

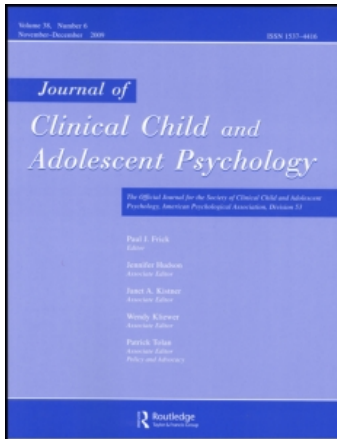
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## Journal of Clinical Child & Adolescent Psychology

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t775648094>

### Parent Alcohol Problems and Peer Bullying and Victimization: Child Gender and Toddler Attachment Security as Moderators

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Online publication date: 23 April 2010

**To cite this Article** Eiden, Rina D. , Ostrov, Jamie M. , Colder, Craig R. , Leonard, Kenneth E. , Edwards, Ellen P. and Orrange-Torchia, Toni(2010) 'Parent Alcohol Problems and Peer Bullying and Victimization: Child Gender and Toddler Attachment Security as Moderators', *Journal of Clinical Child & Adolescent Psychology*, 39: 3, 341 – 350

**To link to this Article:** DOI: 10.1080/15374411003691768

**URL:** <http://dx.doi.org/10.1080/15374411003691768>

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# Parent Alcohol Problems and Peer Bullying and Victimization: Child Gender and Toddler Attachment Security as Moderators

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This study examined the association between parents' alcoholism and peer bullying and victimization in middle childhood in 162 community-recruited families (80 girls and 82 boys) with and without alcohol problems. Toddler–mother attachment was assessed at 18 months of child age, and child reports of peer bullying and victimization were obtained in 4th grade. There was a direct association between fathers' alcohol symptoms and bullying of peers, as well as indirect association via toddler–mother attachment security. Multiple group models indicated that the direct association between parents' alcohol symptoms and bullying was significant for boys but not girls. The association between maternal alcohol symptoms and bullying was significant for secure but not insecure boys or secure/insecure girls. The association between fathers' alcohol symptoms and bullying was significant for insecure boys but not secure boys or secure/insecure girls.

It is now well established that children who have parents with alcohol problems are at increased risk for interpersonal and behavioral problems, psychiatric disturbances, and substance abuse (see Zucker, Donovan, Masten, Mattson, & Moss, 2008). Longitudinal research has demonstrated prospective associations between paternal alcoholism and externalizing and internalizing behavior problems (e.g., DeLucia, Belz, & Chassin, 2001; Hussong et al., 2008), and the subsequent development of substance use and problems (see Jacob & Windle, 2000; Zucker et al., 2008). A few longitudinal studies also have noted lower social competence among girls of fathers with alcoholism at age 6 according to self and teacher reports (Hussong, Zucker, Wong,

Fitzgerald, & Puttler, 2005), and lower social competence among kindergarten children of fathers with alcohol problems according to parent and teacher reports, via lower maternal warmth (Eiden, Colder, Edwards, & Leonard, 2009).

In middle childhood, there is a dramatic increase in children's social networks (Ladd & Pettit, 2002). An important developmental task in middle childhood is the formation of peer relationships and reciprocated friendships (Sroufe, Egeland, & Carlson, 1999). By 10 to 12 years of age, children become more notably skilled in using goal directed strategies to maintain peer relationships and manage conflict with peers without adult intervention (Parker & Gottman, 1989). Children who have problems in maintaining relationships and interacting cooperatively with peers are at risk for a number of concurrent and later problems (Parker & Asher, 1987; Parker, Rubin, Erath, Wojslawowicz, & Buskirk, 2006).

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Numerous studies of peer relations in early to middle childhood have highlighted considerable variations in the degree to which children are accepted by their peers (e.g., Hymel, Rubin, Rowden, & LeMare, 1990). Although some children are well accepted and enjoy a great deal of popularity, others are relatively isolated and disliked. These individual differences in peer interactions are relatively stable across childhood and are indispensable in the development of later social competence (Hartup, 1983, 1996).

Two interrelated aspects of peer relations that are critical for current and later developmental outcomes are peer bullying and victimization by peers. Bullying is a serious problem that has been extensively researched in recent years (e.g., Olweus, 1995, 1996; Pepler, Jiang, Craig, & Connolly, 2008; Smith et al., 1999; Solberg & Olweus, 2003). Bullying is a subtype of aggression (i.e., intentional acts to hurt, harm, or injure; Dodge, Coie, & Lynam, 2006) that is repeated frequently and characterized by an imbalance of strength or power (Olweus, 1994; Pepler et al., 2008; Vaillancourt et al., 2008). As a specific negative relationship context in which aggression is displayed, bullying may manifest as verbal, physical, or relational in nature (Crick & Grotpeter, 1995; Olweus, 1994; Pepler et al., 2008). Bullying is often conceptualized along a continuum recognizing that children may be involved in bullying behavior to differing degrees as the perpetrator or victim, a bully-victim in which they experience both, a bystander, or an uninvolved peer (Espelage & Swearer, 2003). This dimensional approach has revealed that bullying is only moderately correlated with both general peer-directed physical and relational aggression in past research (Pepler et al., 2008). In other words, although all bullying involves aggression, it is distinct from physical aggression perhaps because the most frequent type of bullying involves verbal aggression and teasing (Eder, 1995) and serves the goal of enhancing peer group status (Espelage, Holt, & Henkel, 2003). Few longitudinal studies have been conducted to assess developmental antecedents of bullying (see Long & Pellegrini, 2003; Pepler et al., 2008) and to our knowledge no prospective studies have examined bullying in children at risk for maladaptive trajectories like children of parents who abuse alcohol.

Bullying is particularly relevant for children of parents with alcoholism because evidence from two prospective studies indicate that these children do not follow a normative developmental trajectory for aggressive behavior. For instance, children of parents with alcohol problems are at increased risk for aggression in the toddler and early preschool periods (Edwards, Eiden, Colder, & Leonard, 2006a), and this risk continues into the early school years (Loukas, Fitzgerald, Zucker, & Von Eye, 2001; Loukas, Zucker, Fitzgerald, & Krull, 2003). As children's social worlds become more focused

on peers in middle childhood, higher aggressive behavior noted among children with parents who have alcohol problems may become more focused on peers and manifest as bullying. These children also have lower parent reported social competence around kindergarten age (Eiden, Colder, Edwards, & Leonard, 2009), and this association seems to vary by child gender (Hussong et al., 2005). Children, especially boys with lower social competence, may be more likely to engage in behaviors such as bullying in order to enhance social status among peers (Espelage et al., 2003).

Similarly, victimization by peers increases children's risk for concurrent and later maladjustment (Ladd & Kochenderfer Ladd, 2002; for reviews see Card & Hodges, 2008; Juvonen & Graham, 2001). Some children of parents with alcoholism may be at higher risk for victimization because of poor social skills arising out of poor parenting and social isolation due to parents' alcoholism. Victims of peer aggression often report higher levels of social anxiety, depression, and loneliness (Cunningham, 2007). However, little is known about the association between parents' alcoholism and children's aggression toward or victimization by peers, or about factors that may mediate or moderate this association.

One potential mediator or moderator of the association between parents' alcohol problems and peer bullying or victimization is the quality of parent-toddler attachment. According to attachment theory, early attachment patterns play a key causal role in the development of subsequent relationships (Bowlby, 1979, 1988). Parents who are warm, responsive, and supportive during parent-child interactions are more likely to have securely attached children (Ainsworth & Bell, 1970). Secure attachment to a parent not only serves as a secure base under conditions of stress, but because of greater emotional availability and communication, provides opportunities for learning that carries into the peer context (Ainsworth & Bell, 1970; Michiels, Grietens, Onghena, & Kuppens, 2008). Insecurely attached children may engage in greater bullying of peers as a result of negative internal working models characterized by anger or mistrust (Bretherton, 1985), or due to negative attributional biases (Dodge & Newman, 1981). They may also be more likely to be victimized by peers due to poorer emotion regulation or greater fear in the peer context (Michiels et al., 2008). Empirical evidence from a few studies indicates that children with insecure attachment to their mothers were more likely to bully their peers and experience more peer victimization (Smith & Myron-Wilson, 1998; Troy & Sroufe, 1987). Thus, attachment security may serve as a protective factor for negative child outcomes such as peer bullying or victimization especially under conditions of stress or negative family experiences (Dallaire & Weinraub, 2007; van Ijzendoorn, 1997).

A second potential moderator of the association between parents' alcohol problems and peer bullying or victimization by peers is child gender. Sons of fathers with alcohol problems are more likely to be aggressive and to not display the normative declines in aggressive behavior in the preschool or early childhood period (Edwards, Eiden, Colder, et al., 2006). However, other studies have noted that girls of fathers with alcohol problems, but not boys, have lower social competence in the early school years (Hussong et al., 2005). The attachment literature also indicates some evidence for further interactive effects such that insecurely attached boys, but not girls, may be at risk for externalizing behaviors including peer aggression (Lewis, Feiring, McGuffog, & Jaskir, 1984; McCartney, Owen, Booth, Clarke-Stewart, & Vandell, 2004). Other studies indicate that girls with insecure attachment may exhibit higher levels of externalizing behaviors and be more likely to engage in bullying (Munson, McMahon, & Spieker, 2001).

Based on this literature, we hypothesized that children of parents who have problems with alcohol would be more likely to engage in bullying of their peers and experience more frequent victimization. Attachment security was expected to mediate or moderate the association between parents' alcoholism and bullying/victimization. We expected that parents' alcohol symptoms would predict higher toddler-mother insecurity, which in turn would be a significant predictor of peer bullying and victimization. In other words, toddler-mother attachment security would be one pathway explaining the association between alcohol problems and peer bullying and victimization. A secure attachment relationship with the mother (who in most families is the primary caregiver and, for most families in this sample, the nonabusing parent), may also have a protective effect, so that under condition of risk such as fathers' alcoholism, children who had a secure mother-toddler relationship may have positive internal working models of self and other and engage in less bullying and experience less victimization by peers. The association between fathers' alcoholism and peer bullying and victimization may also be moderated by child gender. Boys of fathers who have problems with alcohol may be more likely to engage in bullying of peers. We did not have specific hypotheses regarding gender moderation for peer victimization, but conducted analyses to examine this issue.

## METHOD

### Participants

The sample consisted of 227 families (111 girls, 116 boys) participating in an ongoing longitudinal study. Families were classified into two groups at

recruitment: the group consisting of parents with no or few current alcohol problems ( $n = 102$ , 51% boys), and the group of families with at least one parent who abused alcohol ( $n = 125$ ). Within the alcoholic group, 102 families had one parent (in 93% of families, this was the father) who met criteria for alcohol abuse or dependence, whereas the other parent was light drinking or abstaining (52% boys). In the remaining 23 families, both parents met diagnostic criteria for alcohol abuse (52% boys). These classifications were based on parental self-reports at 12 months of child age.

As would be expected of any longitudinal study involving multiple family members, there were incomplete data for some participants at one or more of the assessment points included in this study. Of the 227 families, all provided data at 12 months, 220 mother and toddlers had attachment data at 18 months, and 162 children provided data on peer bullying and victimization at fourth grade (9–10 years of child age). There were no significant differences between the 227 families with complete data compared to those with missing data on alcohol diagnosis (48% of families with missing data were in the alcohol group), or child gender distribution (52% of families with missing data had boys). There was no significant association between attachment security (secure/insecure) and missing status at fourth grade.

The majority of the parents in the study were Caucasian (94% of mothers and 87% of fathers) with a smaller percentage of African Americans (5% of mothers, 7% of fathers). Although parental education ranged from less than high school degree to master's degree, about half the mothers (57%) and fathers (55%) had received some post-high school education or had a college degree. Annual family income ranged from \$4,000 to \$95,000 ( $M = \$41,824$ ,  $SD = \$19,423$ ). At the first assessment, mothers were residing with the biological father of the infant in the study. Most of the parents were married to each other (88%). At recruitment, mothers' age ranged from 19 to 40 ( $M = 30.4$ ,  $SD = 4.58$ ). Fathers' age ranged from 21 to 58 ( $M = 32.9$ ,  $SD = 6.06$ ).

### Procedure

The names and addresses of families were obtained from the New York State birth records for Erie County. Parents who indicated an interest in the study were screened by telephone with regard to sociodemographic characteristics and eligibility criteria (see Eiden, Edwards, & Leonard, 2007, for procedural details). Parents were primary caregivers and cohabiting since the infant's birth, and women who reported drinking moderate to heavy amounts of alcohol during pregnancy were excluded from the study in order to control for potential fetal alcohol effects. During the phone screen, mothers were administered the Family History

Research Diagnostic Criteria for alcoholism with regard to their partners' drinking (Andreasen, Rice, Endicott, Reich, & Coryell, 1986) and fathers were screened with regard to their alcohol use. Because we had a large pool of families potentially eligible for the nonalcoholic group, alcoholic and nonalcoholic families were matched on race/ethnicity, maternal education, child gender, parity, and marital status.

Families visited the laboratory at six different child ages (12, 18, 24, 36 months, kindergarten [5–6 years of child age], and fourth grade [9–10 years of child age]). The study was approved by the University at Buffalo Social Science Institutional Review Board. Informed written consents were obtained from both parents and child assents were obtained in fourth grade. Extensive observational assessments with both parents and children were conducted at each age. This paper focuses on 12 month alcohol data, fourth-grade peer bullying and victimization data, and attachment data obtained from observational assessments at 18 months of child age. Families were compensated for their time in the form of gift cards, toys, and monetary compensation.

## Measures

**Parental alcohol use.** The University of Michigan Composite International Diagnostic Interview adapted to a self-report questionnaire (Anthony, Warner, & Kessler, 1994) was used to assess alcohol abuse and dependence at 12 and 18 months. In addition to the screening criteria, *Diagnostic and Statistical Manual of Mental Disorders* (4th ed. [DSM-IV]; American Psychiatric Association, 1994) criteria for alcohol abuse and dependence diagnoses for current alcohol problems (in the past year at 12 months) were used to assign final diagnostic group status. The continuous measures of maternal and paternal alcohol abuse and dependence symptoms assessed at 12 months were used in further analyses.

**Mother-toddler attachment.** The Ainsworth Strange Situation paradigm (Ainsworth & Wittig, 1969), a 21-min videotaped, structured laboratory separation-reunion procedure was used to examine mother-toddler attachment at 18 months. The procedure consists of eight 3-min episodes that occur in a fixed order and are designed to include increasing levels of stress in the infant so as to activate the attachment system. In each episode, the infant's behavior is rated along six dimensions using 7-point scales. The ratings are used to classify the infants into three major categories: secure, insecure-avoidant, and insecure-resistant. In addition to these three classifications, the coding

scheme has been extended to include an additional pattern that is especially prevalent in high-risk infants, the disorganized (D) pattern (Main & Solomon, 1990). The D classification is considered to be an insecure pattern with behaviors representing a collapse of organized behavior in response to stress of separation, resulting from fear or apprehension in the parent's presence (Carlson, 1998). This may be exhibited in a variety of ways. Two major behavioral themes are contradictory behavior patterns or direct indices of fear, freezing, apprehension, or disassociation in the parent's presence. Because the D classification does not represent an organized strategy for maintaining access to the caregiver, an alternative, best-fitting classification of secure, avoidant, or resistant is assigned as well, although in several cases, coding of this alternative classification is extremely difficult.

The fifth author and two research assistants who were blind to group status were responsible for coding all the Strange Situations, with consultation on difficult to code tapes provided by the first author. The first author was originally trained in coding Strange Situations by Douglas Teti, with training on D coding provided by Dante Cicchetti and follow-up training by Alan Sroufe and Elizabeth Carlson. The fifth author was trained by Alan Sroufe and Elizabeth Carlson. Individual dyads used for reliability were selected randomly and included all four classifications. The mean interrater reliability on 15% of the sample using Pearson's  $r$  was .76 on the Strange Situation rating scales and .81 for the Disorganization scale score. Interrater agreement on the four attachment classifications was 93% (Cohen's  $\kappa = .86$ ). Due to power concerns, only the secure/insecure classifications were used in further analyses. Results on predictors of attachment classifications have been reported previously (see Eiden, Edwards, & Leonard, 2002).

**Peer bullying and victimization.** The Revised Bully/Victim Questionnaire (Olweus, 1994) was used to measure peer aggression using child self-reports. This is a widely used measure that assesses bullying toward peers and experiences of being victimized by peers. Children were provided with a definition of bullying and victimization and asked to report the frequency and severity of bullying others and being victimized by others in the last 2 months. Bullying behavior and victimization (nine items in each scale) were measured on 5-point scales, ranging from 0 (*not at all*) to 4 (*several times a week*). The sum of the two sets of items (bullying others and victimization) were used as measures of bullying and victimization. The measure has well established validity in large-scale studies across different schools, with significant associations on the "bullying

others” and “victimization” subscales with peer ratings on similar items (Olweus, 1997), with peer nominations (Olweus, 1991), and with measures of antisocial behavior and other measures of aggressive behavior (see Bendixen & Olweus, 1999). Moreover, positive and significant associations have been found between the BVQ and teacher ratings and diary reports of bullying (Pellegrini & Bartini, 2000). Internal consistencies for this measure have been acceptable in the past (e.g., .76 for bullying and .78 for victimization, Pellegrini & Long, 2002). In the current study, the internal consistencies of the two measures were as follows: Cronbach’s  $\alpha = .67$  for the bully scale, and .66 for the victimization scale. Given the extensive use of these measures and appropriate internal consistency in the past (see Card & Hodges, 2008) these lower than conventional levels of reliability were deemed acceptable, but some caution should be exercised in interpreting the findings. The scores on bullying and victimization were skewed and transformed using square root transformations before further analyses and reached acceptable levels of skew (i.e.,  $<3$ ; Kline, 2005). For the descriptive information presented for bullying and victimization, the nontransformed means and standard deviations are reported.

### Data Analytic Approach

Structural equations modeling (SEM) was used to test all hypotheses. All SEM analyses were conducted using Mplus (Version 4.0; Muthen & Muthen, 1998–2006). Full-information maximum likelihood estimation procedures were used and standardized parameter estimates are presented. Multiple group analyses were used to examine moderation by gender and moderation by attachment security and gender. These models were tested by comparing fully unconstrained with fully constrained models. The  $\Delta\chi^2$  was used as an omnibus test of differences across groups. Given a significant  $\Delta\chi^2$ , we examined the modification indices to locate group differences in path coefficients.

## RESULTS

### Demographic and Descriptive Information

Descriptive and demographic information were first examined for each group of families. By the fourth-grade assessment, 16% of the biological fathers were not living with their families. Of these, 12% were in the alcoholic group, and 4% were in the nonalcoholic group. Chi-square analyses revealed that this difference was not statistically significant ( $p > .05$ ). All of the children who completed assessments at fourth-grade

had regular contact (at least once a week) with their biological fathers and there were no group differences with regards to how much time fathers or mothers spent with their children. Overall, 27 fathers (13%) and 23 mothers (11%) had been in treatment for alcohol problems at some point since recruitment and the fourth-grade assessment, 14 fathers (7%) and 11 mothers (5%) had been in treatment for drug-related problems and 24 fathers (11%) and 38 mothers (18%) had been in treatment for psychological problems. One-way analysis of variance tests revealed that there were no significant group differences in mothers’ education, fathers’ education, total family income, fathers’ work hours, or mothers’ work hours. Descriptive information regarding group differences on parents’ alcohol consumption and alcohol problems is presented in Table 1. There were no associations between child gender and attachment classifications, or between child gender and parents’ alcohol symptoms. The child bullying and victimization scales were correlated at  $r = .31$ ,  $p < .001$ , for the sample as a whole. The correlation between bullying and victimization was significantly higher among children in the nonalcoholic group ( $r = .52$ ) than for children in the alcoholic group ( $r = .23$ ),  $z = 2.07$ ,  $p < .05$ .

### Main Analyses

We first examined the fit of the overall conceptual model, with maternal and paternal alcohol abuse/dependence symptoms at 12 months as the predictors, toddler attachment security with mother at 18 months as the intervening variable, and mean ratings of bullying and victimization by peers as the outcome measures. This model included paths from the two predictors to the mediator, and paths from the mediator to the two

TABLE 1  
Group Differences in Alcohol Consumption, at Recruitment, Peer Bullying, and Victimization Scales

Variable	Nonalcoholic <sup>a</sup>		Alcoholic <sup>b</sup>		$\eta^2$
	M	SD	M	SD	
Paternal QFI	.20 <sub>a</sub>	.28	1.31 <sub>b</sub>	1.16	.25
Paternal Binge	.36 <sub>a</sub>	.58	2.97 <sub>b</sub>	1.93	.39
Paternal Alcohol Symptoms	.16 <sub>a</sub>	.46	9.43 <sub>b</sub>	15.50	.12
Maternal QFI	.06 <sub>a</sub>	.10	.20 <sub>b</sub>	.29	.07
Maternal Binge	.20 <sub>a</sub>	.45	.90 <sub>b</sub>	1.04	.13
Maternal Alcohol Symptoms	.05 <sub>a</sub>	.20	1.03 <sub>b</sub>	2.40	.06
Peer Bullying	.08 <sub>a</sub>	.18	.18 <sub>b</sub>	.28	.03
Peer Victimization	.27	.33	.37	.34	.02

Note. Means with different subscripts were significantly different from each other. QFI = Quantity-Frequency Index.

<sup>a</sup> $n = 59$ .

<sup>b</sup> $n = 103$ .

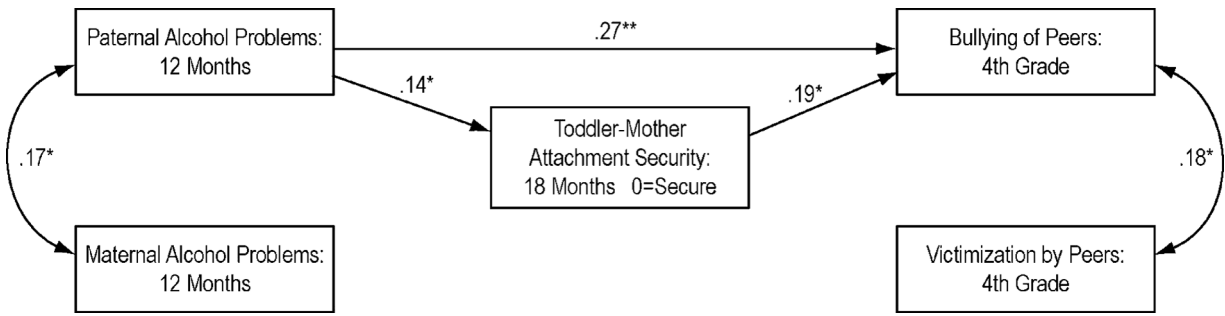


FIGURE 1 Overall path model for peer bullying and victimization. *Note.* The model included paths from maternal and paternal alcohol problems to peer victimization, a path from maternal alcohol problems to bullying, and a path from attachment security to peer victimization. These paths were nonsignificant and are not depicted in the model for ease of presentation. \* $p < .05$ . \*\* $p < .01$ .

outcome variables. The model also included a covariance between the two alcohol measures and a covariance between the residuals of bullying and victimization. Goodness of fit indices revealed that the model did not fit the data well,  $\chi^2(4, N = 227) = 16.23, p = .003$ , comparative fit index (CFI) = .53, root mean square error of approximation [RMSEA] = .11. We next added direct paths from paternal and maternal alcohol symptoms to mean ratings of bullying. Results indicated a significant improvement in model fit,  $\Delta\chi^2(2, N = 227) = 13.59, p < .01$ . This final overall model fit the data well,  $\chi^2(2, N = 227) = 2.64, p = .27$ , CFI = .98, RMSEA = .038. Higher paternal alcohol symptom at 12 months was associated with toddler–mother insecurity at 18 months. Toddler–mother insecurity at 18 months predicted greater bullying of peers in fourth grade. There was also a significant direct path from fathers’ alcohol symptoms at 12 months to peer bullying at fourth grade (see Figure 1). Maternal alcohol symptoms were not related to attachment insecurity or directly to peer bullying. Addition of other direct paths from parents’ alcohol symptoms to victimization did not improve the fit of the model. Attachment security was not a significant predictor of peer victimization.

In the next step, we used multiple group analysis to examine if child gender moderated the association

between alcohol group status and peer bullying and victimization. We first examined fit indices for a fully unconstrained model for boys and girls and compared this unconstrained model with a fully constrained model. These two nested models were significantly different from each other,  $\Delta\chi^2(8, N = 227) = 28.91, p < .01$ . Modification indices indicated that the direct paths from paternal to maternal alcohol symptoms to peer bullying, the path from paternal alcohol symptoms to attachment security, and the path from attachment security to peer bullying should be freely estimated for boys and girls. In the final multiple group model these four paths were freely estimated and all other paths were constrained. This model fit the data well,  $\chi^2(6) = 3.21, p = .78$ , CFI = .99, RMSEA = .001. The significant parameter estimates for this final model for boys are depicted in Figure 2. As depicted in the figure, both maternal and paternal alcohol problems at 12 months were directly associated with peer bullying and victimization at fourth grade. Paternal alcohol problem was associated with higher attachment insecurity, which in turn predicted greater bullying in fourth grade. None of the parameter estimates were significant for girls.

Multiple group analyses with the two attachment security groups for boys and girls were conducted next to examine if the association between parents’ alcohol

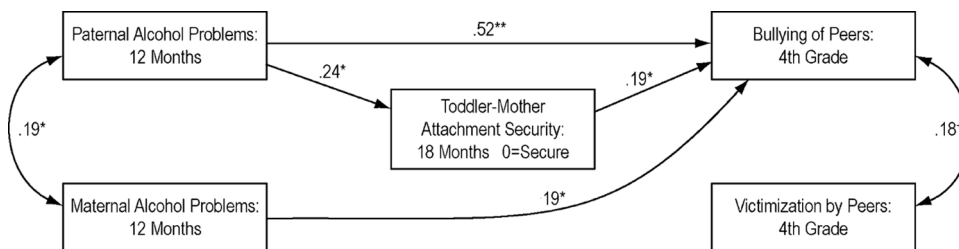


FIGURE 2 Path model for peer bullying and victimization for boys. *Note.* The model included paths from maternal and paternal alcohol problems to peer victimization, and a path from attachment security to peer victimization. These paths were non-significant and are not depicted in the model for ease of presentation. <sup>+</sup> $p < .10$ . \* $p < .05$ . \*\* $p < .01$ .

problems and peer bullying differed as a function of child gender and attachment security. As before, a fully unconstrained model was compared to a fully constrained model and the chi-square difference test was used as an omnibus test of differences across groups. This model included parents' alcohol problems as predictors and child bullying as the outcome measure. As before, the model also included the covariance between fathers' and mothers' alcohol symptoms. The fully constrained model was significantly different from the fully unconstrained model,  $\Delta\chi^2(9) = 20.59$ ,  $p < .05$ , indicating that the association between parents' alcohol symptoms and peer bullying was significantly different across the four groups. Modification indices suggested that the two paths from parental alcohol problems to peer bullying should be freely estimated for secure and insecure boys, but not girls. Thus, these two paths and the covariance were freely estimated for the two groups of boys, but not girls. This final multiple group model fit the data well,  $\chi^2(5) = 2.16$ ,  $p = .54$ , CFI = .99, RMSEA = .001. There was a significant association between maternal alcohol symptoms and peer bullying for secure boys ( $B = .33$ ,  $p < .05$ ), but not for insecure boys ( $B = .19$ ,  $p > .05$ ). There was also a significant association between paternal alcohol symptoms and peer bullying for insecure boys ( $B = .61$ ,  $p < .05$ ) but not for secure boys ( $B = .18$ ,  $p > .05$ ).

## DISCUSSION

Results partially supported our hypothesized model indicating direct and indirect associations via toddler-mother attachment security between paternal alcohol problems and peer bullying. We also hypothesized that sons of parents with alcohol problems and children with insecure attachment to their mothers would be at higher risk for peer bullying. Results generally supported these hypotheses. Among boys, both paternal and maternal alcohol problems directly predicted peer bullying. Paternal alcohol problems also indirectly predicted bullying via security of attachment. These results are supportive of previous studies indicating that sons of parents with alcohol problems are at higher risk for externalizing behavior problems in general (Loukas et al., 2001), and display a non-normative trajectory for aggressive behavior more specifically (Edwards, Edien, Colder, et al., 2006). The current results indicate that this risk may spillover into peer relationships as well, with boys of parents with alcohol problems displaying higher rates of bullying toward peers.

In addition to child gender, security of attachment with mother was a significant moderator of risk for peer bullying among boys. The association between paternal alcohol problems and peer bullying was significant for

boys who had an insecure attachment relationship with their mothers, whereas the association between maternal alcohol problems and peer bullying was significant among boys with a secure attachment relationship with their mothers. The results indicate that in the presence of maternal psychopathology, security of attachment with the mother may be associated with increased risk. In other words, having a secure relationship with a problematic parent may be associated with negative consequences and not confer protection from adversity. Our findings regarding the association between paternal alcohol problems and peer bullying for insecure, but not secure boys, are consistent with the extant attachment theory. Results indicate that sons of fathers with alcohol problems who have an insecure attachment to their mothers continue to have relationship problems in middle childhood in the peer domain. The continuity between early parent-child attachment patterns and future peer relationship problems has been well documented (see Sroufe et al., 1999) but the present findings extend this literature in novel ways. There have been no previous studies examining the role of attachment security in moderating the association between parents' alcoholism and children's peer relationships. However, results from a previous study indicated that secure mother-toddler attachment moderated the association between fathers' alcoholism and children's externalizing behavior problems in the preschool period (Edwards, Eiden, & Leonard, 2006). To the extent that externalizing behavior problems is one predictor of greater peer bullying, the current results extend these previous findings developmentally to middle childhood. This may also explain the stronger association between bullying and victimization among children of nonalcoholic parents compared to children with alcoholic parents. Children with parents who have alcohol problems may be more likely to cope with the stress of their parent's alcoholism by acting out and using aggressive behaviors, or by social withdrawal. Future studies may well examine these specific patterns of behavior in the school setting.

Contrary to expectations, there were no direct or indirect associations between parental alcohol problems and peer victimization. A paucity of research exists exploring the developmental antecedents of peer victimization among typically developing children and even less literature is available for understanding how early risk factors may set children on a maladaptive trajectory toward peer victimization in later developmental periods (see Card & Hodges, 2008). Specifically, few studies have examined risk for victimization by peers among children of parents with alcohol problems. It is possible that other factors not included in this study such as family aggression may predict peer victimization. Future studies may examine this issue more closely.

Similarly, unlike results with peer bullying, attachment security did not moderate the relationship between alcohol group status and peer victimization. Previous studies on predictors of peer victimization have noted that there is a great deal of heterogeneity among children who are victimized frequently by peers and there are significant differences in length of peer victimization (Kochenderfer Ladd & Ladd, 2001). Others have noted that aspects of parenting that are gender-atypical, such as coercive parenting for girls, and overprotective parenting for boys may predict victimization because they hamper the acquisition of social competencies that are gender typical (Perry, Hodges, & Egan, 2001). Thus, aspects of parenting other than attachment per se may have moderated the association between alcohol group status and peer victimization. Moreover, future studies of high-risk children with repeated measures over time may be better able to examine the issue of duration of peer victimization. Chronic victimization over longer periods of development may have different antecedents and consequences than peer harassment at a particular point in time.

Unlike the results with victimization, there were significant and direct associations between parents' alcohol problems and bullying of peers. Greater risk for bullying of peers in middle childhood may be one pathway to later problems documented among children of parents with alcohol problems. Given that bullying in an at-risk population (i.e., maltreated children; Shields & Cicchetti, 2001) is associated with emotion regulation problems, future research should examine the developmental correlates and sequelae of experiences with bullying among children of with parents who have alcohol problems. Typically developing children that engage in bullying also are prone to hostile attribution biases or interpreting the intent of a perpetrator as hostile in an ambiguous provocation situation (Camodeca, Goossens, Schuengel, & Terwogt, 2003). In addition, adolescents who experience bullying or victimization are at risk for depression, suicidal ideation, and suicide attempts compared to those not involved and those engaged in both bullying and victimization are at the greatest risk of these problems (Graham, Bellmore, & Mize, 2006; Hawker & Boulton, 2000). Understanding the antecedents and potential maladaptive outcomes for both typically developing children and those at increased risk could facilitate greater focus on possible developmental mechanisms that could inform effective prevention and intervention efforts.

Although the findings from our study fill an important gap in the literature, there are several significant limitations as well. First, our measures of bullying and victimization were based on child self-report alone. Previous studies of children of parents with alcohol problems using different methods of measuring social

competence indicate that results vary by reporter (Hussong et al., 2005). In addition, the bullying and victimization measure did not explicitly measure relational forms of bullying (see Pepler et al., 2008). Girls display relational aggression as their primary form of aggression (see Putallaz et al., 2007) and thus, this issue may have impacted the findings with respect to the lack of associations among girls. A second limitation is that due to the nature of the design, the role of maternal alcohol problems cannot be examined independent of fathers' alcohol problems. Not only was this sample restricted with regard to maternal alcohol problems because one exclusion criteria was maternal alcohol consumption during pregnancy, but it was also limited because the number of mothers with postnatal alcohol problems was relatively small. However, it is important to note that in the majority of families with alcohol problems, maternal alcohol problems exist in the context of paternal alcohol problems. In other words, women with alcohol problems are more likely to have partners with alcohol problems than vice versa (Roberts & Leonard, 1997). Finally, these results may not be generalizable to families of single mothers who separated from or never lived with a partner who had alcohol problems. One eligibility requirement at the time of recruitment when the child was 12 months old was that biological parents had been living together since the child's birth. This was important so we could examine the effects of fathers' alcoholism on family functioning, parenting, and child development. However, this limits generalizability of our findings to families who were intact when the child was 1 year old.

### Implications for Research, Policy, and Practice

In spite of these limitations, the current study adds to the literature on parental alcoholism with its use of a longitudinal design beginning in infancy, examination of the role of toddler attachment security in moderating risk, and its focus on peer bullying and victimization during middle childhood. The findings that child gender and attachment security moderate risk for peer bullying and victimization are important as they suggests that intervention efforts targeted at improving the quality of relationship with the mother may have significant implications for peer relationships in middle childhood, particularly for boys of parents with alcohol problems. Furthermore, the findings indicate the potential cascading effects and costs of early risk of exposure to parental alcoholism and highlight the continued need to support public health efforts at increasing access to substance abuse and mental health treatment services for caregivers of young children. The results also suggest that timing these interventions for the toddler period may be most beneficial.

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