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Norm-Narrowing and Self- and Other-Perceived Aggression in Early-Adolescent Same-Sex and Mixed-Sex Cliques

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Abstract

We examined the relations between group context and self- and other-perceptions of aggressive behavior in an ethnically-diverse sample of 168 male and female grade 7 adolescents. We used self- and peer-reports of aggression in high- and average-aggressive mixed-sex and same-sex cliques to examine whether group members would assimilate their self-report of aggression to the aggression report of their peers by way of perceived homophily or, conversely, engage in contrast and see their level of aggression as comparatively low in the face of high-aggression peers. Among boys in mixed-sex groups, comparison with highly-aggressive others resulted in a self-perception of lower levels of aggression than those perceived by their peers. Conversely, girls in mixed-sex groups reported their own levels of aggression to be higher than those perceived by their peers. We interpret these findings in terms of the notion of “norm narrowing”: rather than being set by the larger social environment, such as the school, norms are more narrowly determined within one’s immediate peer group.

Keywords

Norms; groups; adolescents; aggression; gender

Our understanding of the form and function of the ties among individuals who gather in groups has been well-established (Baldwin, 1902). One classical social science view contends that our essential sense of self derives in good part from comparing ourselves to others, most especially those in our own social groups and networks (Cooley, 1922/1983; Festinger, 1954). Several social psychological theoretical orientations support the idea that the groups within which individuals function are important for establishing and transmitting norms, influencing behaviors, and supporting identity processes (Abrams & Hogg, 1990; Akers, 1977; Bandura, 1977; Oetting & Beauvais, 1986; Oetting & Donnermeyer, 1998). In early adolescence, the peer group takes on increasing importance as a context for development and adjustment (Kupersmidt & Dodge, 2004) that facilitates socialization of both positive and negative behaviors (Oetting & Donnermeyer, 1998). One way in which behaviors may be socialized or transmitted is through perception of the norm for that behavior within the group. However, such norms may be distorted within groups for which the behavior is characteristic and extreme within the social environment, such as high aggression. In this study, we examine the extent to which individuals in groups characterized by extreme and generally non-normative behavior

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tend to employ norms of their immediate and extreme membership group and not broader peer-group norms as a basis for self-perception.

Adolescents affiliate and form groups with those who share with them one or more characteristics or behaviors, such as sex (Feiring & Lewis, 1991; Maccoby, 1988); level of aggressive and deviant behavior (Cairns et al., 1988; Giordano, Cernkovich, & Pugh, 1986; Hamm, 2000; Kandel, 1978; Leung, 1996); or academic attitude, goals and behaviors (Cohen, 1977; Leung, 1996; Hamm, 2000). Aggressive behavior is one characteristic around which early adolescents form groups (e.g., Dishion, Andrews & Cosby, 1995; Farmer, Leung, Pearl et al., 2002), as aggressive youth tend to cluster in groups with other aggressive youth (Cairns, Perrin & Cairns, 1985; Espelage, Holt, & Henkel, 2003; Xie, Cairns & Cairns, 1999). Moreover, group members' aggression is readily apparent to other members of the group, as they are likely to engage in mutually reciprocal aggressive interactions (Cairns, Leung & Cairns, 1995; Hall & Cairns, 1984) or in reinforcing deviant talk (Dishion & Owen, 2002; Dishion, Spracklen, Andrews & Patterson, 1996).

Such observed homophily (Lazarsfeld & Merton, 1954) may result from adolescents influencing one another through reciprocal socialization or by selecting others who are like them as associates (Baumann & Ennett, 1996; Cohen, 1977; Ennett & Baumann, 1994; Kandel, 1978, 1986; Kinderman, 1998). In their seminal paper, Baumann & Ennett (1996) laid out the prevailing belief in and empirical support for the contention that drug-using peers are the most important and influential factor on the uptake of drug use by adolescents. They noted that several mechanisms are posited to account for such influence, including attitude, norm and behavior transmission; the provision of drug use models; and opportunities and social support for drug use. However, the authors argued strongly that there are concerns about the strength and reliability of the existing evidence for the influence model of drug use. Rather, they asserted that evidence of two other processes, selection and projection, qualify the likely importance of influence processes. Selection of friends who exhibit similar levels of a given behavior (i.e., homophily) is likely to result in the moderate correlations between adolescents' own and friends' or peers' drug use often cited as providing support for the influence explanation. Baumann and Ennett (1996) argued that if adolescents choose friends who are similar to them on their level of existing drug use behavior, maintain ties with or restrict peer group membership to those who behavior in similar ways, and disband ties with those who no longer behavior similarly, then associations between own and others' use cannot be explained by or attributed to influence. The relative importance of peer influence and peer selection processes for explaining the similarity between self and peer levels of adolescent risk and deviant behaviors continues to be debated, with evidence for both processes often presented (Engels, Knibbe, Drop et al., 1997; Kobus, 2003; Simons-Morton & Chen, 2006; Urberg, Degirmencioglu & Pilgrim, 1997).

An important function served by group membership in early adolescence is as a source of behavioral norms and there is a substantial literature on the role of peer norms in understanding adolescent behavior, especially in the area of deviant behavior (Aseltine, 1995; Hawkins, Catalano & Miller, 1992; Olds & Thombs, 2001). Adolescents' perceptions of the normative level of substance use, for example, strongly predict their own use, even when those norms are objectively incorrect (Jackson, 1997; Unger & Rohrback, 2002). Further, what is considered normative can vary widely depending upon the level of the behavior within a defined context, such as a classroom (e.g., Chang, 2004; Henry, Guerra, Huesmann, et al., 2000; Stormshak, Bierman, Bruschi et al., 1999) or school (e.g., Kumar, O'Malley, Johnston et al., 2002; Pokorny, Jason & Schoeny, 2004).

Several studies have examined context effects on various forms of aggressive behaviors among elementary-school children. Stormshak et al. (1999) reported that in first-grade classrooms

where the normative level of aggressive behavior was relatively high, aggressive children were accepted, whereas when aggression was normatively low in the classroom, aggressive children were less accepted. This effect was notably stronger for boys than for girls. Henry and colleagues (2000) reported on the effects of classroom norms for aggression on the acceptability of aggression among an ethnically-diverse sample of economically-disadvantaged elementary school children. They found that aggressive children were more popular and less rejected in classrooms where aggressive behavior was more acceptable. Boxer et al. (Boxer, Guerra, Huesmann et al., 2005) examined the effects of peer group levels of physical aggression among 3rd and 6th graders participating in a small group selective intervention against aggression. They found that group mean level of aggression affected individual levels of aggression over time, such that children with below-average aggression became more aggressive, and children with above-average aggression became less aggressive. Further, these effects were more pronounced when the child was more discrepant from the group mean.

Additional studies provide evidence that context-dependent relations between perceived or descriptive norms and forms of aggressive behavior are likely to obtain amongst older children and adolescents. In a study of predominantly white 6th-8th graders, Espelage and colleagues (2003) used self-reports of bullying and fighting and social network analysis of respondents' within-school friendship to define individuals' peer groups. They report that bullying and fighting within the peer context significantly added to the variance in individual level bullying and fighting over the course of the school year for both males and females, examined in separate sex-specific models. Salmivalli & Voeten (2004) investigated the effects of classroom context (i.e., group norms) on bullying behaviors among children aged 9 through 12 in Finland. They report that group norms explained additional variance in bullying behaviors over and above individual anti- or pro-bullying attitudes. These effects were more pronounced in the older grades and among females.

Gender, at both the individual and the group level, may serve as a context for norms and behavior, especially among early adolescents. From early childhood through early adolescence, peer groups tend to be same-sex (Cairns et al., 1985; Hallinan, 1980). However, in the transition to adolescence, the gender homogeneity of friendship and peer groups begins to break down (Maccoby, 1998) and there is a move towards mixed-sex groups (Cairns, Leung, Buchanan & Cairns, 1995). The emergence of mixed-sex groups in this developmental epoch may act to intensify the behaviors associated with making oneself attractive to the opposite sex. For males, the immediate presence of girls in the clique may encourage attempts to establish a pecking order through displays of aggression and other deviant behavior (Wilson & Daly, 1985). Conversely, expression of physical aggression by girls is not socially valued; rather, girls are more concerned with and motivated by social acceptance (Rubin, Bukowski & Parker, 1998), especially in terms of their burgeoning relationships with boys (Dodge, 2003). Thus, girls in mixed-sex groups may be motivated to suppress visible aggressive behaviors.

Boys are more concerned than are girls with status within the peer group (Rubin et al., 1998), which may make them more susceptible to or aware of the prevailing norms of their groups. Overt or physical aggression is both less prevalent (Archer, Pearson & Westeman, 1988; CDC, 2000) and less acceptable among girls than among boys (Cairns et al., 1985; Heimer, 1996). Further, peer nominations for overt aggression vary by gender of nominator and target: both boys and girls nominate more boys than girls as aggressive; girls nominate other girls as aggressive somewhat more than boys nominate girls (Card, Hodges, Little et al., 2005). When girls are being rated by male and female peers, they are likely implicitly compared to all others, including the boys, more of whom are likely to be rated as aggressive than are girls (Cairns et al., 1985; Crick & Grotpeter, 1995). However, when the girls are rating themselves, it is likely that they are comparing themselves only to other *girls*. Finally, the relation between aggression

and peer social status among early adolescents varies by gender and style of aggression (e.g., indirect, social, physical; Salmivalli, Kaukiainen, & Lagerspetz, 2000) and extant findings suggest differential effects or strength of effects for boys and girls in the ways aggressive behaviors are influenced by small group and classroom context (Espelage et al., 2003; Salmivalli & Voeten, 2004; Stormshak et al., 1999). In sum, there are reasons to expect that the gender of the target and the gender-mix of the clique will moderate relations between individual-level and clique- or group-level aggressive behavior, which in turn should affect the perceived normativeness of aggression.

The literature reviewed above provides evidence that individuals' aggressive behaviors are to some extent influenced by the prevailing contextual norm and that such norms may differ among subgroups within the social environment (e.g., small groups, classrooms). We were interested in understanding how observed homophily within adolescent peer groups or cliques – and by extension, dissimilarity with those *not* within the group or clique – might operate to provide behavioral norms and how these norms might be differentiated from the wider norms of others outside the clique. It is apparent that there may be quite different standards for behavior within and outside the small peer group. The present study adds to the extant literature in a number of ways. First, we use an ethnically diverse, grade-wide sample of early adolescents; second, we examine the processes of small group norms within naturally occurring and peer-identified cliques using social cognitive mapping (SCM) procedures, enhancing the probability of close, reciprocal ties between group members; third, we use both self-reports and peer reports of aggression; and fourth, we examine these processes for males and females within both same- and mixed-gender cliques.

Hypotheses

It is our contention that when an individual is a member of a clique for whom a behavior is characteristic and extreme within the larger peer group (i.e., high aggressive behavior), that individual is more likely to use the level of the behavior *within* the clique, rather than that *outside* the clique in the larger peer group, as a standard or norm to which to compare his or her own behavior. The development of this hypothesis was guided by two competing predictions derived from social psychological theory. The assimilation hypothesis states that, given membership in highly aggressive cliques, group members will assimilate their self-report of aggression to the aggression report of their peers by way of perceived homophily. This hypothesis would be supported if self-reports of aggression were not different from peers reports for highly aggressive adolescents.

Alternatively, the contrast hypothesis states that group members will contrast their own perceived level of aggressive behavior with the normative standard set by their immediate peer clique and rate their level of aggression as comparatively low compared to the other high-aggression peers in their clique. That is, the implicit norm for aggressive behavior narrows to that derived from the immediate clique members, rather than that derived from the wider peer network. This hypothesis would be supported if self-reports of aggression were found to be lower than peer-reports of aggression among the high-aggressive group members.

We were also interested in examining if there are gender-specific processes of self- and other-attributions in terms of deviant behaviors such as aggression. We expected that the mean peer ratings of girls' aggression would be lower than girls' own ratings of their aggression. Because the peer ratings are based on the mixed-gender peer group (that is, all peers rate all other peers in the grade), we argue that even the most aggressive girls would be contrasted with all other peers, including the boys. Conversely, girls are likely to compare their own and other girls' aggressive behavior only with other girls' behaviors, not with all other peers.

We also predicted that the mixed-sex group context will enhance the display of aggression for boys and reduce the display and acceptance of aggression for girls. We expect, then, that among members of mixed-sex groups, boys' self-reports of aggressive behavior will be lower than peer reports, while girls' self-reports will be higher than peer reports. Finally, we expected the impact of the group norms on both self- and other-assessments of aggression to be stronger among boys than among girls.

Methods

Participants

The participants were part of a larger planned longitudinal study of peer social influences on substance use and other risk-taking behaviors in grades 7 through 9. The larger study took place in a school comprising grades 6 – 12 in a mid-size Southeastern city. Participants in the present study (who completed all components of the larger study) were seventh graders assessed at two time points, Fall, 2004, and Spring, 2005. Parent consent and student assent were obtained for 83% of the 7th grade students, for a total of 168 (51% female; 42% European American; 41% African American, 5% Latino, 10% multi-ethnic, and 2% other; mean age at Time 1 = 12.2, SD = 0.52).

Procedure and Measures

In both Fall and Spring semesters of the grade 7 school year, project staff administered a survey to consented students during a 100-minute class period. All measures were collected at both time points and students received a small incentive (five dollars in cash) for completing the survey.

Social cognitive map—Participants were asked about social networks within their grade at their school, beginning with the question: “Are there some kids here in seventh grade who hang around together a lot?” Participants were then instructed to write the names of the students who hang around together, naming all the groups of seventh graders that they could, using free recall (i.e., no class list was provided). As study participants reported on all 7th graders in the school, these nominations were based on 203 students at each time point. The groups derived in Fall and Spring were separately submitted to a computer program (SCM version 4.0) to derive composite groups – or cliques – within a social network based on the Social Cognitive Map procedure developed by Robert Cairns and his colleagues (Cairns, Gariepy, & Kindermann, 1989).

Clique gender balance—Using cliques derived from the social cognitive map procedure, clique gender balance was defined as the proportion of the target student's clique members (including the target student) who were male. This was calculated separately for Fall and Spring clique assignments.

Sociometric peer nominations—Participants were provided with a roster of all the seventh grade students in their school (n = 203) and asked to make unlimited nominations of peers who fit into various behavioral and social influence descriptors.

Sociometric aggression was based on nominations for the descriptor “fights a lot, hits others, or says mean things to them.” We utilized a packaged computer program (Sociometric Collection and Analysis (SCAN) version 5.0.5; DeRosier & Thomas, 2003) to create standardized aggression scores. SCAN is a comprehensive data collection, entry, analysis and reporting program that streamlines and standardizes the peer nomination based sociometric methodology (3C Institute for Social Development, YEAR?).

Clique aggression—Clique aggression was derived from the sociometric aggression ratings of those persons in each student's clique, as derived from the social cognitive maps. This score was only created for students assigned to a clique. The clique aggression score is the mean of the standardized sociometric ratings for aggression for members of the target student's clique, excluding the target student. Again, this was derived separately for Fall and Spring clique assignments.

Student survey—A measure of *self-reported aggression* was collected from the student survey and was derived from a subscale of a 25-item measure adapted from items from the National Youth Survey (Elliot, Ageton, & Huizinga, 1985; Elliot, Huizinga, & Menard, 1989). This measure assesses the number of occasions on which respondents have engaged in various deviant behaviors over the 6 months prior to survey administration. Dichotomous variable codes were created for each item, where 1 = at least one occurrence of the behavior, and the mean of these was taken to create the scale score. Scale scores were created only when 66% or more of the responses were non-missing. Higher scores indicated greater engagement in the behavior. The *aggression* subscale included six items, including “threatened to hit someone in order to get something,” and “attacked someone with the intent to hurt them” (Cronbach's alpha = .68).

Results

Missing data

Only students who were assigned to a clique in either the Fall or Spring (i.e., not coded as isolates) were included in the analyses. In the entire grade, there were thirteen isolates in the Fall (five female, eight male) and seventeen in the Spring (four female, thirteen male). Among the 168 consenting students, this resulted in a potential sample size of 157 (76 male; 73 African American, 66 White, 18 other) in the Fall and 156 (73 male; 72 African American, 66 White, 18 other) in the Spring, or approximately 76% of the total grade-wide student body. Of these, almost all (151 or more) yielded data on each of the dependent measures. No special methods were applied to deal with missing data.

Descriptive statistics

Descriptive statistics – means, standard deviations, correlations -- for the independent and dependent variables are presented in Table 1. For simplicity, these were calculated at the individual level, even for those variables measured at the clique level.

In the Fall, including all students in the grade, there were 34 cliques ranging in size from 2 to 16 students (median = 5), including 13 all-male cliques (81 boys; 3 to 14 per clique), 14 all-female cliques (70 girls; 2 to 9 per clique), and 7 mixed-sex cliques (9 boys, 30 girls; 2 to 16 total per clique). The all-male cliques ranged in mean aggression from -0.66 ($SD = 0.01$) to 2.31 ($SD = 0.14$), with a median mean aggression of -0.40 ($SD = 0.14$); the median within-clique standard deviation was 0.14. The all-female clique mean aggression scores ranged from -0.71 ($SD = 0.01$) to 0.51 ($SD = 0.27$), with a median mean aggression of -0.57 ($SD_{low} = 0.05$, $SD_{high} = 0.02$); the median within-clique standard deviation was 0.05. Two of the seven mixed-sex cliques had only one non-missing value on aggression; the remaining sample is too small to detail. Girls' mean sociometric and self-report aggression scores in the Fall were -.15 ($SD = .78$) and .19 ($SD = .24$), while boys' mean scores were .16 ($SD = 1.18$) and .25 ($SD = .28$), respectively.

In the Spring semester, there were 25 cliques ranging in size from 3 to 14 students (median = 7), including 10 all-male cliques (61 boys; 3 to 10 per clique), 9 all-female cliques (79 girls; 5 to 14 per clique), and 6 mixed-sex cliques (24 boys, 22 girls; 3 to 12 total per clique). The all-

male cliques ranged in mean aggression from -0.67 ($SD = 0.03$) to 1.81 ($SD = 0.42$), with a median mean aggression of -0.34 ($SD_{low} = 0.05$, $SD_{high} = 0.02$); the median within-clique standard deviation was 0.07 . The all-female clique mean aggression scores ranged from -0.69 ($SD = 0.02$) to 1.23 ($SD = 0.04$), with a median mean aggression of -0.60 ($SD = 0.01$); the median within-clique standard deviation was 0.02 . The six mixed-sex cliques show a mean aggression range of -0.63 ($SD = .04$) to 1.96 ($SD = .02$), and the median mean aggression was -0.21 ($SD_{low} = 0.66$, $SD_{high} = 0.05$); the median within-clique standard deviation was 0.03 . Girls' mean sociometric and self-report aggression scores in the Spring were $-.21$ ($SD = .72$) and $.20$ ($SD = .23$), while boys' mean scores were $.23$ ($SD = 1.21$) and $.28$ ($SD = .29$), respectively.

Tests of hypotheses

The key hypotheses were tested by conducting separate multilevel models for both dependent variables: sociometrically rated aggression and self-reported aggression. In each model, the outcome aggression variable was measured at two occasions, clustered within student. Student sex and student race were measured at the student-level; the other predictors, clique aggression and clique gender balance, were measured at the level of occasion (semester). All interactions of student sex, clique aggression, clique gender balance, and occasion of measurement (Fall vs. Spring) were included; only the main effect of student race (coded as African American, White, and other) was included as a covariate. Degrees of freedom were calculated by the between-within method. Time of measurement did not yield significant main effect or interaction terms in any model, and will not be discussed further.

For both dependent variables, the three-way interaction between target student sex, clique aggression, and clique gender balance was significant (sociometric aggression: $t(132) = 2.02$, $p = .045$; self-reported aggression: $t(124) = 2.88$, $p = .005$). The patterns of the interactions differed, and are discussed below. To probe each interaction, we plotted, separately for males and females, the expected value of the dependent variable at representative values of the other predictors. For clique aggression, we used the conventional values of -1 and $+1$ standard deviations from the mean. For ease of interpretation, we recast clique gender balance into clique gender homogeneity. For target students of each gender, we selected values representing a completely homogeneous clique and one representing a clique comprising 80% of the opposite gender; thus, the values used differed by target student gender, but we believe this best illustrates the effects of clique homogeneity.

To facilitate our discussion of the results, we present two figures demonstrating both of the three-way interactions reported above. Figure 1 shows the interaction for sociometrically-rated aggression. As shown in part (a), females are rated as substantially less aggressive if they are in a homogeneous clique rather than a male-dominated one, even controlling for clique sociometric aggression (though the effect is somewhat larger for more aggressive cliques). The overall effect of clique aggression is negative. For males (part b), the overall effect of clique aggression is positive, especially for female-dominated cliques.

Figure 2 shows the expected values for self-reported aggression. For females, the simple effect of gender homogeneity appears to be absent; the most prominent effect is that, for girls in mixed-sex cliques, self-reported aggression is negatively associated with clique aggression; whereas for girls in homogeneous cliques the association is not apparent. For boys, the results are in sharp contrast to those for sociometric aggression. There is a striking negative association between clique aggression and self-report aggression for boys in mixed-sex cliques; as for girls, the effect is absent in homogeneous cliques. Overall, boys in mixed-sex cliques report less aggression.

Discussion

In this study, we examined the extent to which adolescents group together in peer-identified cliques according to their level of aggressive behavior and how membership in these cliques affects adolescents' perceptions of their own levels of aggressive behavior. In line with previous research (e.g., Cairns, Cairns, Neckerman et al., 1989; Dishion et al., 1995), both high- and low-aggressive cliques identified in this sample of early adolescents exhibited moderate to high homogeneity in aggression scores, indicating that cliques can be characterized by homophily on aggressive behavior. Further, our results suggest that members of more aggressive cliques use as their standards for comparison the behavior of their clique-mates rather than that of the wider grade-level network, although there were considerable gender effects, both at the individual and the context or group level.

In line with the assumptions of a social comparison model of self-perception effects, we found that boys in mixed-sex cliques reported their level of aggression to be *lower* than that perceived by their peers in the grade-level network, indicating some distortion of their own level of aggression (Lochman, 1987; Lochman & Dodge, 1998). Thus, it appears that these boys are using as their norm or standard for comparison the level of aggression within their clique, rather than the normative standard in the wider peer group. Conversely, girls perceive themselves as being *more* aggressive than they are perceived to be by their peers. As girls are generally less publicly and overtly aggressive (Archer et al., 1988; Cairns et al., 1985), they may appear to others as less aggressive than they perceive from their own private self observations.

An important question raised by our findings is why these apparent social comparison effects occur only in mixed sex groups and in different ways for boys and girls. It may be that in mixed-sex groups among early adolescent teens, aggression is paraded as a way to establish a pecking order, and this would be more likely to happen in mixed gender groups. For boys, it is likely that aggression is perceived to make one more attractive (Bukowski, Sippola, & Newcomb, 2000). In mixed-sex groups, the aggression of one's (male) peers – that is, one's clique associates of the same sex – may become more evident and it may well be that aggression is seen as a device for gaining increasing acceptance (see also, Prinstein, Meade, & Cohen, 2003). We posit that mixed-sex groups intensify levels of preening and displayed aggression as a pecking order is being established (Wilson & Daly, 1985). In the case of gender, such behaviors as preening to attain dominance over other males in a mixed-sex social context may have evolutionary roots.

From girls' social vantage point, in order to be accepted, they must suppress overt displays of aggression (Heimer, 1996). As they may harbor more aggression than they enact, girls are perceived by others to be considerably less aggressive than boys—despite how they might view their own aggressive tendencies. Because girls are more concerned with and motivated by being liked (Rubin et al., 1998), especially in terms of their burgeoning relationships with boys (Dodge, 2003), girls in mixed sex groups may be motivated to suppress visible aggressive behaviors. Thus the mixed-sex group enhances the display of aggression for boys and reduces the display and acceptance of aggression for girls.

In addition to the differential gender display rules for aggression, our findings indicating that girls perceive themselves to be more aggressive than their peers perceive them to be may also indicate that, while boys may evaluate their own level of aggression in comparison to other boys within their specific clique, girls most likely view their own aggression levels in relation to the wider comparison group of other girls in the larger social context. This once again suggests the more compelling influence of immediate clique norms on boys than on girls (e.g., Espelage et al., 2003; Salmivalli & Voeten, 2005; Stormshak et al., 1999).

Implications for Prevention

There are at least two related implications of the findings reported above. First, assuming that boys in highly aggressive, mixed-sex cliques value their membership in their cliques, then the high level of aggression they likely observe in their peers may be seen as a standard to which they aspire. Because of their affective connection to their clique, they perceive themselves as needing to be more like their chosen peers. Second, with regard to the deviant behaviors that are likely to be evident in such groups (e.g., aggression, substance use, etc.), this tendency to pursue the level of extreme deviance that they perceive in their clique partners puts them at risk for the intensification of their socially acknowledged problem behaviors. Thus, it is not simply that teens are modeling the behavior of their clique associates because they *like* them but they are modeling behaviors to *be like* them. These processes may be implicated in “deviancy training” (Dishion, McCord, & Poulin, 1999; Dishion & Owen, 2002): It is possible that by putting people together who are each high on any deviant dimension, you may increase the level of deviance because they perceive their own level of deviance is lower by contrast; they readjust the norm, and thus see themselves as not as deviant as those whom they value. Such a perception of self in the context of a group that may value and reward deviant behavior renders clique members more mutually susceptible to adopt the unique deviant strategies of their clique associates. Thus, our findings suggest that social comparison might be a mediator of iatrogenic effects – perhaps social comparison sets the stage for deviancy training.

Limitations and Future Research Needs

This study does have several limitations. First, the study was conducted in a magnet school, which may have drawn students with certain characteristics which may impact how our results may be generalized. The proportion of students on free/reduced lunch was lower (22.5%) than the average proportion for the school district’s other middle schools (43%). Further, the sample was relatively small, especially in terms of how it affected the number of cliques of varying composition that were identified. For example, the small number of cliques made it difficult to examine other relationships that might be important to norm-narrowing, such as racial composition of groups.

A second limitation was that study measures were collected contemporaneously, precluding any casual inferences about the relationship between self reported aggressive behavior and membership in more or less aggressive groups. Although we collected data at two time-points, we did not seek to examine the degree of consistency or change in clique membership. Rather, we treated the cliques derived from our two data collections as quasi-independent, even though this is not in fact the case. We did include time as a factor in the analysis, which was not significant alone or in combination with any other factor. However, it would be interesting to examine how clique membership at one time point is related to change in self- and peer-rated aggression at a later time point. At present we cannot explore the extended consequences of narrowed norms but plan to do so in our subsequent work as we are collecting longitudinal data. With these data we will also be able to explore whether the movement to mixed-gender groups (that is, when our current same-sex groups inevitably become gender-integrated) serves to bring about or indeed intensify the process of norm narrowing.

A third limitation is that our interpretation of the results rest upon the two significant three-way interactions between student sex, clique aggression, clique gender balance on our outcome aggression variables, peer-rated and self-reported. Three-way interactions are known to be difficult to replicate both because of the issue of low power and of the difficulty in getting good measurement of three variables. Although we acknowledge that our models had relatively low power with large standard errors, the interactions were significant in spite of this. What we can rely upon is that this interaction among these factors indeed exists: that is, we are secure in the

result of significant differences. What we are less secure in is the magnitude of these effects, and this can only be addressed by future studies that seek to replicate these findings.

Third, although we believe that our measurement model and design was sufficient to address our hypotheses, there is the question of how an alternative design might directly address the issue of self-peer discrepancy in ratings of aggression. For example, Zakriski and Coie (1996) asked their respondents not only to rate which of their peers they liked and which they disliked, but also which ones liked or disliked them. From these ratings, the authors were able to quantify the discrepancy between “actual liking” and “perceived liking” and determine the accuracy of each child’s judgment. For the purposes of our study, it is plausible perhaps to think about getting ratings of aggression from self and peers that are on the same metric and thus determine a quantitative indicator of discrepancy. This would be an interesting way to pursue the discrepancy issue. However, our intent in this study was to explore whether the levels of aggression in the proximal clique set a standard or norm for the self-evaluation of aggression level that is clique-mediated rather than mediated by comparison with the larger, distal, peer network. It is clear that members of aggressive cliques would likely view themselves as more aggressive than their distal peer network. One of the conceptions behind the process of norm-narrowing is that in adolescence the sense of identity is enhanced when an individual adopts norms of their “in-group” and contrasts themselves with the behavioral norms of the “out-group.”

Finally, as discussed in our introduction, the process by which adolescents group together on the basis of aggression (or other deviant or prosocial behaviors) – through selection or influence – is not fully understood and certainly cannot be answered by the present study. Selection may be the reason that more or less aggressive youth grouped together in the cliques we identified: that is, relatively aggressive adolescents may have sought out membership in groups with other youth who appear to value aggression. However, selection cannot explain why individuals within some groups apparently contrast their own level of aggression with others in the group. If they have selected into a group based on similar levels of aggression, then there would likely be no differences between peer-rated and self-reports of aggression. It is rather the group dynamics that appear to be driving these perceptual contrast effects in aggression self rating.

Influence or socialization may also be occurring within these groups, particularly within those that are high on aggression. As Dishion and colleagues (Dishion et al., 1999; Dishion & Owen, 2002) have demonstrated, when aggressive or other deviant youth are grouped together, deviant behavior can escalate. As we suggested above, comparison and contrast effects may in part be responsible for this escalation. That is, to the extent that one views self as less deviant than their clique-mates in aggressive cliques, the norm for what constitutes peer-consistent levels of aggression will be elevated – and increased deviance would likely result.

The overall conclusion we draw from these findings is that the adolescent perceptions of self in group context are extremely important to both self-definition and to the establishment of normative expectations for one’s own behavior. For example, in the sociometric literature, it has been demonstrated that aggressive kids are likely to misperceive not only how others see them in terms of their levels of aggression, but also in terms of the degree of fear they induce in others and how much others may dislike them (Zakriski & Coie, 1996). Perhaps one of the reasons for this inaccuracy of perception on the part of highly aggressive male teens is the tendency for them to perceive themselves not on the basis of the broad social norms of behavior evident in the larger, distal peer group (that is the source of sociometric ratings), but on the basis of the norms that characterize their own immediate group. This possibility brings us full circle to our discussion in the introduction of the notion of norm “narrowing”: Cliques act to narrow the field of perception for the emergence of normative expectancies. Rather than behavioral norms being set by the expected behaviors evident in larger social environment,

such as the school or broader society, they are more narrowly determined within, for example, one's immediate peer association group. A corollary to this conception constitutes the major take-away point of the findings of this study: The identity striving evident during the developmental transition to adolescence renders the behavior of clique-mates as especially salient in setting standards and norms for one's behavior. This suggests that normatively-based approaches to prevention cannot rely on "educating" at-risk young teens about the rates of aggression or drug use behavior among the wider network of peers or age-mates. Instead, altering the normative expectations within at-risk proximal peer groups would seem a better target of creative prevention programming.

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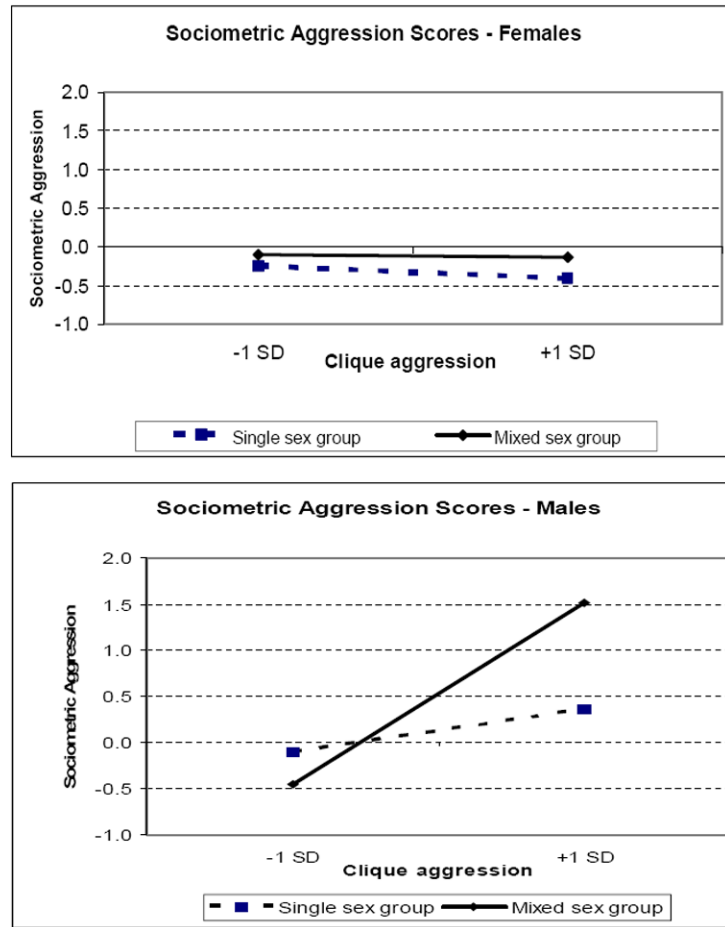


Figure 1. Expected values for sociometrically-rated aggression for (a) females and (b) males, derived from the three-way interaction between target student sex, clique aggression, and clique gender balance.

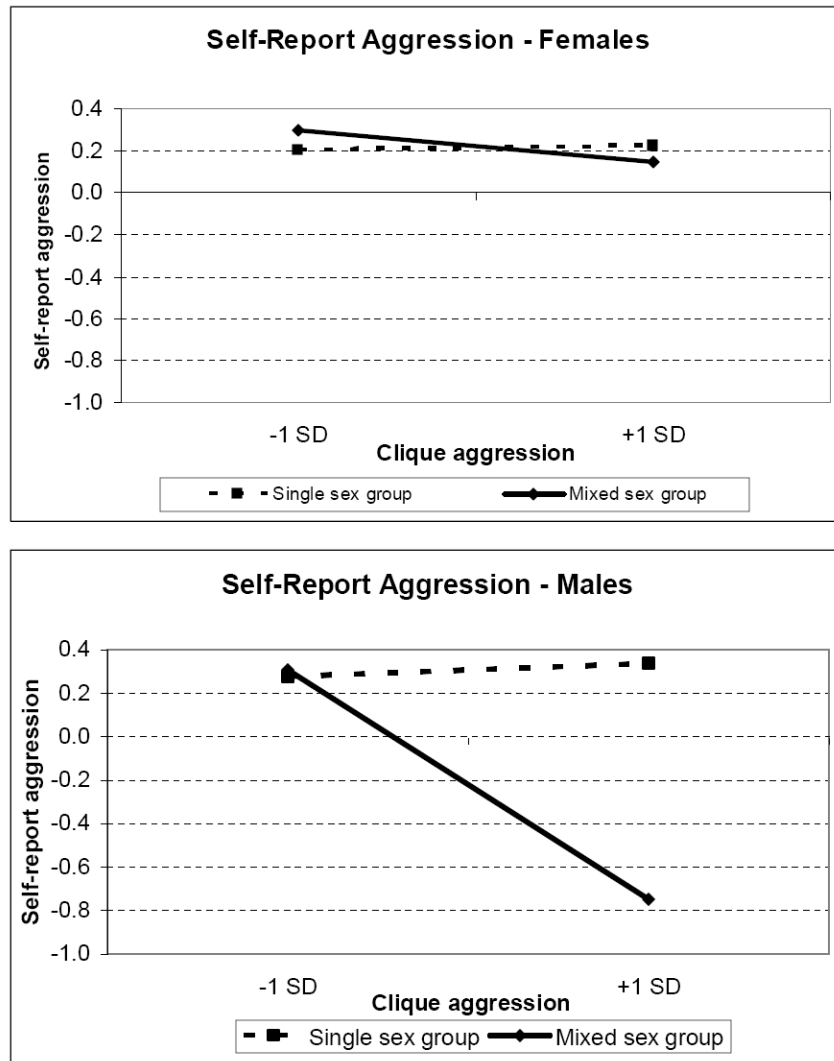


Figure 2. Expected values for self-reported aggression for (a) females and (b) males, derived from the three-way interaction between target student sex, clique aggression, and clique gender balance.

Table 1

Descriptive Statistics

	Gender	Clique Proportion Male	Clique Sociometric Aggress.	Indiv. Sociom. Aggress.	Self-report Aggress.
Gender (male coded high)	--				
Clique Proportion Male	.93	--			
Clique Sociometric Aggression	.23	.28	--		
Individual Sociometric Aggression	.26	.26	.67	--	
Self-report Aggression	.12	.14	.28	.43	--
Mean	0.48	0.48	-0.01	-0.05	0.22
SD	0.50	0.46	0.78	0.95	0.26

Note: N = 315 (representing both semesters). Correlations of magnitude greater than 0.11 are significant, $p < .05$.