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Examining the Developmental Process of Risk for Exposure to Community Violence among Urban Youth

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Abstract

Considerable research has documented the effects of community violence exposure on adolescents' behavior and mental health functioning, yet there has been less research on the process by which early risks increase the likelihood that youth will be exposed to community violence. The current study used data from a community epidemiologically-defined sample of 623 urban youth followed from first grade through adolescence to examine the process by which early-onset aggressive behavior and poor academic readiness influenced risk for community violence exposure. Consistent with transactional developmental theories, early-onset aggressive and disruptive behavior was associated with poor academic readiness; these early risks contributed to later peer rejection, and subsequent conduct problems and greater affiliation with deviant peers, which in turn increased youths' exposure to community violence. Having an enhanced understanding of the risk process directs attention to potential targets for preventive interventions for youth at risk for subsequent exposure to violence.

Keywords

community violence exposure; development; aggression; academic readiness

A substantial body of research documents the negative influence of community violence exposure on child and adolescent development. Youth exposed to community violence are at an increased risk for behavioral and mental health problems including aggressive behavior (Luthar & Goldstein, 2004; McCabe, Lucchini, Hough, Yeh, & Hazen, 2005), internalizing problems (Cooley-Quille, Boyd, Frantz, & Walsh, 2001; Fitzpatrick, Piko, Wright, & LaGory, 2005), and symptoms of Post-Traumatic Stress Disorder (Garbarino, Bradshaw & Vorasi, 2002; McCart et al., 2007). Community violence exposure also has been linked with educational problems (Ratner et al., 2006), greater participation in delinquent and risk-taking behaviors and, association with deviant peers (Foney & Cunningham, 2002; Salzinger, Ng-Mak, Feldman, Kam, & Rosario, 2006), and substance use and abuse (Kilpatrick, Acierno, Resnick, Saunders, & Best, 1997). Moreover, youth who witness violence are at increased risk of becoming the victim of violence (Gorman-Smith & Tolan, 1998; Youngstrom, Weist, & Albus, 2003).

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Given the numerous adverse outcomes associated with community violence exposure, it is important to identify factors that put children at greater risk for exposure to community violence. Most of the extant research has focused on demographic risk factors such as race, gender, and age of exposure (Buka, Stichick, Birdthistle, & Earls, 2001); however, additional research is needed to understand the *process* by which potentially malleable factors increase the risk for exposure to violence. An enhanced understanding of the risk process may direct our attention to potential targets for programs aiming to prevent community violence exposure.

A Developmental Perspective on Community Violence Exposure

Violence is a fact of life for many youth. National data indicate that approximately 36% of high school students have been in a physical fight within the past year (Centers for Disease Control and Prevention [CDC], 2008), and that 35% of youth (ages 2–17) have witnessed at least one form of violence in the past year (Finkelhor, Ormrod, Turner, & Hamby, 2005). The rates of exposure tend to be highest during adolescence and among males, ethnic minority youth, and those living in urban settings (Buka et al., 2001; CDC, 2008; Finkelhor et al., 2005). Youth with externalizing behavior problems also are at greater risk for community violence exposure (Boyd, Cooley, Lambert, & Ialongo, 2003; Lambert, Ialongo, Boyd, & Cooley, 2005).

Both life course (Elder, 1994) and developmental psychopathology (Cicchetti, 2006) theories suggest that early negative experiences, like aggressive behavior problems during the adjustment to elementary school, can alter a child's developmental trajectory (Kellam & Rebok, 1992) and the accomplishment of normative developmental milestones. Similarly, research on the early onset of aggressive behavior suggests that aggressive behavior during childhood may be indicative of psychosocial problems, which pose further developmental risk (Moffitt, 2006). Relatedly, Patterson's transactional model of the development of antisocial behavior suggests that the effects of early aggressive behavior on subsequent involvement in violence are mediated by achievement problems, rejection by prosocial peers, and deviant peer affiliations (Patterson, DeBaryshe, & Ramsey, 1989). Other similar models have been proposed that highlight the inter-connectedness of risks within the child, peer, and academic domains as a developmental pathway by which early aggressive behavior increases the risk for psychopathology (Dodge & Pettit, 2003; Kellam & Rebok, 1992). These developmental theories may inform our understanding of the process by which youth are at risk for exposure to community violence. The current study builds on theories of the development of aggressive behavior in order to understand the process by which early aggressive behavior and poor academic readiness increase the risk for subsequent exposure to community violence.

Early risk factors

Child and adolescent externalizing behavior problems have been linked with an increased risk for exposure to community violence (Boyd et al., 2003; Gorman-Smith & Tolan, 1998) and peer rejection and victimization (Hanish & Guerra, 2000; Schwartz et al., 1998). Aggressive youth also are more likely to be involved in aggressive, conflictual situations – some of which they likely initiated (Freudenberg et al., 1999; Guerra, Huesmann, & Spindler, 2003). Moreover, aggressive youth may be rejected by prosocial peers because their behavior is perceived as adverse, and thus they "drift" or possibly self-select into deviant peer groups (Thornberry & Krohn, 1997). Regardless of the process by which they join the deviant peer group, these youth become exposed to a variety of delinquent behaviors, including participation in dangerous activities or being in risky situations which are subject to the effects of modeling and reinforcement (Vitaro, Brendgen, & Tremblay, 2000).

Like aggressive behavior, low school engagement and poor academic performance may increase the risk for exposure to community violence (Henrich, Brookmeyer, & Shahar, 2005). Specifically, youth who are successful in school are less likely to become delinquent or display aggressive behavior (Herrenkohl et al., 2000; Resnick, Ireland, & Borowsky, 2004), which in turn may reduce their likelihood of engaging in other risky behaviors and being exposed to violence. Furthermore, research by Patterson, DeBaryshe, and Ramsey (1989) suggests that early achievement problems contribute to rejection by prosocial peers and greater affiliation with deviant peers, which in turn increase the risk for subsequent aggressive and delinquent behavior.

More specifically, association with deviant peers tends to increase youths' involvement in risky behavior, including delinquent and violent acts (Keenan, Loeber, Zhang, Stouthamer-Loeber, & Van Kammen, 1995; Salzinger et al., 2006) and gang membership (Thornberry, Krohn, Lizotte, & Chard-Wierschem, 1993). Likewise, spending unstructured and unmonitored free time with deviant peers has been shown to increase one's risk for victimization and witnessing violence (Richards et al., 2004). Peers also may reinforce highrisk behaviors (e.g., fighting) that increase the likelihood of being exposed to violence (Vitaro et al., 2000). Not surprisingly, youth with deviant peer affiliations are also more likely to be exposed to community violence (Lambert et al., 2005) and be victims of crime (Lauritsen, Laub, & Sampson, 1992). Moreover, affiliation with delinquent peers remains a significant predictor of youth community violence exposure, even after controlling for the youth's own behavior (Salzinger et al., 2006).

Gender differences in violence exposure

While much of the literature examining risk for violence involvement and exposure has focused on males (e.g., Tolan, Gorman-Smith, & Henry, 2003), the extant research suggests that there are robust gender differences in the risk for exposure to violence (Stein, Jaycox, Kataoka, Rhodes, & Vestal, 2003). Specifically, males tend to be at greater risk for exposure because they are also more likely to engage in other high-risk behaviors that increase their opportunity for exposure to violence (Farrell & Bruce, 1997; Wilson, Rosenthal, & Battle, 2007). However, additional research is needed to determine whether the developmental processes associated with community violence exposure varies by gender.

Overview of the Current Study

The available theoretical and empirical work on the development of aggressive behavior directs our attention to early-onset aggression, poor academic readiness, peer rejection, and deviant peer affiliations as factors involved in the community violence exposure risk process (Kellam & Rebok, 1992). Most of the published research linking these risk factors with community violence exposure has been cross-sectional and has examined risk factors for exposure in one domain or another (e.g., individual, peer, or family). However, transactional developmental theories (e.g., Patterson et al., 1989) suggest these risks are inter-related and should be examined longitudinally.

The current study used data from a community epidemiologically-defined sample of urban, primarily African American youth followed from first grade through adolescence to examine the process by which early-onset aggressive behavior problems and poor academic readiness influence the risk for exposure to community violence. It was hypothesized that an early onset of aggressive and disruptive behavior would be associated with poor academic readiness, and each would contribute to later peer rejection. The youth exhibiting these early risks also were expected to later report greater affiliation with deviant peers and develop conduct problems, which in turn would increase their exposure to violence. Specifically, the effects of early behavioral and educational risks on exposure to violence were hypothesized

to occur indirectly through peer rejection and deviant peer affiliations. Based on prior research suggesting that externalizing behavior and deviant peer affiliation may be stronger predictors of males' community violence exposure than females (e.g., Lambert et al., 2005), it was anticipated that the developmental process of risk would be similar for males and females, but that the strength of associations between the risk factors and community violence exposure would be stronger for males than females.

Method

Participants

Data for the current study are drawn from a community sample of children who participated in a longitudinal randomized trial of two school-based universal preventive interventions whose immediate targets were aggressive and disruptive behavior in first grade (Ialongo et al., 1999). Three first grade classrooms in each of nine elementary schools were randomly assigned to one of the intervention conditions or a control condition. The interventions were provided over the first grade year, and participants were followed through high school. Data for the present study were collected in grades 1, 3, 6, and 8.

Of the 678 children who participated in the original study in the fall of 1993, approximately 92% (n = 623) participated in the third, sixth, or eighth grade follow-up assessments. These 623 children comprised the sample of interest, with 335 (53.8 %) boys and 288 (46.2%) girls. Approximately 87% of the current sample was African American (n = 541) and approximately 13% was European-American (n = 82). Approximately 69% of the current sample received free or reduced-priced lunch (FARMS; an indicator of family poverty). In first grade, the youth ranged in age from 5.59 to 7.60 years (M = 6.23, SD = .35). Chi–square tests showed no differences in gender, percentage receiving FARMs, or intervention condition between the 623 participants included in this study and the 55 in original sample who did not provide data at the follow-up assessments (ps > .05). The 623 who participated in the follow-up assessments were significantly more likely to be African American ($\chi^2 = 12.54$, p < .01).

Assessment Design

Teachers completed assessments of the youths' aggressive behavior and academic readiness in Grade 1, and peer rejection in Grade 3. Teachers reported about youths' conduct problems and youth reported about their deviant peer affiliations in Grade 6. Community violence exposure was assessed in Grade 8. A face-to-face interview was used to gather data from the teachers and youth at each assessment point. This study was approved by the University's Institutional Review Board. Written informed consent was obtained from parents and verbal assent was obtained from the youth.

Measures

Demographic information—Information was collected regarding participants' age, gender, and receipt of FARMS.

Teacher-reported behavioral adjustment—Elementary school aggressive behavior, academic readiness, peer rejection, and conduct problems were assessed using the *Teacher Observation of Classroom Adaptation-Revised* (TOCA-R; Werthamer-Larsson, Kellam, & Wheeler, 1991), a brief measure of each child's adequacy of performance on the core tasks in the classroom as perceived by the teacher. The TOCA-R is a structured interview administered by a trained member of the assessment staff. Teachers rated the extent to which each child displayed specific behaviors and attributes on a 6-point scale ("never true" to "always true"). Specifically, aggressive behavior in first grade was measured using the mean

of the 11-item aggressive/disruptive behavior subscale, which assessed overt behaviors such as breaking rules, fighting, breaking things, yelling at others, and teasing classmates (first grade Coefficient alpha (α) = .94). Prior research has indicated that the aggressive/disruptive behavior subscale scores in Grades 1–5 significantly predicted adjudication for a violent crime in adolescence and criteria for Antisocial Personality Disorder at age 19–20 (e.g., Petras, Chilcoat, Leaf, Ialongo, & Kellam, 2004). Academic readiness in first grade was measured using the mean of nine TOCA-R items, which assessed effort, attention, eagerness to learn, and engagement in academic activities (first grade $\alpha = .96$). The academic readiness subscale also has high predictive validity, such that for each unit increase on the TOCA-R academic readiness subscale, there was a 36% reduction in the odds of receiving special education services in middle school. Peer rejection in Grade 3 was measured using the 3-item TOCA-R likeability/rejection subscale which assessed whether children had friends, were sought as playmates, or were rejected by classmates (third grade $\alpha = .78$). The 6-month test-retest reliability of the peer rejection scale was .70 during first grade, and the subscale correlated .44 with peer nominations of rejection in Grade 1. Finally, conduct problems in Grade 6 were assessed using the conduct problems subscale of the TOCA-R (sixth grade $\alpha = .89$). In middle school, the conduct problems subscale was significantly related to whether a child had been suspended from school during elementary or middle school.

Exposure to deviant peers—Deviant peer affiliation was assessed using six items developed by Capaldi and Patterson (1989). Using a forced choice format, youth indicated how often their peers engaged in antisocial behavior (e.g., cheating on tests, stealing, damaging property) and/or substance use (sixth grade $\alpha = .76$).

Exposure to community violence—Community violence exposure was assessed using 7 items drawn from the Children's Report of Exposure to Violence (CREV; Cooley, Turner, & Beidel, 1995), a self-report instrument used to assess the frequency of exposure to community violence. The violent events included being beaten up, robbed or mugged, shot or stabbed, witnessing someone experiencing one or more of those events, or witnessing a shooting. For the present study, the number of events experienced through witnessing or victimization was summed to create an exposure to violence score.

Analytic Strategy

We conducted path analysis in Mplus 5.1 (Muthén & Muthén, 1998–2008), which uses maximum likelihood estimation, to examine the hypothesized relationships among study constructs. Model fit was evaluated using the following indicators of fit: Chi-square, the Comparative Fit Index (CFI), the Tucker Lewis Index (TLI), and the Root Mean Square Error of Approximation (RMSEA). Because prior research has identified gender differences in predictors of community violence exposure (e.g., Boyd et al., 2003; Lambert et al., 2005), multiple group analyses were performed to examine gender differences in the associations between constructs. To examine possible gender differences, the fit of models with paths freely estimated for males and females were compared with models in which paths were constrained to be equal for males and females. A significant decrement in chi-square model fit for the constrained model would indicate a significant gender difference. Intervention status and receipt of free or reduced cost lunch were included as covariates in each of the path analytic models.

Results

Descriptive Statistics and Relations among Study Variables

Means, standard deviations, and ranges of all study variables for the total sample and by gender are presented in Table 1. Teachers reported significantly more aggressive behavior for boys (M= 1.78) than for girls (M= 1.43), t= 5.43, p< .001. Teachers also reported significantly higher levels of peer rejection in boys (M= 2.49) than in girls (M= 2.19), t= 2.86, p< .01. In terms of academic readiness, teachers reported significantly higher academic readiness for girls (M= 4.40) than for boys (M= 3.95), t= 4.18, p< .001. In Grade 8, 41.8% of the sample reported exposure to community violence in the past year, with males reporting significantly more exposure than females (48% and 34%, respectively).

Bivariate associations among predictors and outcomes for males and females are presented in Table 2. Teacher reports of aggressive behaviors and academic readiness were negatively associated for males and females. Specifically, as reports of aggressive behaviors increased, teacher-reported academic readiness for youth decreased. Teacher reports of aggressive behaviors and conduct problems and peer rejection were also positively associated for males and females. Deviant peer affiliation was positively associated with conduct problems for males. In addition, deviant peer affiliation was positively associated with exposure to community violence for both males and females.

Path Analyses

The hypothesized model was tested in Mplus and was found to have a good fit to the data, $\chi^2(6) = 10.73$, p = .09; CFI = .988; TLI = .945; RMSEA = .034, and associations between constructs were in the hypothesized directions (see Figure 1). The path estimates from first grade aggressive behavior and academic readiness to third grade peer rejection were significant. Specifically, children rated as aggressive by teachers in Grade 1 were more likely to be rejected by peers in Grade 3 (β = .15, p< .01); children whose teachers rated them as high on academic readiness in Grade 1 were less likely to be rejected by peers in Grade 3 ($\beta = -.24$, p < .001). Aggressive behavior in Grade 1 and peer rejection in Grade 3 were significantly positively associated with conduct problems in Grade 6 (aggressive behavior $\beta = .17$, p < .001; peer rejection $\beta = .21$, p < .001), indicating that aggressive and rejected children were more likely to exhibit conduct problems. Academic readiness in Grade 1 was significantly negatively associated with conduct problems in Grade 6 ($\beta = -.12$, p < .05). Conduct problems, in turn, significantly predicted exposure to community violence, such that youth with more conduct problems in Grade 6 were more likely to be exposed to community violence in Grade 8 (β = .12, p < .05). Academic readiness was significantly negatively associated with deviant peer affiliation ($\beta = -.11 p < .05$); youth who were less academically ready in Grade 1 were more likely to affiliate with deviant peers in Grade 6. Deviant peer affiliation, in turn, was positively associated with exposure to community violence in Grade 8 (β =.21, p<.001). Neither intervention status nor receipt of free or reduced cost lunch was associated with exposure to community violence.

To determine whether the associations between study constructs varied for males and females, multiple group analyses were performed. Specifically, we compared a freely estimated model to a constrained model in which the paths for males and females were constrained to be equal for boys and girls. These nested models were not significantly different ($\chi^2_{\text{diff}}(13) = 6.41$, p > .05), indicating that the path estimates for males and females were not significantly different.

Discussion

The current study explored whether the effects of early risks (i.e., aggressive behavior and poor academic readiness) occurred indirectly through peer rejection and the onset of concomitant conduct problems and deviant peer affiliation, resulting in greater exposure to community violence. The results of the path analyses confirmed the hypothesis that early aggressive behavior increased the likelihood that youth would be exposed to community violence. The results also provided support for the hypothesized promotive effect of early academic readiness - a factor not examined in prior research on risk and protective factors for community violence exposure. Specifically, academic readiness in first grade reduced the likelihood that youth would experience peer rejection, later deviant peer affiliation, and exposure to community violence. Thus, problems adapting to the classroom (i.e., behavior problems and poor readiness) at the transition to formal schooling can serve as a signal of possible subsequent behavior problems and increased risk for exposure to violence in the community (Kellam & Rebok, 1992). The associations among aggressive behavior, conduct problems, deviant peer affiliation, and increased community violence exposure suggest that victims of crime may lead lifestyles that place them in situations where violence is more likely to occur (Jensen & Brownfield, 1986). Similarly, aggressive behaviors and affiliation with deviant peers can increase individuals' risk for involvement in violence, including witnessing and victimization.

Peer Rejection, Deviant Peer Affiliations, and Exposure to Violence

Based on the work of Patterson et al. (1989), it was hypothesized that early aggressive behaviors would lead to peer rejection and affiliation with deviant peers, which in turn would elevate the risk for subsequent exposure to violence. Although the path linking rejection with deviant peer affiliations was not significant, rejection was linked with later conduct problems, which in turn predicted community violence exposure. This suggests that rejection is a possible outcome of early risk behaviors (i.e., aggression, poor academic readiness) and plays a role in increasing the risk for community violence exposure. It is important to note, however, that our measure of peer rejection did not allow examination of whether children were being rejected by mainstream peers. It is possible that the effects would have varied if we had assessed rejection differently.

Several studies have identified involvement with delinquent and deviant peers to be a risk factor for violent victimization (e.g., Buka et al., 2001; Schreck, Fisher, & Miller, 2004). While the majority of these studies have been conducted with high risk or delinquent youth, research with community samples also has found affiliation with deviant peers to increase youth exposure to community violence (Lambert et al., 2005). Results of the current study extend that prior research by identifying early behavioral characteristics that increase youth affiliation with deviant peers. The link between poor academic readiness and later affiliation with deviant peers suggests that increasing academic skills and competencies may reduce the likelihood of later problem behavior and violence exposure. Future research should examine other pathways from early risk characteristics to deviant peer affiliation.

We also explored the possibility of gender differences in the hypothesized associations. Whereas prior research has reported some gender differences in the risk for exposure to violence (Stein et al., 2003), the results of the path analysis revealed no significant gender differences in the risk process. These findings suggest that both boys and girls with increased conduct problems and deviant peer affiliations are more likely to be exposed to community violence.

Implications for Prevention and Early Intervention

These findings highlight the significance of both academic readiness and aggressive behavior problems in early elementary school as potential *malleable* factors that can be targeted through preventive interventions to reduce the risk for violence exposure in adolescence. Programs aiming to reduce aggressive and disruptive behaviors, along with interventions focusing on promotion of academic readiness and increasing academic skills, may reduce the incidence of conduct problems and subsequent affiliation with delinquent peers, which these data suggest are proximal risk factors for community violence exposure. Assessment strategies should be put in place in early elementary school to detect these behavioral and academic risks.

Transactional theories of aggressive behavior suggest that there are reciprocal associations between aggressive behavior and exposure to community violence, such that early aggressive behaviors increase the likelihood that youth will be exposed to violence, which in turn can elevate their risk for perpetrating violence (Tolan et al., 2003). Preventive interventions that aim to reduce aggressive behavior may help disrupt this cycle. While not all youth who display aggression in early childhood will continue to display these behaviors throughout childhood and adolescence (Loeber & Stouthamer-Loeber, 1998), universal preventive efforts targeting early aggressive and disruptive behaviors also may improve academic outcomes and psychological well-being. These programs also hold promise as a method of reducing involvement in deviant peer groups and preventing exposure to violence.

Limitations and Future Directions

Findings from this research should be evaluated in the context of some limitations. This study focused on malleable individual characteristics (i.e., aggressive behavior, academic readiness) as risk factors for community violence exposure. Given this focus, family and neighborhood characteristics that also have relevance for youth exposure to community violence were not examined. Future research should integrate risks across multiple domains (e.g., individual, family, and neighborhood) in order to gain a more comprehensive understanding the ecology of risk for community violence exposure (Chung & Steinberg, 2006; Tolan et al., 2003).

Some research suggests that witnessing community violence and victimization by community violence have different consequences for behavioral adjustment (O'Donnell, Schwab-Stone, & Muyeed, 2002), but these categories of community violence exposure have not been consistently linked with different outcomes (Overstreet, 2000). Nonetheless, future research should examine whether witnessing and victimization by community violence have different antecedents. Furthermore, a more extensive assessment of community violence exposure may reveal different results. While the community sample examined in this study is a significant strength, results only can be generalized to youth from similar socioeconomic, racial, ethnic, and geographic backgrounds. Additional prospective longitudinal studies of youth are necessary to better understand the interplay of youth aggressive behavior and exposure to community violence for youth of other backgrounds and in different contexts. Further, consequences of early exposure to community violence on adolescent exposure and other mechanisms linking early risk with adolescent exposure to community violence have yet to be clarified.

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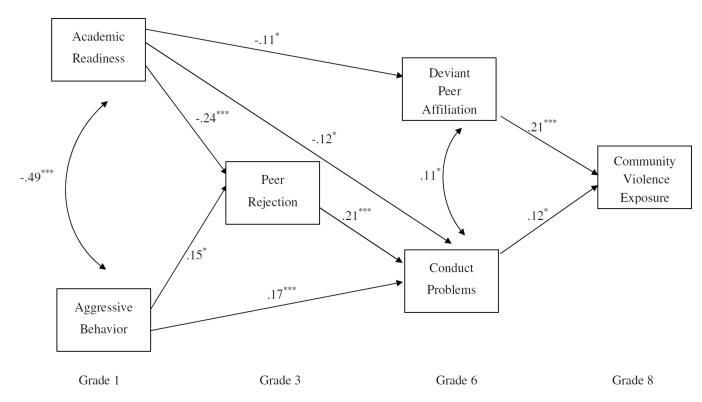


Figure 1. Standardized coefficients for indirect effect of first grade academic readiness and aggressive behavior on eighth grade community violence exposure. Note. * p < .05. ** p < .01. *** p < .001.

Table 1

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Means and Standard Deviations of Study Variables for Total Sample and by Gender

		Ī	Total Sample	<u>ple</u>	M	Males	Fem	Females	
Variable	Mean	(SD)	Range	Range Maximum Range	M	(SD)	M	(SD)	T-test
Grade 1									
Aggressive Behavior	1.62	(0.85)	1–6	1–6	1.78	(0.95)	1.43	(0.68)	5.43 ***
Academic Readiness	4.16	(1.37)	1–6	1–6	3.95	(1.38)	4.40	(1.32)	4.18 **
Grade 3									
Peer Rejection	2.35	(1.17)	1–6	1–6	2.49	(1.20)	2.19	(1.13)	2.86 **
Grade 6									
Deviant Peer Affiliation	10.25	10.25 (3.93)	6-29	1–30	10.46	10.46 (4.07) 10.01 (3.76) 1.29	10.01	(3.76)	1.29
Conduct Problems	1.56	(0.67)	1-5	1–6	1.70	(0.73)	1.40	(0.54)	4.86 ***
Grade 8									
Exposure to Community Violence		0.64 (0.92) 0-6	9-0	2-0	0.75	(86.0)	0.51	(0.83)	(0.98) 0.51 (0.83) 3.02^{**}
									I

= 512 for conduct problems; n = 522 for deviant peer affiliation; n = 545 for exposure to community violence. Aggressive behavior, academic readiness, peer rejection, and conduct problems were assessed using the Teacher Observation of Classroom Adaptation-Revised (TOCA-R; Werthamer-Larsson et al., 1991). Deviant peer affiliation subscale was developed by Capaldi and Patterson (1989). Community Note. Sample sizes vary slightly because complete measures were not available for all participants at each assessment, n = 623 for aggressive behavior and academic readiness; n = 509 for peer rejection; nviolence exposure was assessed using the Children's Report of Exposure to Violence (CREV, Cooley et al., 1995).

p < .05. p < .05. p < .01.

*** p<.001. Page 13

Table 2

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Correlations among Study Variables for Males and Females

Variable	1	2	3	4	5	9
Grade 1						
1. Aggressive Behavior	l	50 ***	.25 ***	.07	.25 ***	90.
2. Academic Readiness	***	1	31 ***	13*	23 ***	.00
Grade 3						
3. Peer Rejection	.25 ***	29	!	.11	.28 ***	60.
Grade 6						
4. Deviant Peer Affiliation	90	04	.05	1	.18**	.24 ***
5. Conduct Problems	.22	26 ***	.29***	.05	l	.21 **
Grade 8						
6. Exposure to Community Violence	.03	04	.03	.19**	.05	1

Note. Correlations for males are above the diagonal, whereas those for females are below the diagonal. Aggressive behavior, academic readiness, conduct problems, and peer rejection were assessed using the Teacher Observation of Classroom Adaptation-Revised (TOCA-R; Werthamer-Larsson et al., 1991). Deviant peer affiliation subscale was developed by Capaldi and Patterson (1989). Community violence exposure was assessed using the Children's Report of Exposure to Violence (CREV; Cooley et al., 1995).

$$\begin{array}{ccc}
+ & & \\
p < .10 \\
 & & \\
p < .05. \\
 & & \\
p < .01.
\end{array}$$

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