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Procedural Justice in Resolving Family Disputes: Implications for Childhood Bullying

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Abstract

High levels of family conflict and poor family conflict resolution strategies are often associated with externalizing behaviors in children, including the behavior of bullying. Through family interactions, parents have the opportunity to convey a variety of messages to the child. Some of these messages are sent through the child's appraisal of procedural justice, which refers to the judgments of fairness directed at the process by which a conflict is resolved. The current study investigated the relationship between appraisals of procedural justice in family conflict resolution and bullying among middle-school students. A sample of 1,910 sixth through eighth graders completed a self-report survey on school violence. Structural equation modeling revealed a significant relationship in which higher appraisals of procedural justice during family conflict resolution were associated with lower frequencies of bullying by the child. Furthermore, this relationship was partially mediated by the internalization of the parent's conduct during the conflict resolution process. The current study extended the research literature addressing the relevance of procedural justice in child development. Implications of these findings and suggestions for future research are discussed.

Keywords: bullying, procedural justice, cycle of violence, policy

Although bullying has been an age-old phenomenon, it has only recently been recognized as a serious and pervasive problem. In the spring of 1999, the United States experienced the shootings at Columbine High School where victims of bullying opened fire on classmates before killing themselves. While such events may grab the public's attention, they only represent the prevalent and harmful consequences of frequently unreported incidents of childhood bullying.

Bullying is commonly defined as repeated acts of aggressive behavior by one or more parties who are in a position of greater power, either socially or physically, than the recipient (Nansel, Overpeck, Pilla, Ruan, Simmons-Morton, & Scheidt, 2001). Direct forms of bullying include hitting, teasing, and threatening, while indirect approaches occur through rumor-spreading, social exclusion, friendship manipulation, and cyber-bullying (Rigby, 1996). The underlying purpose of bullying is to intimidate the victim through humiliation, abuse, and fear usually for the sake of establishing dominance or maintaining status (Roberts, 2000). While occurrences of child abuse have been a longstanding social concern, peer abuse has only recently been acknowledged as problematic.

Correlates and Consequences of Bullying

Children who engage in bullying are more likely than their peers to also engage in vandalism, fighting, theft, and weapon-carrying (Nansel, Overpeck, Haynie, Ruan, & Scheidt, 2003; Olweus, 1993). Bullies are more likely than other children and adolescents to engage in frequent heavy drinking and drug use (Kaltiala-Heino, Rimpela, & Rimpela, 2000). They may exhibit poorer academic achievement and demonstrate a dislike of the school environment (Nansel et al., 2001). Bullying may also be an indicator of later criminal behavior. In a longitudinal study with male participants, Olweus (1993) found that 60% of bullies in middle school had at least one criminal conviction by age 24 and 40% had three or more convictions. Later in life, bullies perform below their potential in employment settings (NSSC, 1995) and are more likely to display aggression toward their spouses and children (Roberts, 2000). Addressing the causal factors of bullying may therefore have relevance not only for childhood victims but also for other societal concerns.

Prevalence

Studies show that children report similar rates of bullying regardless of whether they live in an urban, suburban, or rural environment (Hazler, 1996; Nansel et al., 2001). Research conducted in various countries (i.e., Australia, Canada, Finland, Great Britain, Japan, Spain, Sweden, the Netherlands, and the United States) also shows similar prevalence rates (Olweus, 1997). A study of Norwegian and Swedish children aged 8 to 15 revealed that 7% of the children had bullied their peers. A study by Baldry and Farrington (1999) of Italian middle-school students found that 18% of students reported bullying others "sometimes" during the prior 3 months and 8% reported bullying once a week or more frequently. In a national study of U.S. youth, 11% of students in grades 6 through 10 reported bullying others "sometimes" during the current school term while 9% reported bullying another student once a week or more often (Nansel et al., 2001).

The prevalence of bullying can change with age and level of development. Bullying typically increases during childhood and decreases during late-adolescence. Most studies report a peak in bullying during early to mid-adolescence (Eisenberg & Aalsma, 2005; Nansel et al., 2001; Olweus, 1991). Olweus (1991) noted that the highest rates of self-reported bullying were among 14- and 15-year-olds. Similarly, a study of youth in grades 6 through 10 found the highest rates of self-reported bullying among eighth graders (Nansel et al., 2001). Although the overall trend appears fairly consistent, disparities may exist when considering different types of bullying. Rivers and Smith (1994) found that although physical bullying decreased with age, verbal bullying increased.

The Intergenerational Continuum

One theory for the appearance of violently aggressive behavior in children is that it has been passed down from the violently aggressive behavior of the children's parents. Explanations for this transmission follow.

Cycle of Violence

Bullying and other forms of aggressive behavior often appear to have some basis in the conduct of the child's parents. The term cycle of violence is used to convey the intergenerational perpetuation of aggressive behavior (Carney & Merrell, 2001). A bully-victim-bullying cycle is often apparent, originating either at home or at school (Widom, 1992), and parents who were bullies during childhood tend to have children who are themselves bullies (NSSC, 1995).

Reviews of the characteristics of bullies and of the bully's family reveal similarities between the conduct and outlooks of the two groups. Characteristics of the parents include a lack of warmth and involvement and the application of inconsistent but corporal discipline (Duncan, 2004; Olweus, 1993). Children who bully report high negative affect within their families, poor relationships with their parents, and little emotional support (Rigby, 1993). Children who bully are also more likely than other children to be exposed to violence within the home. Bullies are nearly twice as likely to have been exposed to domestic violence (Baldry, 2003) and to have been maltreated by a parent (Shields & Cicchetti, 2001). High levels of family conflict and poor conflict resolution strategies have been associated with various types of externalizing behaviors including bullying (Daniels & Moos, 1990; Duncan, 2004; Jaycox & Repetti, 1993). Pellegrini (1998) found that parents of bullies typically have poor management skills and tend to use power-assertive techniques to manage the child's behavior. Their method of punishment is often physical or in the form of an angry, emotional outburst.

On the child's side, children who bully their peers tend to be impulsive and aggressive, to have difficulty conforming to rules, and to enjoy dominating other children (Olweus, 1993). They tend to lack a sense of empathy for their victims, and many are not aware of how aggressive they are (Beale, 2001; NSSC, 1995). Bullies will select victims of any age, size, or status as long as they perceive that the repercussions or consequences of their actions will be minimal (Carney & Merrell, 2001). Finally, bullies lack problem-solving skills,

have difficulty processing social information, and may misinterpret other people's behaviors as antagonistic (Andreou, 2001; McNamara & McNamara, 1997).

Cycle of Dominance

Although the cycle of violence model is informative in capturing a potential source of aggressive behavior, the terminology is often used in a broad manner and may include the effect of experiencing or witnessing violence or harsh treatment on a variety of behaviors from homicide to self-destruction. As such, the model has certain limitations in explanatory power. Also, by emphasizing the violent end of a behavioral spectrum, the model, at least in nomenclature, may exclude more subtle forms of the behavior it is intended to address. This criticism of too much yet too little may be partially resolved by bringing the nature of the behavior to the forefront. For the purposes of this article, we propose the term "cycle of dominance" for understanding the intergenerational perpetuation of bullying. While reflecting the transmission of behavior from parent to child, the proposed model also readily allows for the inclusion of verbal and relational forms of bullying. At the same time, the model highlights the underlying dynamic that exists in the behavior both of the bully and of the bully's parents: the (nonbenevolent) dominance of one person over another.

Family Conflict and Procedural Justice

Family conflict is the medium in the parent-child relationship where dominance is most apparent. From arguments over bedtime during childhood to discussions addressing adolescent autonomy, family conflicts begin early in the life of a child and occur regularly throughout the course of development. Reflecting a fundamental component of social interaction, conflict resolution as experienced in the family context can send important messages to the child and have an impact on the child's development of interpersonal behaviors and attitudes. The potential relationship between family conflict resolution and childhood development is particularly relevant to childhood bullying as families of child bullies are often found to have high levels of family conflict and to employ poor conflict resolution strategies (Daniels & Moos, 1990; Duncan, 2004; Jaycox & Repetti, 1993).

Conflict resolution can be divided into two components: the procedures used in coming to a decision or outcome and the outcome itself. Judgments of fairness directed at these two components are referred to as procedural and distributive justice respectively. Early investigations into the importance of these constructs revealed that people are concerned as much or more with the procedures used in resolving a dispute as they are about the actual outcome or final decision that is reached (Thibaut & Walker, 1975; Tyler, 1989).

Although this article will address procedural justice as a unidimensional construct, there have been a variety of theoretical conceptualizations and empirical verification of distinct factors that contribute to a person's judgment of procedural justice. The seminal work of Thibaut and Walker (1975) revealed that a person's control over the presentation of information or evidence in the decision-making process is one of the aspects necessary for a sense of fairness. Leventhal (1980) advanced the theory to include a more comprehensive set of factors and suggested that, in perceiving fairness, people consider the dimensions of representation, consistency, impartiality, accuracy, correctibility, and ethicality.

Of particular relevance to family conflict, Tyler (1989, 1994) has proposed a relationship-oriented conceptualization that focuses on the relationships between decision makers and participants involved in the decision-making process. Tyler (1994) has suggested that people evaluate procedural justice along the relational dimensions of neutrality, standing, and trust. The component of neutrality refers to the impartial, evenhanded treatment toward all participants. Standing involves the authority figure treating a person as a valued member of a relevant group, such as part of the family in a family dispute. Finally, trust refers to whether the participant has faith in the good intentions of the authority figure and others involved in the resolution procedures.

A factor analysis of Leventhal's (1980) and Tyler's (1994) conceptualizations of procedural justice by Jackson and Fondacaro (1999) revealed three underlying dimensions: personal respect, standing, and instrumental participation. The personal respect factor consisted of items related to being treated with dignity and being respected as a unique individual. The second factor, standing, reflected the participant's evaluation of being treated as a valued member of a relevant referent group (e.g., the family) by the authority figure (e.g., the parent). The final factor, instrumental participation, involved items that measured one's control over the presentation of information to the authority figure. All of these factors have parallels in the process of childhood bullying, which suggests the development of bullying behavior may partially originate through the child's experiences with procedural justice during conflict resolution at the home.

Effects of Procedural Justice on Deviant Behavior

The manner by which conflicts are resolved in the family environment can affect a child's development particularly in the area of problematic behavior. A parenting style described as authoritative parenting sets limits on the child's behavior according to moral and conventional guidelines but allows the child some degree of input and autonomy on personal matters (Baumrind, 1971). A study by Baumrind (1991) found that authoritative parenting was associated with lower levels of deviant behavior. Likewise, adolescents who reported being treated with more dignity and respect and in a more neutral and trustworthy manner contemporaneously reported lower levels of deviant behavior (Fondacaro, Dunkle, & Pathak, 1998). Finally, identifying with and internalizing the values and beliefs of their parents has been linked to children's perceptions of fairness in parental disciplinary practices (Kochanska & Aksan, 1995; Tyler & DeGoey, 1995).

In contrast, a coercive parenting style may be characterized by the use of power, intimidation, or threat to compel the child to behave in accordance with parental directives. This coercive parenting style has been associated with higher levels of deviant behavior (Gorman-Smith, Tolan, Zelli, & Huesmann, 1996) and may lead to anger arousal and the potential for violence (Tedeschi & Felson, 1994). In fact, family conflict is related to affiliating with deviant peers and this relation is mediated by peer conflict (Stuart, Fondacaro, Miller, Brown, & Brank, 2008). This means that juveniles with high conflict at home are more likely to be involved with deviant peers, and part of the reason for this is that they are more likely to have higher conflict relationships with their peers. The conflict the juveniles are experiencing at home is being modeled in their relationships with their peers, and

those negative relationships are more likely to involve deviant peers. The current investigation takes this notion a step further by examining family conflict and bullying behavior of juveniles.

Toward an Understanding of Bullying Behavior

The development of bullying behavior can result from poor family conflict resolution strategies through several processes. Studies investigating the effect of procedural justice on socialization have found a link between assessments of fairness and the identification and internalization of family values that are related to prosocial behavior and moral standards. Tyler and Degoe (1995) reported that trust or trustworthiness in the parent-child relationship may facilitate identification and internalization of family values. Kochanska and Aksan (1995) have shown that very young children who perceive their parents' discipline practices as fair are more likely to internalize their parents' beliefs. Furthermore, Grusec and Goodnow (1994) have shown that adolescents are more likely to internalize the proposed message of a parent when they believe the parent has taken their needs, abilities, and viewpoints into consideration. Children who perceive the parental methods of conflict resolution as unjust are therefore less likely to become socialized.

Bully-victim interactions are often accompanied by the bully possessing a lack of empathy for the victim as well as underestimating the level of aggression being directed toward the victim (Beale, 2001; NSSC, 1995). Widom (1994) found that severe physical discipline during childhood, as well as severe stress, can lead the child to become "desensitized" to future painful or anxiety-provoking experiences. Therefore, after a course of development where the fairness in family conflict resolution is assessed by the child to be extremely low, the child may experience a lack of empathic anxiety that contributes to the child's disrespect for or devaluing of other children.

Procedural justice appraisals of family conflict resolution may also lead to bullying through the learning and adaptation of maladaptive social practices. In the family context, the child has the opportunity to observe the power differential that is inherent in the parent-child relationship. This observation is accompanied by perceptions of the parental attitudes and behaviors that are directed toward the child during the course of family conflict resolution. Through the course of development, the attitudes and behaviors put forward by the parent may be internalized by the child and become part of the child's working model of social conduct. Drawing from an ecological model of development (Bronfenbrenner, 1973), it is then predicted that the child will adapt the internalized values and practices and apply them to his or her peers. The probability of this process is strengthened by the similarities between the underlying factors of procedural justice—respect, standing, and instrumental participation (Jackson & Fondacaro, 1999)—and some common goals of childhood bullying which are to disrespect, exclude, or silence another child.

In the present study, this final process linking procedural justice appraisals during family conflict resolution to the manifestation of bullying behavior was tested. Using a mediation model, an internalization variable representing the child's values and practices related to procedural justice dimensions was hypothesized to partially mediate the causal path linking procedural justice appraisals to bullying behavior.

Hypotheses

The purpose of the present study was to develop the research on family environment and its relationship to problematic behavior in children. Specifically, interest was given to appraisals of procedural justice in family conflict resolution and whether and how these appraisals may lead to childhood bullying. The specific aims and hypotheses of the study were as follows:

- 1) To determine whether procedural justice appraisals in family conflict resolution are related to the development of bullying behavior. It was predicted that lower appraisals of procedural justice would be related to higher levels of bullying.
- 2) To determine whether a child's internalization of parental values and practices partially mediated the relationship between procedural justice appraisals and bullying. In the proposed model, it was predicted that low appraisals of procedural justice in family conflict resolution would be related to the internalization of socially unfair attitudes and behaviors that would then be associated with higher levels of bullying.

Method

Participants

Participants of the study were part of a larger survey-based investigation on social factors and psychosocial characteristics that underlie the nature and causes of aggressive behavior and attitudes (Miller et al., 2003). Middle school students were recruited from 27 schools located in five states (Florida, Texas, California, Connecticut, and New Jersey) and a randomized selection of classes from nine participating school districts within those states. Verbal assent was obtained from all participants, along with written parental consent, before administering the survey. For each completed parental consent form returned, schools received \$2. See Brank et al. (2007) for a more detailed description of data collection.

The original sample consisted of 3,230 students. Students who did not report an age or who were not of the typical middle-school age range (i.e., 11 to 14 years) were removed ($n = 141$). Participants who did not complete all of the items in the selected subscales used in the present study were also removed. The resulting sample consisted of 1,910 students, which is comparable to the sample sizes used in previous studies analyzing the original dataset (Brank et al., 2007; Stuart et al., 2008).

Comparison analyses between the students who remained in the dataset and those who were removed were conducted for those who provided demographic information. The two groups differed by gender, $\chi^2(1, N = 2,866) = 4.96, p < .05$, with a higher proportion of male students being removed. Female students made up 62% of the participants who were retained for the study and 57% of the participants who were removed from the dataset, while male students accounted for 38% of the retained group and 43% of the removed group. Differences also occurred for race, $\chi^2(6, N = 3,061) = 40.38, p < .01$. White students made up 35% of the retained group and 26% of the removed group while African American participants represented 17% of the retained group but 23% of the students removed. Hispanic

students were also represented to a larger degree among the students who were removed, making up 34% of this group while accounting for 31% of the retained group. Age was also a factor that differentiated the compositions of the retained and removed groups of participants, $\chi^2(3, N = 3,089) = 19.82, p < .01$, with younger students being removed to a proportionately higher degree. Together, students aged 11 and 12 years old made up 44% of the students who were retained but 52% of those removed while students aged 13 and 14 years old accounted for 56% of the retained group and only 48% of the removed group. Even with these differences, we felt it was important to remove participants who were not of the appropriate middle school age or who had missing data on subscales of interest. Not only were we concerned about the integrity of the answers received if too many were missing because it might indicate the student was not taking the survey seriously, but we were also concerned about the integrity of the statistical findings if we replaced missing values in artificial ways.

The final sample was distributed approximately evenly across the three middle school grades with 35% enrolled in sixth grade, 34% in seventh grade, and 31% in eighth grade. Ethnicity varied with White students making up 35% of the sample, Hispanic Americans 31%, African Americans 17%, Asian Americans 4%, Native Americans 2%, multiracial students 5%, and 6% coming from other ethnicities. More girls (62%) were represented in the sample than boys (38%). The average age of participants was 12.65 ($SD = .94$).

Measures

Family procedural justice

Procedural justice is the appraisal of fairness in the resolution of conflict and was measured using the Family Decision Making Questionnaire. In the first section of the questionnaire, the student is asked to think about and to write a few words that describe a recent conflict or disagreement he or she has had with one or both parents or guardians. The second section contains 16 items that assess the fairness with which the student believes he or she was treated during the resolution of the conflict. Examples of the items include, "Your parent(s) treated you with respect," and "Your parent(s) were equally fair to everyone involved." Responses can range from 1 (*strongly disagree*) to 5 (*strongly agree*). Based on the factor analysis performed by Stuart (2006), 13 items were included in the subscale with higher scores indicating greater procedural fairness (Cronbach's $\alpha = .96$ for the present sample).

Internalization of parental values and practices

During the course of development, a child may internalize the parental attitudes and behaviors that are perceived during the course of family conflict resolution and incorporate them into a working model of social conduct. Items from the Communication and Openness to Differences subscales were selected to assess this variable. The subscales were part of a larger measure of the student's perception of the school environment and the items were selected to assess the child's extension of procedural justice related values and practices to other students. Items were selected for the present measure if they addressed the core procedural justice factors of communication, respect, and acceptance and if they

assessed either the student's competence in a particular behavior or acceptance of a particular value. Ten items were selected and combined to form an amalgamated measure of internalization. Sample items include, "I am open to hearing opinions from other students, even when I disagree with them," and "When I am angry with other students, I am able to talk it out with them." Items are rated from 1 (*strongly disagree*) to 5 (*strongly agree*) (see Appendix for a list of all the items and their factor loadings). The measure of internalization of parental values and practices produced a Cronbach's alpha of .84 for the present sample.

Bullying

Bullying behavior was measured using four items from the Modified Aggression Scale (Orpinas, 1998; Bosworth & Espelage, 1998). This scale assesses the frequencies of relatively mild forms of aggression being directed toward a fellow student by the participant. Sample items include, "I called other students names," and "I threatened to hit or hurt another student." Items are rated from 1 (*no opportunity*) to 5 (*5 or more times*) and inquire about the previous 30 days. Cronbach's alpha for this sample was .86.

Procedure

Participants completed the surveys at their respective schools during regularly scheduled school time. School personnel and research assistants administered the surveys to groups of varying size and allowed students 45 minutes to 1 hour to complete the assessment. The measures used in the current investigation were interspersed in a collection of 228 questions forming 14 scales. The overall survey instrument was designed to explore the nature and the causes of antisocial behaviors associated with middle school students.

Results

Structural Equation Modeling

The general composition of a full structural equation model consists of two components and the analysis follows with a two-step procedure (Anderson & Gerbing, 1988). The underlying structure is a hypothesized model of causal relations among latent variables, or factors, and is analyzed using path analysis. Observed variables, or indicators, load on their respective factors to form a measurement model that is analyzed using confirmatory factor analysis. Before analyzing the underlying structural model, the validity of the measurement model must first be established. The models were tested using AMOS 6.0 (Arbuckle, 2005).

Preliminary Analyses

The model parameters were estimated using the maximum likelihood method. This method of estimation assumes the distribution of the observed variables is multivariate normal. While all aspects of multivariate normality can be difficult to assess, many instances of multivariate nonnormality are detectable through inspection of univariate distributions (Kline, 2005). Descriptive statistics for each measure along with zero-order correlations between variables are provided in Table 1. The absolute values of the skew and kurtosis

indexes were less than 3.0 and 10.0, respectively, indicating all the univariate distributions were normal.

Table 1. Descriptive Statistics and Zero-Order Correlations

Measure	Mean (SD)	Skewness	Kurtosis	1	2	3
1. Procedural justice in family conflict resolution	48.0 (15.7)	-.677	-.536	—	.316*	-.294*
2. Internalization of parental values and practices	36.2 (8.2)	-.572	.145		—	-.295*
3. Bullying	7.7 (3.6)	.894	-.248			—

Note: *Correlations are significant at $p < .01$.

Parcels

Allowing an individual item to act as an indicator can allow idiosyncratic properties (e.g., distributions) to influence the latent variables. Using composites of items, called parcels, can reduce the likelihood of idiosyncratic effects. Procedures outlined by Russel, Kahn, Spoth, and Altmaier (1998) were used to create item parcels. The first step was to conduct an exploratory factor analysis for each scale and then order their items according to the loadings on the scale's factor. The items of each scale were grouped into parcels based on their ranks so that the average loading of each parcel was roughly equal.

Model Testing

The measurement model was tested using confirmatory factor analysis. Validity of the measurement model was established by the significant loading of all indicators on their respective latent variables ($p < .01$) and by acceptable fit indices ($\chi^2_{(17)} = 40.04$; CFI = .998; RMSEA = .027) showing the data fit the proposed model.

The full structural equation model was then analyzed to test the underlying causal model. The current investigation addressed whether procedural justice appraisals in family conflict would affect bullying behavior and whether this relation would be partially mediated by the child's internalization of parental values and practices during family conflict resolution. Therefore, the hypothesized causal model contained a direct path from procedural justice appraisals to bullying, as well as a direct path from procedural justice appraisals to internalization by the child and from internalization to bullying (see Figure 1).

The hypothesized model resulted in an adequate fit to the data ($\chi^2_{(17)} = 40.04$; CFI = .998; RMSEA = .027). The standardized direct effect of procedural justice appraisals on bullying was $-.23$, with lower ratings of fairness regarding family conflict resolution relating to higher levels of self-reported bullying. All the parameter estimates in the structural model were significant and in the predicted direction.

The standardized indirect effect of procedural justice on bullying, acting through the internalization variable, was $.34(-.26) = -.088$. Following a methodology suggested by Shrout and Bolger (2002), a bootstrap analysis was conducted to test the significance of the indirect effect. From 200 bootstrap samples, a 95% confidence interval for the indirect effect was produced. The confidence interval did not include zero, leading us to conclude that the indirect effect was significant at $p < .05$.

Figure 1. Structural equation model and standardized regression weights for the relationship between procedural justice appraisals and bullying. The relationship was partially mediated by the internalization of parental attitudes and behaviors related to conflict resolution, $\chi^2_{(17)} = 40.04$; CFI = .998; RMSEA = .027.

Discussion

The present study was the first attempt to link procedural justice appraisals in family conflict to childhood bullying. High levels of family conflict and poor conflict resolution strategies have been associated with various types of externalizing behaviors including bullying (Daniels & Moos, 1990; Duncan, 2004; Jaycox & Repetti, 1993). Procedural justice is one aspect of family conflict resolution and refers to the child's perception of fairness toward the resolution process. An association between externalizing behaviors and procedural justice was observed by Fondacaro, Dunkle, and Pathak (1998); adolescents who reported less favorable appraisals of procedural justice during family conflict also reported higher levels of deviant behavior. Additionally, lower appraisals of family procedural justice were related to increased levels of deviant peer group involvement and this relation was mediated by peer conflict (Stuart et al., 2008). To extend research addressing the relevance of procedural justice in child development, an investigation of the relationship between procedural justice appraisals and bullying was conducted.

The link between family conflict resolution and childhood bullying can be captured by the "cycle of dominance" model, which includes an array of behaviors and highlights the underlying motive of dominance. Parents of bullies tend to use corporal discipline (Duncan, 2004) and other power-assertive techniques to manage the child's behavior (Pellegrini, 1998). These maladaptive parenting styles are supported by the natural power imbalance that exists between parent and child. Likewise, childhood bullies act aggressively, either socially or physically, toward children in positions of lesser power (Nansel et al., 2001) with the underlying purpose of establishing dominance or maintaining status (Roberts, 2000).

After repeated experiences of conflict in the family environment, the child would recognize the power differentials in the parent-child dyad and internalize the behaviors and

attitudes of the parent into a working model of social conduct. This model would include what the child would perceive to be normal, and perhaps appropriate, behavior of the more powerful party. Following an ecological model of development (Bronfenbrenner, 1973), it was hypothesized that children would carry the learned strategies and values from the family context into their behaviors with their peers.

The present study used structural equation modeling to analyze a partial mediation model in which procedural justice appraisals were related to bullying behavior both directly and through the internalization of parental values and practices. Both the direct effect of procedural justice appraisals on bullying and the indirect effect through the internalization of procedural justice related attitudes and practices were significant. These results demonstrate the importance of procedural justice during family conflict resolution by showing how unfavorable assessments of procedural justice are associated with higher occurrences of bullying behavior. The study also showed that this relationship is partially explained by the child internalizing the parent's attitudes and behavior directed toward the child during the course of conflict resolution. The study found that higher assessments of procedural justice in family conflict resolution were associated with the internalization of prosocial attitudes and behaviors regarding conduct toward other people. Subsequently, the internalization of prosocial conduct was found to be associated with lower levels of bullying.

Policy Implications and Directions for Future Research

The last two decades have seen an international increase in both research and policy that are focused on childhood bullying (Smith, Ananiadou, & Cowie, 2003). In the United States, schools are governed by an interrelated system of federal and state law with the majority of disciplinary policies being developed at the state and local levels. The primary legislative medium for initiating antibullying policy is therefore at the state level (Limber & Small, 2003).

The term "bullying" began to enter state legislation in 1998 (Furlong, Morrison, & Greif, 2003). By 2003, 15 states had passed laws addressing bullying among school children (Limber & Small, 2003) and in 2007, 35 states had enacted anti-bullying legislation (Srabstein, Berkman, & Pyntikova, 2008). While these numbers reflect a growing legislative awareness of bullying, the effect and adequacy of these laws are still insufficient. In a 2007 review of state legislation, Srabstein et al. (2008) recommended that state anti-bullying statutes include a clear definition of bullying, state that bullying should be prohibited, make reference to the implementation of prevention and treatment programs, and assert the association between bullying and public health risks. The authors report that only 16 states, covering approximately 32% of public school students, have passed laws that address these four basic elements.

Furlong et al. (2003) suggest that a clear definition of bullying in state legislation is necessary for establishing a common understanding at the local level and for avoiding confusion when implementing anti-bullying programs. The authors recommend a research-based definition of bullying be included in state legislation and cite Olweus's (1993) three primary components of bullying: intentionality, a power imbalance, and repetition. While 15 states had enacted bullying legislation in 2003, only three included the imbalance of

power in the definition and none of the statutes included all three components of the definition. Furthermore, 13 additional state representatives in the same year reported having legislation that addressed bullying but that did not contain the term “bullying” (Furlong et al., 2003).

Legislators frequently include bullying under another heading such as harassment or assault (Furlong et al., 2003). Of the 35 states that had anti-bullying legislation in 2007, 25 had defined bullying, harassment, and/or intimidation together or synonymously (Srabstein et al., 2008). This pattern also occurs at the local level. A survey of Illinois high school administrators found that while most administrators reported a school policy that addressed and defined bullying, half of the administrators reported the bullying policy was included within a larger harassment policy (Macleod, 2008). Statutory definitions of this type capture the aggressive and intentional nature of bullying but lack the critical power imbalance component. Anti-harassment policies are also typically limited to harassment based on race, color, national origin, sex, and disability, which are required of school districts by federal law in order to receive federal funding (Limber & Small, 2003). As bullying is not necessarily connected to these characteristics of the victim, its definition should not be limited by these boundaries.

A clear definition of bullying that is consistent with research is necessary in state statutes in order to communicate the exact nature of bullying and intended policy implications to local school districts. The causes of bullying behavior, the purpose of bullying of dominating a less powerful student, and the psychological outcomes for the victim need to be adequately understood for effective interventions to be implemented. This process can only begin by an accurate and standard definition of what constitutes bullying behavior. The U.S. Department of Education (1998) has produced a pamphlet that includes a comprehensive definition of bullying, along with a discussion of the seriousness of the behavior, the effectiveness of a comprehensive approach, and strategies for administrators, teachers, students, and parents. State laws, however, continue to show diverse and partial definitions of the behavior. There is room for both the federal government to influence a nationally consistent and research-based definition of bullying and for states to elevate the effectiveness of their laws that are intended to protect children and provide a safe and healthy learning environment.

As of 2007, 24 states have legislation either encouraging or requiring local school boards to develop bullying prevention programs (Srabstein et al., 2008). Programs that take a social-ecological perspective and involve the children, parents, and schools will tend to be the most effective (Furlong et al., 2003). One method for addressing bullying at schools is the use of plays and videos to generate classroom discussion. The media presentations should depict different types of bullying and possible responses and should be age appropriate. Role-play activities have been developed for high school students (Smith et al., 2003) and a puppet show has been used for younger children (Limper, 2000). Beale (2001) describes the development and performance of a play on bullying by a school drama department and suggests that locally produced plays can deal with specific issues that are relevant to a particular school body. The development of a play, and subsequent discussion, can help school personnel become more aware of the extent of bullying at their school. Students are sometimes surprised that their behavior is classified as bullying or are unaware that other

students are also bullied and go through the same experiences (Beale, 2001). Teachers can be given materials to facilitate class discussion that include the definition of bullying, types of bullies and bullying, effects of being a bully or a victim, and the role of the observer. Including in these materials the dimensions of procedural justice that are used as pathways for social-relational dominance can help bullies understand the effects of their behavior and assist victims in understanding their experiences.

Some schools use school tribunals or mediation conferencing when addressing bullying (Smith et al., 2003). Both methods involve conflict resolution procedures that incorporate procedural justice constructs. Although these methods are designed to address a particular incident of bullying, they can also allow the bully to observe and experience fair procedural justice attitudes and procedures.

Providing training to school professionals is necessary for effectively addressing school bullying. Training should not only involve teachers, but also administrators, support staff, and volunteers (Limber & Small, 2003). Training materials can be provided through workshops, other staff development activities, and the school district's website. Training materials should educate staff about the nature and prevalence of bullying and include a discussion of dominance and of how dominance-oriented values and attitudes can be transferred across ecological levels.

Parents should be included and can become involved in intervention efforts through a variety of ways. Sending newsletters and performing student plays on bullying at PTA meetings or a parents' evening can raise parental awareness and understanding of contemporary childhood bullying (Beale, 2001). Teachers, administrators, and counselors who approach parents of bullies can address family conflict resolution procedures. School staff should do so by focusing on parental strengths as opposed to approaching parents with a deficit or blaming orientation. Parents can be encouraged or trained in conflict resolution using a conceptualization that incorporates procedural justice theory. Suggested strategies for family conflict resolution should affirm the notions of respect, inclusion, and participation of the child.

Schools with more comprehensive policies show lower rates of bullying (Smith, Smith, Osborn, & Samara, 2008). One source of this pattern is that these policies cover the multiple types of bullying and variety of places that bullying occurs. Many policies exist on a school-wide level but should take into account the ecological contexts that generate bullying and incorporate the influential sectors of a child's life outside the school. Another important effect of systemic policies is that they are an indicator to victims that the harmful and marginalized state of peer victimization is not an accepted or tolerated aspect of the school culture. The establishment of anti-bullying norms can send victims the message that they belong, are respected, and have a voice and can encourage them to pursue the avenues of support that are available through the school's program. A systemic school policy can also provide the silent majority of the school body with effective and culturally accepted attitudes and behaviors to respond and reduce bullying.

There is a need to continue community-based empirical research that is grounded in ecological theory and comprehensive models of human development. The present study takes a step toward illuminating the connection between macrosocial principles rooted in the legal norms of voice or participation, respect for the individual, and standing or status

recognition and the criteria used to evaluate conflict resolution in the microsocial context of family decision making. Furthermore, the results show that attitudes and values displayed by parents during family conflict resolution may be internalized by the child and carried over into other ecological domains.

Continuing efforts to develop effective intervention programs designed to address bullying are necessary as well as consultation with school and state legislatures. A complete definition of bullying in state statutes, along with clear policy guidelines, are necessary for the effective dissemination of anti-bullying conceptualizations into school policy. A visible, active, and comprehensive school response can then address the behavior of the bully, strengthen victims, influence the school body, and involve parents.

Limitations

Some limitations of the present study exist. The sample used in the analyses was significantly different with respect to gender, race, and age from the group of students who were removed due to incomplete data. The excluded group likely contained students who would have provided scores at the low end of procedural justice assessments in family conflict resolution as well as at the high end of bullying. If this were the case, the ranges in the scores for these variables would be restricted leading to reductions in the estimated effects in the structural equation model. Therefore, although the sample used in this study was significantly different in gender, race, and age from the removed group, it is unlikely this would have led to the significant results found in the study.

As a statistical analysis, structural equation modeling cannot prove causality. It is possible that bidirectional influences exist between the variables in the model (Kuczynski, Marshall, & Schell, 1997). Bullying tendencies in the child may lead to greater difficulties in resolving conflicts at home. Also, a child may develop negative views of procedural justice or maladaptive views toward interpersonal conduct through other processes such as innate dispositions that would then produce greater difficulty for the parent in resolving conflict or lead to poorer appraisals of procedural justice by the child despite the parent's best attempts at fair conflict resolution. It is also possible that if other variables, such as the amount of family conflict, were added to the model, the significant effects of procedural justice appraisals would be reduced. However, as the study acted as a confirmatory analysis of a theory-based model, it is appropriate the results are included in the larger body of research findings related to family functioning and child development.

A final limitation of the study is that the analyses were conducted using data from a large survey of school violence. In the interest of ensuring that the surveys would be completed, some of the subscales were chosen for their brevity even though they were used to measure constructs that are quite complex. One notable case was the bullying subscale which consisted of only four items. Although the scope of such a scale is uncertain, it did address different forms of bullying and produced adequate internal reliability.

Conclusion

Children's appraisals of procedural justice during family conflict resolution were shown to be associated with childhood bullying. This relationship can be partly explained by the

child's internalization of parental values and practices observed during the conflict resolution process. When children perceive that the way they are treated in the resolution of family conflict is unfair, they are more likely to internalize unfair attitudes regarding social conduct and then direct similar attitudes toward other children. This in turn leads to higher levels of bullying behavior. The present study contributes to our understanding of the relationship between procedural justice appraisals in family conflict resolution and childhood delinquency and emphasizes the importance of future study in the area of family conflict resolution.

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Appendix. Questions Forming the Internalization of Parental Values and Practices Scale and Their Factor Loadings

Question	Factor loading
I listen to other students when they have problems.	.562
It is important to let other students know how you feel.	.507
It is important to know how other students feel.	.517
I feel comfortable talking with other students.	.714
When other students are angry at me, I am able to communicate my opinions and feelings.	.642
When I am angry with other students, I am able to talk it out with them.	.681
I respect students from other racial groups.	.520
I respect the opinions of students who differ from me.	.644
All students have a right to their own opinions.	.520
I am open to hearing opinions from other students, even when I disagree with them.	.638