

Peer Social Structure and Risk-Taking Behaviors Among African American Early Adolescents

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This study investigated associations between peer status, peer group social influences, and risk-taking behaviors in an urban sample of 647 African American seventh-grade students. The highest rates of problem behaviors were seen in the controversial peer status group, or those youth who were both highly liked and highly disliked by other youth. Findings also revealed contrasting patterns of peer group leadership. The more conventional, positive leadership style predicted lower rates, and the less mainstream, unconventional style predicted higher rates of involvement in problem behaviors. Conventional leaders were most likely to be popular status youth, while unconventional leaders were mostly to be both controversial and popular status youth. Controversial status youth were also more likely to be involved in deviant peer groups. Results highlight the importance of controversial status students as key influence agents during early adolescence. We discuss the implications of these results for preventive interventions to reduce adolescent problem behaviors.

KEY WORDS: risk-taking behaviors; peer status; leadership; problem behaviors.

INTRODUCTION

The purpose of this paper is to examine the relation between adolescent risk-taking behavior and several dimensions of adolescent social structure. First, although there is substantial evidence that peer rejection in elementary school is predictive of several forms of risk taking in adolescence, there are no data on the concurrent relation between adolescent peer social status and risk-taking behavior. Because of significant changes in the way adolescents view the challenging of adult rules from the way they did in childhood, there is the possibility that being rejected or

accepted by peers in adolescence may not have the same relation to risk-taking behavior in adolescence as in childhood. Second, recent distinctions in types of adolescent peer group leadership raise the importance of connecting these different types of peer leadership and peer influence to risk-taking behavior. Third, in light of consistent evidence that associating with deviant peers is an important risk factor in rule-breaking behavior in adolescence, we will examine the interrelationships between peer social status and types of peer leadership and deviant peer group membership. By addressing these questions in a sample of urban, African American seventh graders, we hope to advance an understanding of the relation of these different dimensions of peer social structure in a population of youth for whom concerns about adolescent risk-taking behavior have special significance in contemporary U.S. society.

There is a clear consensus that childhood peer status, in particular rejection by peers, is an important contributor to children's social and emotional development (Coie and Miller-Johnson, 2001; Newcomb *et al.*, 1993; Rudolph and Asher, 2000). Peer status is predicated on the perceptions and evaluations of peer associates, or the acceptance and/or rejection of children by their peers. A

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major focus of the peer relations literature has been on the links between peer rejection and maladjustment. Rejected children evidence high levels of disruptive, physically aggressive, emotional-reactive, and hyperactive-inattentive behaviors. In addition, they lack the prosocial skills to balance the negative social consequences of their aggressive tendencies (Bierman *et al.*, 1993, 1995). Such children also interpret the intentions of others negatively, enhancing their tendency to respond in a reactively aggressive manner (Dodge, 1993). Other children may shun rejected children, and such exclusion further amplifies problem behaviors (Hymel and Franke, 1985). In essence, the chain of negative interpersonal experiences of rejected children escalates over time and solidifies their negative group status.

Controversial status children also share some qualities with rejected children (Newcomb *et al.*, 1993; Parkhurst and Asher, 1992). They are highly disliked by at least some of their peers and show high levels of aggressive behavior. However, in contrast with rejected children, controversial status children have other attributes that buffer them from being excluded or rejected by their peers. Similar to popular status children, these children are highly sociable and interactive with their peers. They also evidence many positive social traits, have a lot of friends, and are quite visible in the peer culture. Consequently, despite their aggressive behavior, controversial status children are highly accepted by their peers. The mix of antisocial and popular attributes in controversial students is interesting, and there is not clear evidence that controversial peer status is a risk factor for subsequent maladjustment.

In contrast, numerous studies have shown that peer rejection during childhood is an important predictor of risk-taking behaviors and other negative outcomes during adolescence. Patterson and Bank (1989) found that peer rejection in fourth grade was linked to problem outcomes two years later, even after controlling for earlier problem behaviors. In a two-year longitudinal study (Bierman and Wargo, 1995), peer rejection, along with aggression, predicted higher levels of aggressive and disruptive behaviors and prosocial deficits. Coie *et al.* (1992, 1995a) followed a sample of African American children into adolescence. Rejection by peers in the third grade predicted externalizing problems in the sixth grade. Growth curve analyses through the 10th grade showed that for boys, both rejection and aggression predicted higher levels of externalizing symptoms. Peer rejection for girls also led to higher parent ratings of externalizing symptoms. Taken together, these studies provide good evidence that peer rejection in childhood leads to subsequent adolescent problem behaviors.

What is less clear, however, is whether similar predictive patterns can be found concurrently, in terms of the prognostic significance of contemporaneous peer status

for risk-taking behaviors during early adolescence. There is a dearth of sociometric data on adolescent samples. This is striking, given the heightened importance of peer relations in adolescence and the role of peers as powerful socializing agents. Two studies looked at the concurrent associations between peer rejection and adolescent problem behaviors (French *et al.*, 1995; Parkhurst and Asher, 1992). However, both of these studies focused on rejected subgroups. This seems sensible, given the strong relationship that exists between aggressive and problematic behaviors and peer rejection in childhood. This study expands on these investigations by examining categories of peer status beyond peer rejection in relation to risk-taking behaviors.

It is our contention that the social acceptance of problem behaviors during adolescence may be quite different than during that childhood. In support of this, Coie *et al.*, (1992) followed a sample of urban, African American children from third to eighth grades and looked at developmental shifts in associations between social acceptance and aggressive behavior. As expected, in the third grade, social preference was negatively associated with aggression such that aggressive children were more rejected by their peers. By the sixth grade, there was no association between aggression and social preference. However, in contrast with data in third grade, social preference in the eighth grade was *positively* associated with both aggression and deviant peer involvement. In other words, being aggressive and hanging out with deviant peers actually enhanced social acceptance among peers.

These results suggest that during adolescence, peer influence processes play an increasingly important role in promoting risk-taking behaviors. During the teen years, peer norms shift from compliance with those in authority (e.g., parents, teacher) to compliance with peers, and from peers congruent with authority figures to peers who challenge authority (Miller-Johnson and Costanzo, *in press*). In keeping with Moffitt's theory of adolescent-limited delinquency (1993), delinquency and other risk-taking behaviors are a statement of personal independence and a means to prove maturity and autonomy. Risk-taking behaviors become a coveted social asset in that they promote access to power and privilege. Thus, youth who engage in aggressive and other problem behaviors come to be highly regarded because they represent a means to autonomy and independence from adults. These rebellious leaders may act as magnets, and other teens may be drawn to those charismatic "antiestablishment" peer leaders who have the "gumption" to buck the adult authority system (Luthar, 1997).

Beginning efforts have been made to examine peer leadership among adolescents. Luthar and McMahon

(1996), in their sample of inner-city teens, found two contrasting patterns of admired, well-liked teens. The first group was characterized by conventionally valued behavior, such as prosocial behavior and academic achievement. By comparison, the second group was characterized by disruptive/aggressive behaviors and poor school performance. Similarly, Rodkin *et al.* (2000) found two subtypes of well-liked peers—popular-prosocial boys (“model”) and popular-antisocial (“tough”). The “tough” group rated themselves as being aggressive, “cool,” and athletic, while the “model” group described themselves as also being “cool” and athletic, but at the same time nonaggressive and academically competent. Both groups of these well-liked boys were highly central in their peer groups. These findings suggest that youth who are admired among peers are a heterogeneous group and highly aggressive youth may be among the most influential and prominent among their peers.

Our study builds on this small body of literature and defines two types of peer leaders. The first are those youth who are traditionally thought of as being leaders and are in conventional positions of authority. Next, we define a second more deviant, antiestablishment characterization. This type may not have formal status as leaders, but are natural leaders and set peer trends in dress, speech, and behavioral norms that promote a sense of independence from adult regulation. We anticipate that, in comparison to the conventional type of leader, the more unconventional “trendsetter” type will be more involved in risk-taking behaviors. It also makes sense to think that controversial youth will be leaders of these deviant peer groups in an unconventional sense. By comparison, while rejected youth may be involved in these deviant peer groups, we expect that they will be peripheral group members.

Peer influence processes may be especially germane for youth living in impoverished neighborhoods where the temptations are already great (Coie and Jacobs, 1993; Luthar, 1997). These youth are surrounded by high levels of interpersonal violence and drug use and are exposed to role models for whom violence and other risk-taking behaviors are a legitimate means of survival. In such neighborhoods, violence may be an effective strategy to overcome the realistic barriers of limited educational and economic opportunities. In short, behaviors viewed as deviant by mainstream adult society may be considered a source of status, and involvement in risk-taking behaviors may not only be considered somewhat normative but perhaps even adaptive. Thus, the social context of disadvantaged neighborhoods may promote peer group norms that encourage risk-taking behaviors.

Our study also addresses one methodological complexity facing the measurement of deviant peer

associations. Most studies have not considered the perspective of the youth who actually comprise the membership groups. Rather, deviant peer involvement has typically been defined either by the adults in control or by peers not necessarily connected to the youth. Such reports may be confounded by raters’ negative values concerning youth’s involvement in problem behaviors. Bagwell *et al.* (2000) found that others’ ratings of deviant peer associations were highly correlated with ratings of the target child’s aggression ($r = 0.88$). Similarly, Urberg *et al.* (1990) found that adolescent smokers overestimated the smoking behavior of their best friends. One important contribution of the present study is that deviant peer involvement was assessed by a measure that comes from the target child’s actual peer group and may be less biased by generally prosocial norms.

In summary, our study addresses three issues that relate to peer processes during adolescence and their contribution to early adolescent problem behaviors. First is to examine the association between concurrent peer status and problem behaviors during early adolescence. We hypothesize that the controversial status youth will be the most likely to engage in risk-taking behaviors (Coie *et al.*, 1992b). Next, we look at peer influence dimensions, namely deviant peer involvement and the two leadership styles, and their association with problem behaviors. We anticipate that in comparison to the conventional type of leader, the more unconventional “trendsetting” type will be more involved in risk-taking behaviors (Luthar and McMahon, 1996; Rodkin *et al.*, 2000). Last, we examine how the two peer leadership styles and deviant peer involvement are linked to peer status. We speculate that controversial status youth will be most likely to be involved in deviant groups and to serve in trendsetting leadership positions. While we expect rejected youth to be involved in deviant peer groups, we do not anticipate that they will be rated as peer group leaders (Luthar and McMahon, 1996; Rodkin *et al.*, 2000).

METHOD

Participants

Participants were African American seventh graders (approximately age 13) enrolled in a school-based intervention and evaluation project to reduce violence, substance use, and sexual behavior ($N = 647$; 46% boys). Students were recruited from four middle schools in a small Southeastern city school district characterized by children who were predominantly African American (90%) and of low socioeconomic status (65% of children in the school system were eligible for the free or reduced school

lunch program). All measures were group-administered at school. The assessment took place prior to the implementation of the intervention. Although measures were obtained for all students, given problems interpreting sociometric data about children who are in an extreme minority (Kupersmidt and Coie, 1990) only African American participants were included in this study. Data were collected in the fall of 1993 ($n = 307$; 45% boys) and 1994 ($n = 340$; 47% boys). The participation rates were 66 and 79% for the 1993 and 1994 cohorts. Students were paid \$5 for completing the survey.

Measures

Measures included peer-based sociometric ratings and youth self-reports of involvement in adolescent problem behaviors. The sociometric survey provided ratings of peer status, deviant peer involvement, and peer group leadership. Ratings of problem behaviors included involvement in risky sexual activity, substance use, and violence-related behaviors.⁵

Sociometric Survey

The sociometric survey yielded ratings of peer status, deviant peer involvement, and conventional and unconventional leadership. Sociometric surveys have shown very good validity in terms of predicting other behavioral outcomes (Coie *et al.*, 1992, 1995a). Unlimited nominations were used to avoid ceiling effects (Terry and Coie, 1991). Youth in each school were provided with a roster of all of the seventh graders in their school and asked to nominate peers who fit various behavioral descriptors. Nominations were summed for each student on the basis of the total ratings for that descriptor within their grade. Scores for each student were standardized within schools to control for the variability in grade size.

To assess *peer status*, students were asked to identify grademates whom they “liked most (LM)” and “liked least (LL).” Social preference and social impact scores were then computed. Social preference was the difference between the LM and LL scores (LM–LL). Social impact was the total of the LM and LL scores. On the basis of the Coie and Dodge (1983) classification, students were assigned to 1 of 5 mutually exclusive peer status groups using a 0.50 cutoff: popular–social preference greater than

or equal to 0.50, LL less than 0, and LM greater than 0; rejected–social preference of less than or equal to -0.50 , LL greater than 0, and LM less than 0; neglected–social impact less than or equal to -0.50 ; controversial–social impact greater than 0.50 and LM and LL greater or equal to 0; and average–both social preference and social impact between -0.50 and 0.50.

To assess *deviant peer associations*, youth nominated whom they “hang out with” and peers who “hang out with other kids who get into trouble.” A q -type factor analysis with oblique rotation was applied to a correlation matrix that indexed the extent to which each pair was consistently named as “hanging out” together (Coie *et al.*, 1995b). Participants received factor loading scores for each of the cliques in the school; the factor with the highest loading was designated as the primary clique. All participants received factor loading scores for each of the cliques in the school. Students with all clique loadings less than 0.25 were placed in a separate clique. To examine associations with deviant peers, a score was calculated that measured the extent to which each clique was composed of adolescents who get into trouble. This was achieved by taking the correlation between the participants’ scores on the “hangs around with kids who get into trouble” and their loading on each clique. A measure of association with deviant peers was then calculated for each child by summing over all cliques the product of the clique deviancy score by the child’s loading on that particular clique.

To assess *conventional leadership*, we used the sociometric item “persons who are leaders and good to have in charge.” *Unconventional leadership* was based on the descriptor “persons who other kids listen to; these people set the trends for other kids.” The scores for deviant peer involvement and conventional and unconventional leadership were continuous, ratings were standardized within schools to control for the variability in grade size.

Adolescent Problem Behaviors

Youth reported on their involvement in sexual behavior, substance use, and violence. Items were adapted from the Youth Risk Behavior Surveillance System (YRBSS; Centers for Disease Control, 1990). Dichotomous composite variables were calculated for these three domains. Recent sexual behavior was operationalized as whether or not the participant reported having had sexual intercourse in the last three months. Substance use was assessed by items relating to the use of cigarettes, alcohol, marijuana, crack/cocaine, and inhalants (gasoline, glue, or paint) and

⁵This study did not have data available on pubertal status. Nevertheless, it is important to recognize the important role played by pubertal status in adolescent problem behaviors (see Udry, 1994, for more detailed information). In particular, this may have confounded the data as seventh-grade females were well into puberty, while seventh-grade males were just entering puberty.

whether they had been “drunk or high.”⁶ Dichotomous composite variables were created for (1) cigarette use; and (2) use of alcohol, marijuana, crack/cocaine, or inhalants, or having been “drunk or high.” We also derived two violence composites. The first violence variable indicated whether the student had ever been badly hurt in a fight, shot at, cut, or stabbed. The second violence variable indicated whether the student had carried or used a weapon (time periods: weapon carrying—last 90 days; weapon use—last year).

Recruitment of Participants

Analyses compared those students with both sociometric and self-report data to those who did not have self-report data. The dependent variables for these analyses were sociometric scores as these were the only data available on all potential participants.⁷ Analyses were completed in the total sample and separately by cohort. Youth who were missing self-report data received lower peer ratings on the conventional, $t(893) = -6.54, p < 0.001$, and unconventional, $t(893) = -3.80, p < 0.001$, leadership sociometric variables than did youth with both self-report and sociometric data. The effect for unconventional leadership was significant for cohort 1 only, $t(349) = -4.03, p < 0.001$. Peer status also varied as a function of whether or not youth had both sociometric and self-report data, $\chi^2(4, N = 893) = 20.43, p < 0.01$. This result was significant for cohort 1 only, $\chi^2(4, N = 463) = 22.40, p < 0.01$. Neglected youth were more likely to be missing self-report data (51%) relative to the other peer status groups (average: 26%; controversial: 37%; popular: 22%; rejected 39%). Analyses for the “getting into fights” variable were not significant. These findings suggest that less information was available on youth who were more peripheral to the school setting (i.e., neglected status youth, youth receiving lower unconventional leadership ratings). These may be youth who were less noticeable in school or who may have been less frequently in attendance.

⁶At the time of this study, the YRBSS was administered to high school students only. As the prevalence of cigarettes and alcohol use was much greater than that of marijuana, crack/cocaine, and inhalants, the time period for use varied depending upon the substance to capture appropriate variability. For cigarette or alcohol use, the previous month constituted the time period; for all other substances, the period was the previous year.

⁷Students with permission to participate rated all students in the grade, regardless of consent status. Therefore, data on sociometric ratings were available for all students in the grade.

RESULTS

Descriptive Information: Peer Status, Sociometric Variables, and Problem Behaviors

The number of participants in each peer status group was as follows: popular ($n = 211$; 36% boys), rejected ($n = 131$; 65% boys), neglected ($n = 109$; 49% boys), controversial ($n = 94$; 45% boys), and average ($n = 102$; 41% boys). The proportion of boys and girls differed significantly across status groups, $\chi^2(N = 647) = 28.59, p < 0.001$. There were a disproportionately greater number of rejected boys (boys vs girls: 28% vs. 13%) and a disproportionately greater number of popular girls (boys vs. girls: 26% vs. 39%). The other peer status groups showed comparable rates by gender (boys vs. girls: average—14% vs. 17%; controversial—14% vs. 15%; neglected—18% vs. 16%). The proportion of youth reporting involvement in each of the following problem domains was as follows: sexual behavior—27%; cigarette use—13%; other substance use—17%; injury—14%; weapons—28%. Boys reported significantly higher rates of sexual intercourse $\chi^2(N = 629, 49.86, p < 0.001)$, injury $\chi^2(N = 647, 19.66, p < 0.001)$, and weapon-carrying- or weapons-related violence $\chi^2(N = 614, 21.64, p < 0.001)$ than did girls (boys vs. girls: sexual activity—41% vs. 16%; injury—21% vs. 9%; weapons—37% vs. 20%). The use of cigarettes and other drugs did not vary by gender.

Concurrent Associations: Peer Status and Adolescent Problem Behaviors⁸

Early adolescent sexual activity was significantly related to adolescent peer social status, $\chi^2(4, N = 624) = 19.57, p < 0.001$. Rates of sexual activity were considerably higher in the controversial group (44%) than in the other peer status groups. The next highest levels were shown in the rejected (30%) and the popular (27%) groups. Lower levels were seen in the average (21%) and the neglected (18%) groups.

Cigarette use was also significantly associated with peer status, $\chi^2(4, N = 619) = 16.36, p < 0.01$. Once again, the highest rates of cigarette use were reported by the controversial status youth (25%). Lower rates were reported across all other groups: rejected (13%), popular (12%), average (9%), and neglected (7%). Use of other substances besides cigarettes was unrelated to peer status, $\chi^2(4, N = 618) = 5.29, p > 0.20$. The two violence

⁸Analyses were also completed separately by gender, and the pattern of findings was similar for boys and girls. Therefore, we report results for the entire sample.

Table I. Social Influence Predictors of Problem Behaviors

Model	Predictors	Wald χ^2	β	Odds ratio	95% Interval	
					Lower	Upper
Sexual activity	Intercept	98.49***	-1.65			
	Male	17.11***	0.94	2.59	1.65	4.06
	Unconventional leader	28.42***	0.77	2.16	1.63	2.87
	Conventional leader	22.68***	-0.75	0.47	0.35	0.65
	Deviant peers	3.62 [†]	0.23	1.26	0.99	1.59
Cigarette use	Intercept	108.16***	-2.00			
	Male	4.22*	-0.60	0.55	0.31	0.97
	Unconventional leader	14.29***	0.59	1.80	1.33	2.44
	Conventional leader	14.62***	0.63	1.87	1.36	2.58
	Deviant peers	10.13**	0.54	1.73	1.32	2.26
Substance use—other	Intercept	80.60***	-1.41			
	Male	7.96**	-0.73	0.48	0.29	0.80
	Unconventional leader	2.49	0.23	1.26	0.95	1.69
	Conventional leader	10.35**	-0.53	0.59	0.43	0.81
	Deviant peers	8.20**	-0.39	0.68	0.52	0.88
Injured in a fight	Intercept	117.78***	-2.19			
	Male	2.33	0.42	1.53	0.89	2.64
	Unconventional leader	0.03	0.03	1.03	0.74	1.42
	Conventional leader	5.25*	-0.43	0.65	0.45	0.94
	Deviant peers	12.78***	0.52	1.69	1.27	2.25
Weapons involvement	Intercept	74.03***	-1.30			
	Male	3.56 [†]	0.41	1.51	0.98	2.32
	Unconventional leader	13.34***	0.49	1.63	1.25	2.12
	Conventional leader	14.71***	-0.55	0.58	0.44	0.77
	Deviant peers	7.54**	0.32	1.37	1.10	1.72

Note. With the exception of gender, odds ratios are based on a one standard deviation change. The sample size is 647.

[†] $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

variables were not related to peer status: injury— $\chi^2(4, N = 612) = 3.67, p > 0.40$; weapons— $\chi^2(4, N = 612) = 5.44, p > 0.20$.

Overall, sexual activity and cigarette use were highest in the controversial peer status group, with somewhat lower levels being reported in the popular and rejected groups. The lowest levels of risk-taking behaviors were seen in the average and the neglected groups.

Peer Social Influence Dimensions and Adolescent Problem Behaviors

In considering the relation of the two types of peer leadership to risk taking behavior, we thought it important to examine the relation between membership in a deviant peer group and risk-taking behavior in the same analysis, since these two dimensions of adolescent peer structure were very likely related. A series of multivariate logistic regression analyses were conducted. As shown in Table I, separate analyses were conducted for each of the dichotomous outcome variables (i.e., sexual behavior, substance

use, and violence). For each dependent variable, models were constructed with main effects for gender, deviant peer involvement, and conventional and unconventional leadership.⁹ Also reported is a goodness-of-fit (GOF) chi-square statistic (Stokes *et al.*, 1995). A nonsignificant GOF indicates a good model fit.

Conventional and unconventional leadership had significantly different relations with early sexual activity. Unconventional leadership increased the likelihood of early sexual activity, while conventional leadership decreased the likelihood of early sexual activity. However, membership in a deviant peer group was not related to early sexual activity. Gender was significantly related to early sexual activity; boys reported higher levels of early sexual intercourse than did girls. The final model fit the data very well (GOF $\chi^2(8) = 7.35, p = 0.50$).

Cigarette use was significantly associated with both types of peer leadership and deviant peer group

⁹Preliminary analyses tested the interaction of gender with each of the peer influence domains. Interactions for all of the problem behaviors were nonsignificant.

membership, as well as gender. The final model fit reasonably well ($GOF \chi^2(8) = 10.78, p = 0.21$). Parameter estimates indicated that unconventional leaders were more likely to report cigarette use than were conventional leaders, and those youth involved with deviant peers were also more likely to report using cigarettes than were those not in deviant peer groups. Girls were more likely than boys to have smoked cigarettes.

The pattern of results for other substance use was generally similar to that for cigarette use. Deviant peer involvement increased the probability of other substance use, while conventional leadership decreased the probability of other substance use. The effect for unconventional leadership was not significant. The significant gender effect reflected the fact that girls were more likely than boys to report using other substances. The GOF statistic was nonsignificant ($GOF \chi^2(8) = 12.49, p = 0.13$).

Two aspects of violence were examined: being a victim of violence and having or using a weapon. Involvement with deviant peers significantly increased the likelihood of being a victim of adolescent violence. Conventional leadership ratings decreased the likelihood of being victimized. The effects for gender and unconventional leadership were not significant. The final model for victimization fit the data quite well ($GOF \chi^2(8) = 4.53, p = 0.81$). Youth involved with deviant peers were more likely to carry or to use weapons than were youth not in deviant peer groups. Similarly, unconventional leaders were more likely to carry or to use weapons than were conventional leaders. The effect for gender was not significant. The resulting model fit the data reasonably well ($GOF \chi^2(8) = 12.13, p = 0.14$).

Thus, the two types of adolescent leadership showed contrasting patterns of association with problem behaviors. The unconventional, more "trendsetter" type of leader was more likely to report problem behaviors, while the conventional, more mainstream type of leader was less likely to report problem behaviors. Consistent with findings from other studies, deviant peer involvement also contributed incrementally to the prediction of substance use and violence.

Associations Between Peer Status, Deviant Peer Involvement, and Peer Leadership

The final set of analyses looked at the intersection of peer status with each of the peer social influence dimensions. Using a z score cutoff of greater than or equal to 0.5, we dichotomized the deviant peer involvement and the type of peer leadership variables. We first looked at the association between peer status and each of the

two leadership styles. Peer status was significantly related to both unconventional, $\chi^2(4, N = 647) = 188.44, p < 0.01$ and conventional leadership ($\chi^2(4, N = 647) = 155.02, p < 0.01$). The highest proportion of unconventional leaders was seen in the controversial and popular status groups (popular–54%; controversial–52%; average–10%; neglected–0%; rejected–6%). A different pattern emerged for the conventional leadership style. The proportion of conventional leaders was highest in the popular status group (57%) as compared with the other peer status groups (average–21%; controversial–26%; neglected–6%; rejected–5%).

We next looked at the relation between peer status and deviant peer involvement, and the association was highly significant ($\chi^2(4, N = 647) = 76.12, p < 0.001$). The proportion of youth involved with deviant peers was highest in the controversial status group (62%). A somewhat lower proportion of popular status youth were involved in deviant peer groups (41%). The proportion of youth involved with deviant peers was considerably lower in the average (27%), rejected (18%), and neglected (13%) groups.

DISCUSSION

The purpose of this study was to examine associations among peer status, deviant peer group membership, and type of peer leadership and early adolescent involvement in sexual behavior, substance use, and interpersonal violence. First, in contrast to the results of studies linking childhood peer rejection to adolescent problem behavior, the present findings highlight an important relationship between controversial peer status and adolescent problem behaviors. Second, there has been very little published from a peer relations perspective on the relation between peer leadership, peer status, and risk-taking behavior. Our results suggest that a more unconventional peer group leader may be influential in promoting norms that support involvement in risk-taking behaviors. This "trendsetter" type of leader was also most likely to be of controversial peer status. Such findings may be particularly relevant to intervention efforts to reduce adolescent problem behaviors.

Consistent with our hypotheses, controversial status youth exhibited the highest rates of involvement in risky behaviors. These controversial status students, while disliked by some, are also highly accepted by others and quite visible in the peer culture. Although they are likely to be highly disruptive and aggressive, these youth typically possess many positive and effective social qualities (Newcomb *et al.*, 1993; Parkhurst and Asher, 1992). Thus,

they are likely to have the requisite interpersonal skills to influence others and to be highly persuasive in attracting a following of other peers. Our results support sociological views of popularity and status (Adler and Adler, 1998; Eder *et al.*, 1995). In these ethnographic studies, well-liked adolescent males are described as being tough, cool, and belligerent. Other characteristics include having "savoir faire" or well-developed interpersonal skills that are used to influence or control other youth. Our results converge with these conclusions in documenting the fact that many admired and very influential youth are highly involved in risk-taking behaviors.

Also as hypothesized, it was the controversial status youth, and not the rejected youth, who were the unconventional peer leaders. Controversial youth are apparently well liked and socially skilled, and therefore well equipped to take on positions of authority. By comparison, rejected status youth may have social skill deficits that would interfere with their ability to be influential. While rejected youth may belong to deviant peer groups, they may be peripheral or "sideline" members of these groups. Thus, in early adolescence, being rejected seems to mean being only a peripheral member of adolescent peer groups, including the deviant peer groups. These results underscore the importance of distinguishing between merely being considered a member of a deviant peer group and one's rank or status within that group.

Related to this, deviant peer group involvement and controversial status showed different patterns of association with risk-taking behaviors. Specifically, deviant peer involvement was associated with violence-related behavior and substance use, but not with early sexual activity. Even more interesting is the fact that while deviant peer involvement predicted being a victim of violence, controversial peer status was not associated with being a victim of violence, even though it was the controversial status students who seemed to be the leaders of these deviant peer groups and who were most likely to report sexual activity. What these findings suggest is that the "rank-and-file" members of deviant peer groups may not combine the propensity for risk with positive interactive attributes. Hence, they may be victimized by other youth (perhaps even by other deviant peer group members) and are not as popular with members of the opposite sex. These rank-and-file deviant peer group members do not appear to benefit socially from their association with these deviant peer leaders, and instead are placed in social situations that are primed for physical abuse and taunting by other peers. In contrast, the controversial status youth seem to be influential and admired by fellow deviant peer group members who may envy them for their success with the opposite sex. These controversial status youth appear to

be more charismatic leaders who set the pace for delinquent acts and other activities, although they themselves do not appear at increased risk for being victims of violence themselves. These results highlight the importance of understanding the varying ways that peer leadership and other structural aspects of adolescent peer society are related to involvement in risk-taking and problem behaviors.

Our findings support recent work showing that early adolescent peer group leaders are a heterogeneous group and that highly aggressive, problem-prone youth may be among the most influential and well liked among their peers (Luthar and McMahon, 1996, Luthar, 1997; Rodkin *et al.*, 2000). Traditionally, the study of peer leadership has focused on more conventional, adult-sanctioned leaders (e.g., Edwards, 1996). Indeed, our results indicated that some leaders were highly popular and involved in lower levels of problem behaviors. However, these youth are not likely to be influential among a broad array of peers (particularly those peers inclined toward deviance). Rather, during early adolescence, it seems to be the unconventional "antiestablishment" leader who is responsible for promoting the shift in peer attitudes and behavior toward greater risk-taking. On the surface at least, this latter form of peer leader has greater influence on peer orientations that challenge conventional values. Other teens may be enticed by the charismatic, rebellious nature of these "antiestablishment" leaders, and this kind of "followership" may be seen as an effective way to establish independence from adult regulation. These findings suggest the importance of additional study of these "trendsetter" leaders if we are to successfully intervene in the powerful identity-promoting structure of adolescent peer groups. Important questions for future research include how controversial leaders induce the internalization of peer group norms; and how and why a follower moves to adopt unconventional behavior as part of one's own repertoire.

Our findings suggest that, at least in this sample of inner-city, urban African American youth, the typical dynamics between peer acceptance and risk-taking orientations may be quite different than what has been found in younger samples. In part, this may be due to the impact of the broader social context on reinforcement contingencies for risky behaviors. Youth in inner cities are often faced with choosing between the values of the local peer community and those of the larger adult society. Winfield (1995) coined the term "oppositional social identity" as a response to tensions between these viewpoints. The social context of teens living in low socioeconomic neighborhoods may promote distinct ideologies, role expectations, and behavioral standards that impact the normative structure supported by peer groups (Burton *et al.*, 1995). Teens

are most likely to model the behaviors that are normative in their communities. Thus, in high crime, high poverty neighborhoods, risk-taking behaviors may appeal not only to other problem-prone youth, but also to the larger body of mainstream youth. It remains unclear whether these shifting standards of behavior also affect adolescents from more privileged communities and reflect broader adolescent trends. Moffitt (1993) postulated that adolescents are caught in a "maturity gap" when they are biologically capable of taking on adult responsibilities, yet are expected to delay positive adult responsibilities. Antisocial behavior becomes a statement of independence and autonomy and a way to evidence maturity in the social structure. Replication of our findings in other samples is important to determine whether these results generalize to youth living in other sociocultural contexts.

These findings have implications for prevention efforts to reduce adolescent problem behaviors. Most intervention strategies (e.g., social skills training, knowledge-based curriculum) utilize an authority-directed approach. Given that adult-oppositional tendencies are a strong component of powerful identity-seeking propensities in adolescent peer groups, such "top-down" intervention approaches are not likely to have long-lasting effects. Even when interventions have utilized peer leaders (e.g., Perry *et al.*, 1996; Price *et al.*, 1993), these efforts have relied on mainstream authority figures, and such leaders are likely to have only a limited sphere of influence on the reduction of broader peer-supported risk-taking behaviors. If, as our data suggest, that well-liked and influential youth are highly involved in problem behaviors, then intervention efforts must consider the embeddedness of peers in these powerful group contexts. Our findings would suggest reaching adolescents through peer leaders, including the use of more unconventional, controversial status peers who are antiestablishment types of leaders (Coie and Jacobs, 1993; Luthar, 1997; Miller-Johnson and Costanzo, in press).

Several limitations of this study should be noted. First, the data were cross-sectional, and as such, could not address questions of causality and the direction of effects. Second, youth ratings of involvement in problem behaviors may have been biased to some extent by the fact of the survey being administered in a school setting. While confidentiality was assured and the measures were group-administered, the sensitive nature of the questions may have influenced the veracity of the responses. Although there is evidence showing that questions such as the ones used in the study can provide reasonable data (Weinhardt *et al.*, 1998), we recognize concerns regarding the validity of self-report data on sensitive topics and possible under- or overreporting (Catania *et al.*, 1990). The study did take

several steps to increase the validity of the self-report data, including the use of briefer reporting periods, literacy assessment to guide the reading level of the questions, and providing clear and concise instructions. Third, participants were exclusively African American and from low SES neighborhoods and the findings may not generalize to other youth. Fourth, attrition analyses indicated that neglected peer status youth and youth receiving low leadership ratings were less likely to complete the self-report survey. Thus, our findings may not generalize to students who are more marginal in the school setting.

Despite these limitations, this study suggests increasing complexity in the peer social structure of adolescent peer groups. Our results highlight an important relationship between controversial peer status and adolescent problem behaviors, and emphasize the need to expand definitions of leadership within adolescent peer groups. Such findings underscore the importance of taking into account peer group social dynamics in designing interventions to reduce problem behaviors among adolescents.

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