL REVIEW BOARD (IRB) Amendment for Personnel Changes

Title of Project: Family Transitions Project, FTP			
Principal Investigator (PI): Tricia Neppi		Degrees: Ph.D.	
University ID: 29167966245	Phone: 4-8502	Email Address: tneppi@iastate.edu	<b>RECEIVED</b>
FOR STUDENT PROJECTS (Required when the principal investigator is a student.)			<b>SEP 06 2012</b>
Name of Major Professor/Supervising Faculty:			
University ID:	Phone:	Email Address:	<b>By IRB</b>

**Changes in Key Personnel:**

Key personnel includes any individuals who will have contact with the participants or the participants' data (e.g., interviewers, transcribers, coders, etc.). This information is intended to inform the committee of the training and background related to the specific procedures that each person will perform on the project. For more information, please see Human Subjects - Persons Required to Obtain IRB Training. Personnel who will have contact with human blood, specimens, or other biohazardous materials must also complete Bloodborne Pathogens Training. If the principal investigator has or will change, a complete new IRB application is required.

List any individuals to be removed from the study staff: **Megan Grummer; Renae Schurbon; Brenda Smith; Alexandria Ulrich**

Complete the following table to list any new key personnel:

NAME	Interpersonal contact or communication with subjects, or access to private identifiable data?	Involved in the consent process?	Contact with human blood, specimens, or other biohazardous materials?	Other Roles in Research	Qualifications (i.e., special training, degrees, certifications, coursework, etc.)	Human Subjects Training Date
✓ Kelsey Hartsman <i>(Hartsman)</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Undergraduate Research Assistant	HS	01/16/2012
✓ Yuk (Erica) Pang	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Graduate Research Assistant	BS	5/15/2012
✓ Haley Wedmore	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Graduate Student	MS	9/2008 <i>10/4/08</i>
✓ Kelsey Crowder	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Graduate Student	BS	8/23/2010
✓ Jui Dhalewadikar	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Graduate Student	MS	8/24/2011
✓ Lisa Ryherd	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Graduate Student	MS	2/2/2009
✓ Sarah Bicklehaupt	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Graduate Student	MS	1/30/2010
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			

Office for Responsible Research: 08/26/11

<b>FOR IRB USE ONLY</b>	<input checked="" type="checkbox"/> All human subjects training requirements have been met.
IRB Reviewer Signature	Date
<i>Kerry A. Aguirre</i>	<i>9/7/2012</i>