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Brief Report: Do Delinquency and Community Violence Exposure Explain Internalizing Problems in Early Adolescent Gang Members?

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Abstract

Adolescent gang members are at higher risk for internalizing problems as well as exposure to community violence and delinquency. This study examined whether gang membership in early adolescence is associated with internalizing problems (depression, anxiety, and suicidal behavior) and whether these associations are mediated by delinquency and witnessing community violence. In a sample of 589 ethnically diverse early adolescents, gang membership was related to suicidal behavior but not depression or anxiety. Both delinquency and witnessing community violence mediated this association. Professionals working with gang members should assess these youth for suicidal behavior and provide interventions as needed.

Keywords

Adolescents; Gangs; Delinquency; Violence Exposure; Suicidal Behavior

Introduction

Adolescent involvement in gangs is a serious public health problem, with an estimated 788 000 youths involved in 27 000 gangs in the United States in 2007 (Egley & O'Donnell, 2009). Gang membership is typically characterized by engagement in some form of criminal activity, such as fighting with other gangs, stealing cars or other goods, selling illegal drugs, or engaging in property damage (Esbensen, Winfree, He, & Taylor, 2001). Accordingly, gang members report higher rates of violent offending, nonviolent delinquency, and victimization than their peers (Taylor, Peterson, Esbensen, & Freng, 2007). However, being a gang member also increases the risk for internalizing problems, such as low self-esteem (Herrmann, McWhirter, & Sipsas-Herrmann, 1997) and emotional distress, particularly post-traumatic stress (Li et al., 2002). However, it is not clear whether these effects extend to other internalizing problems, such as symptoms of depression, anxiety, and suicidal

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behavior. Additionally, no studies have addressed the mechanisms responsible for increased internalizing problems in gang members. Because gang members have greater involvement in delinquent behaviors than non-gang members (DeLisi, Barnes, Beaver, & Gibson, 2009) and delinquency in adolescence is linked to higher rates of internalizing problems, including depression, anxiety disorders, and suicidal behavior (Vermeiren, 2003), we hypothesized that delinquency would mediate any associations between gang membership and internalizing problems. Additionally, because gang affiliation increases adolescents' involvement in violence (Li et al., 2002) and exposure to violence is associated with multiple internalizing problems (Mrug, Loosier, & Windle, 2008), we expected that violence exposure would also mediate the links between gang membership and internalizing problems. Thus, this study examines the associations between early adolescents' gang membership and depression, anxiety, and suicidal behavior, and whether these relationships are mediated by delinquency and witnessing community violence.

Methods

This report utilizes data from Wave 2 of the Birmingham Youth Violence Study (Mrug et al., 2008) conducted in the greater Birmingham, Alabama, USA metropolitan area in 2004–2005. This study was approved by the institutional review board (IRB) of the University of Alabama-Birmingham. Of 603 total participants, 589 had valid data for all variables. Mean age in the sample was 13.2 years ($SD=0.9$); it was comprised of 52% males, 78% African Americans, and 21% Caucasians.

Adolescents reported on their gang involvement, anxiety, depression, suicidal behavior, delinquency, and witnessing community violence. Current gang membership was assessed with one dichotomous item ('I belong to a gang – True for me/Not true for me') from the Attitudes towards Gangs questionnaire (Nadel, Spellman, Alvarez-Canino, Lausell-Bryant, & Landsberg, 1996). This self-report assessment of gang membership has been shown to be valid in previous studies (Esbensen et al., 2001). Anxiety was measured with the total score from the Revised Children's Manifest Anxiety Scale (28 items) (Reynolds & Richmond, 1997). Six dichotomous items from the DISC Predictive Scales (Lucas et al., 2001) measured depression. Suicidal behavior was based on 2 dichotomous items assessing adolescents' plan or attempt to commit suicide in the past 12 months (Reifman & Windle, 1995). No suicidal plan and attempt was coded as 0, and either or both were coded as 1. Delinquency was measured by 27 items assessing adolescents' engagement in activities such as stealing, school truancy, and physically harming others in the last 12 months (Elliott et al., 1983, 1985; Flanagan & Maguire, 1990), coded 0 (never in the last year) 1 (once), or 2 (2 or more times). Witnessing community violence was computed as a sum of 3 dichotomous items assessing witnessing a threat of violence, actual violence, and threat or violence involving a weapon in the community in the last 12 months. Demographic covariates (family income, child's age, ethnicity, and gender) were measured with parent report and included as covariates. After univariate and bivariate statistics were examined, hierarchical logistic regressions evaluated the effects of gang membership on internalizing problems and whether delinquency and witnessing community violence mediated these relationships.

Results

Thirty-one adolescents (5%) reported belonging to a gang, 65 (11%) reported suicidal behavior, 431 (72%) reported any delinquent behavior, and 197 (33%) witnessed community violence (see Table 1 for descriptives). Bivariate correlations (Table 1) indicated that gang membership was positively associated with suicidal behavior, delinquency, and witnessing community violence, but unrelated to anxiety or depression. Delinquency and witnessing

community violence were both positively related to suicidal behavior. Logistic regressions showed that after adjusting for demographics, gang members were 3.4 times more likely to report suicidal behavior than non-gang members (Table 2). The addition of delinquency and witnessing community violence to the model reduced the odds ratio from 3.4 to 2.0 (*ns*). Sobel tests indicated that both mediated effects of gang membership on suicidal behavior were significant (through delinquency: $b=0.30$, $SE=0.06$, $t=5.11$, $p<.001$; through witnessing community violence: $b=0.08$, $SE=0.04$, $t=2.04$, $p<.05$).

Discussion

The results indicated that among early adolescents in this sample, gang membership was associated with suicidal behavior, but not with anxiety or depression. It is possible that the adolescents' young age or desensitization to negative emotions contributed to the lack of association between gang membership and anxiety and depression. Alternatively, gang membership may only be related to more violent internalizing behaviors, such as suicidal or other self-harm behaviors. As expected, gang members reported higher levels of both delinquency and witnessing community violence, which fully mediated the effects of gang membership on suicidal behavior. Thus, higher involvement in criminal activities and witnessing violence may be responsible for increased suicidal behavior in young adolescent gang members.

However, it is possible that other variables not measured in this study also explain higher levels of suicidal behavior in this population. For instance, death and injury among the youths' friends, hopelessness, low conventional bonds (e.g., with parents or schools), and perceptions of danger may also contribute to suicidal ideation and attempts among gang members. Additionally, because previous studies have established that community violence exposure is associated with increased symptoms of post-traumatic stress disorder (PTSD; McDonald & Richmond, 2008), PTSD symptoms may also contribute to suicidal behavior among gang members. Each of these potential mediators should be addressed in future studies.

The main limitation of this study is its cross-sectional design, which does not allow us to rule out alternative explanations of the obtained relationships. For instance, it is possible that youth who engage in delinquent behavior, are exposed to violence, or are suicidal are more likely to join gangs. Although this report comes from a larger study containing two waves of data, the prevalence of gang membership at wave 1 (mean age = 11.8 years) was too low (<1%) to study gang membership as a predictor of an increase in internalizing problems over time. Clearly, longitudinal investigations of gang membership and its precursors and consequences are needed.

Another limitation is the low percentage of adolescents who self-identified as gang members, which may have lowered the statistical power to detect significant differences between gang members and non-members. The low rate of gang membership is reflective of the young age of our participants (13.2 years) relative to the peak age of gang involvement at age 15 (Battin-Pearson, Thornberry, Hawkins, & Krohn, 1998), and is consistent with other reports using similarly aged samples (DeLisi et al., 2009). Although gang membership is relatively rare in early adolescence, it is associated with serious consequences that warrant its further study (DeLisi et al., 2009; Herrmann, McWhirter, & Sipsas-Herrmann, 1997; Li et al., 2002; Taylor et al., 2007).

Despite these limitations, our findings demonstrate that young adolescent gang members are at an increased risk for harm not only from others but also from themselves, and that suicidal behavior in this population may result from gang members' greater involvement in

delinquency and exposure to violence. Future research should utilize longitudinal designs to explore causal relationships between gang membership, suicidal behavior, delinquency, violence exposure, and other related variables. More closely-spaced assessments (e.g., every 3–6 months) may also be helpful in identifying shorter-term influences of gang membership and resulting experiences on psychosocial functioning in youth. Finally, because gang members were over 3 times more likely than their peers to report suicidal behavior, suicidal intentions and plans should be routinely assessed by health care providers and juvenile justice professionals dealing with gang members, and intervention services should be provided if needed.

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Table 1

Descriptive Statistics and Correlations of All Variables (N=589)

	M (SD)	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Age	13.16 (0.9)	1.00								
2. Family Income	6.37 (3.9)	-.31**	1.00							
3. Female, N (%)	290 (48)	-.05	-.08*	1.00						
4. Ethnic Minority, N (%)	480 (80)	.30**	-.33***	.11**	1.00					
5. Gang Member, N (%)	31 (5)	.11**	-.06	-.02	.05	1.00				
6. Delinquency	3.50 (4.4)	.24**	-.16**	-.12**	.16**	.31**	1.00			
7. Witnessing Community Violence	0.51 (0.8)	.22**	-.25***	-.07	.18**	.12**	.36**	1.00		
8. Anxiety	10.19 (6.5)	.01	-.17***	.16**	.13**	.06	.31**	.15**	1.00	
9. Depression	2.60 (1.7)	.04	-.14***	.09*	.13**	.02	.30**	.14**	.67**	1.00
10. Suicidal Behavior, N (%)	65 (11)	.11**	-.06	.12**	.03	.14**	.20**	.15**	.27**	.30**

Note. Family income is coded using 13 categories from <\$5,000 to >\$90,000.

* $p < 0.05$;

** $p < 0.01$.

Table 2

Logistic Regression Predicting Suicidal Behavior

	<i>B</i>	(<i>SE</i>)	<i>OR</i>
Step 1			
Female	0.85**	0.29	2.35
Age	0.39*	0.16	1.48
Family income	−0.02	0.04	0.99
Ethnic minority	−0.16	0.39	0.85
Gang member	1.22**	0.43	3.39
Step 2			
Gang Member	0.71	0.47	2.03
Delinquency	0.08**	0.03	1.09
Witnessing Community Violence	0.33*	0.16	1.39

Note.

*
 $p < 0.05$;**
 $p < .01$