Group Identification in Early Adolescence: Its Relation with Peer Adjustment and Its Moderator Effect on Peer Influence

Jeff Kiesner, Mara Cadinu, François Poulin, and Monica Bucci

This study was conducted to test whether group identification (importance of the group to the individual) co-varied with individual–group similarity on problem behavior; and whether group identification moderated peer group influence on the individual's development of delinquent behavior across a 1-year period. The level of reciprocated nominations within the individual's self-nominated group was controlled for in all analyses. Participants were 190 sixth and seventh graders (during the first year of the study) from the north of Italy. Level of reciprocated nominations within the group, but not identification, was found to covary with individual–group behavioral similarity (group behavior interacted with reciprocity of group nominations in predicting individual behavior). Group identification, but not reciprocated nominations, was found to moderate peer group influence on the individual's change in delinquent behavior, across 1 year. The individual's peer status within the classroom, level of reciprocated nominations, and gender all were related to the individual's level of group identification. Results are discussed in terms of understanding peer group influence on the individual.

INTRODUCTION

Three important issues in the study of peer relationships and problem behavior are the level of relationships examined, the context in which they are studied, and the importance of the relationships for the individual. Examples of two different levels of relationships are dyads and groups. The context refers to social settings such as the classroom, the school, or the neighborhood in which the relationship takes place. The importance of the relationship refers to the subjective importance of the relationship to the individual—for example, the level of identification with a group. As Rubin, Bukowski, and Parker (1998) have pointed out, although groups offer a high level of social complexity with emergent properties such as norms and shared cultural conventions, group phenomena has been the focus of relatively little empirical research in the area of developmental psychology. In the present study we examined the individual's level of identification with groups in the school context.

Groups in early adolescence have previously been described in terms of cliques—which are small groups made up of linked friendships (Parker, Rubin, Price, & DeRosier, 1995)—or as crowds, which are large groups based mostly on reputation (Brown, 1990). One approach to clique measurement is to identify clique members, clique affiliates, and clique isolates using reciprocated and nonreciprocated nominations in a social network analysis (Ennett & Bauman, 1994). A limitation of this method is that it does not capture the individual's own definition of his or her group. For example, using a social network analysis, an ado-lescent may be identified as an isolate, and therefore would not be considered as a possible "recipient" of peer influence in the group context. Any peer effects would then be attributed to the status of being isolated. That same individual, however, may be able to nominate a group of peers with whom she or he identifies, and this group may in fact influence the individual's behavior and adjustment. Indeed, an isolated adolescent may modify his or her behavior in an attempt to become accepted by one or more groups with which he or she identifies, or wishes to belong. For this reason, in the present study, an individual's peer group was defined as a personally defined group with whom the adolescent identifies and spends time. This definition is consistent with Turner's (1987) description of "psychological groups" as being subjectively important to the individual, rather than based on objective membership observed from the outside.

The subjective nature of group membership has been examined by Brown, Eicher, and Petrie (1986). These authors found that "loners" gave significantly less importance to crowd affiliation than either "jock-populars" or "druggie-toughs." However, because the difference between the "loners" and the other crowds is based on social status whereas the difference between the "jock-populars" and "druggie-toughs" is based on behavior, it seems that variability on the measure of importance depends on social status rather than behavior. Although these results cannot necessarily be generalized to cliques, we suggest that the importance of a particular social affiliation (crowds, cliques,

or friendships) may be a subjective experience differing across individuals by gender or peer status.

Group Identification

In the present study, the subjective importance of the group to the individual is considered in terms of group identification, which refers to feelings of involvement and pride that an individual feels toward a group to which he or she belongs. The concept of group identification has been studied in the area of social psychology in relation to, for example, intergroup differentiation (perceived differences between one's own group and an outgroup; Brown, Condor, Mathews, Wade, & Williams, 1986), direct evaluations of an outgroup (Hinkle, Taylor, Fox-Cardamone, & Crook, 1989), and self-stereotyping following an experimentally manipulated threat to the ingroup's status (Spears, Doosje, & Ellemers, 1997; for research supporting the concurrent and discriminant validity of group identification, see Jackson & Smith, 1999; Smith, Murphy, & Coats, 1999).

Although most of the research on group identification comes from the area of intergroup relations, some researchers have examined group identification in relation to social adjustment. For example, Pombeni, Kirchler, and Palmonari (1990) found that adolescents who reported a strong identification with a peer group asked other people for support, accepted support, and talked about problems more often with other people than individuals who reported low group identification. Moreover, the high identifiers also reported resolving their problems more often than low identifiers.

To study the relation between ethnic identification and social adaptation, Ethier and Deaux (1994) followed first-year Hispanic students who were entering Ivy League colleges. Results showed that high identification with being Hispanic at the beginning of the year was related to high levels of involvement with Hispanic cultural activities and increases in Hispanic identification. Low identification, on the other hand, was related to high levels of perceived threat from the new college setting and a further lowering of identification with being Hispanic. Thus, group identification was found to be positively related to social adjustment in the new college setting. Although the findings from both of these studies are intriguing, conclusions are limited by the fact that all measures were based on self-report.

Although some authors have tried to identify different dimensions of group identification (i.e., affective, behavioral, cognitive, individual–group opposition; Henry, Arrow, & Carini, 1999; Hinkle et al., 1989),

results have either failed to demonstrate a multifactor solution (Smith et al., 1999), have shown that only a positive affective subscale demonstrates adequate internal consistency (Pombeni et al., 1990), or have shown that a positive affective subscale is the most reliable predictor of intergroup bias (Hinkle et al., 1989). Therefore, in this study, the focus was on what has been referred to typically as attraction or affective identification, including questions such as "Are you proud to be a part of this group?"

Group Identification and Deviant Peer Affiliation

The relation between deviant peer affiliation and problem behaviors has been found for violence and aggression (Cairns, Cairns, Neckerman, Gest, & Gariépy, 1988; Dishion, Eddy, Haas, Li, & Spracklen, 1997; Kupersmidt, Burchinal, & Patterson, 1995), school dropout (Cairns, Cairns, & Neckerman, 1989), and drug use (Bauman & Ennett, 1994; Dishion, Capaldi, Spracklen, & Li, 1995). This relation has been studied in terms of the behavioral similarity between the individual and the peers (Boivin, Dodge, & Coie, 1995; Ennett & Bauman, 1994; Kandel, 1978; Poulin et al., 1997; Wright, Giammarino, & Parad, 1986) and the role of peer influence associated with an escalation in individual problem behavior (Dishion et al., 1997; Dishion, Spracklen, Andrews, & Patterson, 1996).

Tremblay, Mâsse, Vitaro, and Dobkin (1995) suggest that to understand the effects of peer associates on development, it may be important to measure the strength of the relationships among the peers. According to this viewpoint, the friends with whom an individual is weakly bonded are likely to have a minimal influence, whereas friends with whom an individual is strongly bonded are likely to have a stronger effect. Thus, it would be hypothesized that the strength of the relationship would moderate the effects of peer influence. Similarly, one could hypothesize that the strength of identification with a group would moderate the effects of the group on the individual.

In the present study, we examined two specific hypotheses regarding group identification. The first was that individual–group similarity on problem behavior would covary with the individual's level of group identification. Second, we hypothesized that group identification would moderate group influence on the individual's change in delinquent behavior across 1 year.

The first hypothesis predicted that higher levels of group identification would be associated with a stronger relation between individual and group problem behavior (individual–group behavioral similarity). Such a relation could be explained in two ways. First, highly similar individuals may form more cohesive

groups with which they identify more strongly. Second, a high level of identification may make individuals more similar to each other, possibly by a strong commitment to group norms. This, however, implies group influence, which was the focus of the second hypothesis.

The second hypothesis pertained to identification as a moderator of peer influence. Previous research has shown that a variety of factors may moderate peer influence. For example, the age of one's friends (Stattin, Gustafson, & Magnusson, 1989), the stability of the friendships (Berndt, Hawkins, & Jiao, 1999), one's self-reported susceptibility to peer influence (Schulenberg et al., 1999), and parenting style (Mounts & Steinberg, 1995) have all been found to moderate the peer influence process. In the present study, we hypothesized that when identification with a group was strong, the group would have a stronger influence on the individual. On the other hand, if group identification was low at Year 1, there would be no relation between group behavior and individual change.

It is possible, however, that group identification is simply a proxy for structural characteristics of the group such as integration into the group. For example, do the other members recognize the target individual as a member of their group (reciprocity of nominations)? Therefore, in the present study, we examined the relation between group identification and reciprocity of group nominations, and include reciprocity in all analyses, along with group identification.

Peer Status and Reciprocated Nominations as Predictors of Group Identification

A final and important question is "Which variables predict the individual's level of identification with their self-nominated group?" We examined one characteristic of the individual (peer status) and one characteristic of the group (level of reciprocated nominations).

Peer status based on sociometric peer nominations (Coie, Dodge, & Coppotelli, 1982; Newcomb & Bukowski, 1983) refers to the relative social standing (popular–rejected) of an individual within a specific social context. Past research has shown that socially rejected children are at high risk for a variety of negative developmental outcomes (Ollendick, Weist, Borden, & Greene, 1992; Parker & Asher, 1987). One possible negative consequence of peer rejection that has not been examined is a social disengagement from social groups in general. For example, rejected individuals may report lower levels of group identification, even for groups that they self-select.

A second factor that may influence an individual's identification with a self-selected group is the propor-

tion of reciprocated nominations from the other group members. Individuals may identify more strongly with groups that have a high level of reciprocity among the nominations, and less strongly with groups that have a low level of reciprocated nominations. That is to say, identification with a group may depend on how real the group is. Finally, we also tested for differences between boys and girls on group identification, because previous research has found that girls value crowd membership more than boys (Brown et al., 1986; Brown & Lohr, 1987).

METHOD

Participants

The present data come from a 1-year longitudinal study conducted in the Veneto region (northeast) of Italy. For the original sample, the parents of all sixth-grade students from four middle schools, and all seventh-grade students from one of these schools, were asked for permission for their child to participate. Of these 295 children, permission to participate was obtained for 249 (84%). Of these 249 students (111 females, 138 males), 213 were sixth graders, and 36 were seventh graders. The mean age of the sample was $M = 11.2$ years ($SD = .48$). Of the original 249 students, 215 (86%) participated also during the second year. There were no differences in attrition rate between boys and girls, or between the two grade levels. The present analyses are based on students who participated during both years of data collection, and for whom sufficient data were available (i.e., participants who reported not having a group were not included). In all, 190 participants were used for the present analyses. A multivariate analysis of variance (MANOVA) using youth, peer, and teacher reports of problem behavior found significant differences between the 190 participants included in the analyses and the 59 participants who were excluded. Univariate tests found that the included participants were less problematic on both the youth- and teacher-report measures (included participants: $M = -.11$ and $M = -.12$, respectively; excluded participants: $M = .36$ and $M = .40$, respectively). These means were based on standardized scores with $M = 0$ and $SD = 1$. Further analyses revealed no differences between the included and excluded participants on social preference or group identification. Although socioeconomic status was not directly measured, these schools included students from a wide range of social classes (low and working classes through upper middle class). Finally, the correlations and Cronbach's αs presented in the description of the measures were

based on the entire sample ($N = 249$), or the number of participants with complete data.

Procedure

Questionnaire booklets were administered to the students in the classroom during normal school hours during the months of April and May. Each questionnaire consisted of three parts: group identification measure, peer-report measure, and the youth self-report questionnaire. Two research assistants were present during all administrations, which lasted approximately 1 hr, 15 min. Administration of these questionnaires was highly structured, with all students completing the same section of the questionnaire booklet at the same time and then waiting for instructions for the following section. In addition, teachers were asked to complete a teacher report of child problem behavior. All measures were administered within each classroom on the same day.

Measures

Group identification. The group identification measure involved a three-step procedure. First, students were given a definition of a "group" that included two key characteristics: (1) there must be at least 3 children in the group (including the target child), and (2) these children must spend time together. Thus, neither a dyad nor a set of independent friends who don't spend time together would qualify as a group. In the second step, children were asked to list the names of their peers who were in their group at school. Participants were able to list any students from the school, regardless of whether those students were participating in the study. Finally, children were asked to respond to a set of seven questions regarding their level of identification with that group (i.e., "Is it important for you to belong to this group?" "Are you happy to be described as a member of this group?", and "Are you proud to be a part of this group?"). Responses to these questions were given on 10-point Likert scales ranging from "No, not at all" to "Yes, very much." This procedure was repeated for an out-of-school group. Participants were able to nominate only one group in each context (in and out of school). No limitation was given with regard to overlapping members. Thus, if a participant wished to nominate one member for both the in- and out-of-school groups, that was permitted.

Although the definition of a group indicated that to qualify as a group the members must all spend time together, no criteria was set for how much time needed to be spent together. Therefore, even if an in-

dividual had minimal contact with a group, and other group members may not have even recognized the individual as a friend or group member, the individual may have subjectively identified with the group. Moreover, specifying that the members must spend time together helped ensure that there was at least a minimal amount of contact between the individual and other group members.

The Year 1 Cronbach's α for the seven identification questions was α = .85 for the in-school group and α = .90 for the out-of-school group. The group identification score was the mean of the nonstandardized responses to the seven group identification questions. The Year 1 in-school and out-of-school identification measures were moderately correlated, $r(216) = .42$, $p < .001$. The mean identification scores in and out of school were approximately equal ($M = 8.34$, $SD = 1.33$ and $M = 8.36$, $SD = 1.63$, respectively). The means for group size were 4.78 ($SD = 2.27$) for the in-school groups, and 5.03 ($SD = 3.16$) for the out-of-school groups. Five participants reported having no in-school group and 33 participants reported having no out-of-school group. Of the individuals who reported having an in-school group, 65 (26%) reported mixed-gender groups. Of the individuals who reported having out-of-school groups, 83 (38%) reported mixed-gender groups. Thus, mixed-gender groups appeared to be more common outside of school. Because a sufficient proportion of the members could be identified only for the in-school groups, the present analyses were based only on the data regarding the in-school groups.

Peer status. Peer nominations were conducted within each classroom providing each participant with a list of the classroom peers who also were participating in the study. Classroom peers, rather than school-wide peers, were used because in Italian schools students remain with the same classroom of peers for the entire day and year, as well as across the 3 years of middle school. Unlimited and cross-gender peer nominations from classmates on the liked-most (LM) and liked-least (LL) questions were used to assess each adolescent's level of social preference. The LM and LL scores were first standardized within each classroom across gender. A social preference score (LM − LL) was then calculated for each participant and used as an indicator of peer status. The Year 1 correlation between LM and LL was $r(249) = -.79$, $p < .001$.

Youth report of problem behavior. The youth-report questionnaire (a modified version of the Child Telephone Interview; Dishion et al., 1984) was used as a measure of the participants' problem behavior. Within this questionnaire there were two types of questions. The first set of questions required a yes/no

response to 12 questions regarding activities that the child may have engaged in during the last 24 hours (or during the last week for smoking cigarettes, alcohol use, and drug use). The 24-hour reference period was used because these behaviors were expected to be relatively high-frequency behaviors. Questions used to tap these behaviors included "Did you argue with or talk back to an adult?", "Did you swear at anyone?", and "Did you tell lies?" The second set of questions required a response using a 4-point Likert scale to six questions regarding more delinquent behaviors that the child may have engaged in during the last 6 months (during the last week for the second year of data collection). The longer reference period was used for this set of questions because they were expected to be lower base-rate behaviors (e.g., stealing, graffiti, and vandalism). The Year 1 Cronbach's αs for these two measures were satisfactory, α = .75 for the first set of questions and α = .68 for the second set of questions. Both scales were then standardized across the entire sample and linearly combined, $r(249) = .55, p < .001$.

Peer reports of problem behavior. Unlimited and cross-gender peer nominations on one behavioral question were used as a measure of problem behavior. This question was "Who are the kids that hit, pick on, or tease other kids?" Nominations on this question were standardized within each classroom to control for differences in class size.

Teacher report of problem behavior. An adapted version of a teacher-report questionnaire (Kiesner, 1997) was used to measure problem behavior in the classroom during the past week. Seven items from the questionnaire were used to calculate the problem behavior score. These questions included, for example, "Is this child argumentative?" and "Does this child disturb classmates?" All questions required a response using a 6-point Likert scale, ranging from "No, not at all" to "Yes, frequently." A separate form was used for each student. The Year 1 Cronbach's α for the seven items was high, α = .93. The teacher report of problem behavior score was the mean of the unstandardized responses to the seven questions.

Individual and group problem behavior composite scores. To create a Year 1 problem behavior composite score for each individual, the self report, teacher report, and peer reports of problem behavior were first standardized and then linearly combined. The correlations among these three measures ranged from $r(249) = .41$ to $r(249) = .53$, all $ps < .001$.

To calculate the group's Year 1 problem behavior composite score an average across the individual members within each group (except the target member) was first calculated for each of the three problem behavior measures. The correlations among these three group scores ranged from $r(224) = .45$ to $r(224) = .67$, all $ps < .001$. These three group scores were then standardized and linearly combined to form one group problem behavior composite score.

Individual delinquent behavior scores. A Year 1 and Year 2 delinquent behavior score was calculated for each individual. This score was the sum of the standardized scores for nine questions from the youth self-report questionnaire. The nine items used for this delinquency score included the six items from the second set of questions in the youth report (see above), and the three questions about cigarette, alcohol, and drug use. These items were used for the delinquency score because they represent more severe delinquent behaviors for which peer influence and change during adolescence should be particularly relevant. The standardized Cronbach's α for these nine items was satisfactory for both Year 1, α = .72, and Year 2, α = .79.

Reciprocity of group nominations. To calculate the level of reciprocity of group nominations the simple proportion of group nominations that each individual made that were reciprocated by the other group members was first calculated. The mean proportion of reciprocated nominations was .52 (SD = .34). Because this score was dependent both on the number of group nominations that the individual made and the number of group nominations received, the proportion score was regressed on these variables and the residuals were saved as a new variable. This new variable represented a measure of reciprocity after controlling for the number of nominations made and received by each individual. As evidence that this residualization was important, 28% of the variance in the proportion score was explained by the number of nominations made and received, $F(2, 246) = 47.02$, $p < .001$, with nominations made and received both significantly contributing to the model, $\beta = -.18, p < .01$, and $\beta = .55, p < .001$, respectively. Thus, this score represented the extent to which the individuals' subjective group membership was shared by the other members of their group, after controlling for the individuals' group size and how often the individuals were nominated by other students as members of the group.

RESULTS

Validity of the Group Identification Measure

The present data set provides evidence to support the discriminant validity of the group identification measure. For example, the correlation between group identification and group size was $r = .11, p < .10$ for both the in-school ($n = 244$) and out-of-school ($n =$

216) groups. This relation was weak and suggests that identification was independent of group size. Moreover, the correlation between reciprocity of nominations and group identification for the in-school group was $r(244) = .13$, $p < .05$. This correlation indicates that the group identification measure was related to the level of reciprocated nominations, but that these two measures generally tapped different constructs.

Descriptive Statistics

None of the correlations between social preference and the three measures of problem behavior were significant. The frequency of overlapping members across in-school and out-of-school groups was very low, with 168 (67.7%) of the participants having no overlap. The mean proportion of members from the in-school group who were also members of the out-of-school group was .18 ($SD = .30$), and the mean proportion of members from the out-of-school group who were also members of the in-school group was .21 ($SD = .34$).

Of the 5 adolescents with no in-school group, 4 were below the 25th percentile on social preference and all 5 were below the 50th percentile. Of the 33 participants who had no out-of-school group, 14 (42%) were below the 25th percentile on social preference and 26 (78%) were below the 50th percentile. These data suggest that classroom-based social preference was related to not having a group, both in and out of the school.

Identification, Reciprocity of Group Nominations, and Individual–Group Behavioral Similarity

To test the hypothesis that the individual's level of group identification would covary with individual–group behavioral similarity on problem behavior, a four-step hierarchical multiple regression was conducted. In the first step, the individual problem-behavior score was regressed on the group problem-behavior score and gender (males = 0, females = 1). In the second step, the Year 1 group identification (with the in-school group) and reciprocated group nominations were added. In the third step, the two-way interaction term involving reciprocated nominations and group behavior was included in the model. Finally, in the fourth step, the interaction term involving group identification and group behavior was added. All variables used in this model were from Year 1. The measures of problem behavior for both the individual and the group were the composite problem behavior scores. These were used because they represented a general tendency for problem behavior and they had the advantage of including multiple informants. We hypothesized that group behavior, gender, and the interaction term involving group identification would all significantly predict the individual's problem behavior score. All interaction terms involving gender were tested (first entering all two-way interactions, then adding the three-way interactions), but because none of these interactions were statistically significant, they were not included in the analyses presented here. Because we had specific hypotheses regarding the direction of most effects, one-tailed tests of significance were used for all effects except for the main effects of reciprocated nominations and group identification (Myers, 1990; Pedhazur, 1982). To facilitate interpretation, all variables, except gender, were standardized to have $M = 0$ and $SD = 1$ (the interaction terms were the products of the standardized predictors; Aiken & West, 1991).

The correlations among the predictor variables for this model (and the following model) are presented in Table 1. Because gender was coded with males = 0 and females = 1, it can be seen that boys, and their groups, demonstrated higher levels of problem behavior. Also, girls reported higher levels of group identification, and had a higher proportion of recip-

Table 1   Correlations among Variables Used in the Multiple Regression Models Predicting Individual Problem Behavior and Change in Delinquency

Predictor	Gender	Year 1 Group Problem Behavior	Year 1 Individual Delinquency	Group Identification
Gender				
Year 1 group problem behavior	−.44***			
Year 1 individual delinquency	−.16*	.28***		
Group identification	.16*	−.10	−.04	
Reciprocated nominations	.22**	−.21**	−.10	.20**

Note: All correlations are based on the 190 participants included in the regression analyses.
*$p < .05$; **$p < .01$; ***$p < .001$.

Table 2   Regression Model Predicting Year 1 Individual Problem Behavior

Predictor	b	R^2 Change	Cumulative R^2
Step 1 Group behavior[a]	.28***		
Gender[a]	−.47***	.194***	.194***
Step 2 Reciprocated nominations	.00		
Group identification	.03	.001	.195***
Step 3 Group Behavior × Reciprocated Nominations[a]	.15**	.030**	.225***
Step 4 Group Behavior × Identification[a]	−.04	.002	.227

*Note: b*s are from nonstandardized solution.
[a] One-tailed test of significance.
** $p < .01$; *** $p < .001$.

rocated nominations. The negative correlation between group problem behavior and reciprocated nominations indicates that groups showing high levels of problem behavior were less likely to reciprocate nominations. The correlations across all measures ranged from $r = 0$ to $r = .38$ (absolute values), indicating that there were no problems of multicollinearity for these two multiple regression analyses.

Results of the multiple regression model predicting Year 1 individual problem behavior are presented in Table 2. In the first step, 19% of the variance in individual problem behavior was explained by group problem behavior and gender, $F(2, 187) = 22.56$, $p < .001$. As expected, the relation between individual and group behavior were positive, indicating that high levels of group problem behavior were associated with high levels of individual problem behavior. The effect of gender was significant, even after controlling for the effect of group behavior. In the second step, group identification and reciprocated nominations were added to the model and explained no additional variance, $F_{change}(2, 185) = .10$, ns. In the third step, the interaction term between reciprocated nominations and group behavior was entered and explained an additional 3% of the variance, $F_{change}(1, 184) = 7.01$, $p < .01$. The positive regression coefficient indicates that a high level of reciprocated nominations was associated with a stronger relation between individual and group behavior. That is, when reciprocity of nominations was high, the individual and the group were more similar with regard to problem behavior. Finally, the interaction term between identification and group behavior was entered and explained no additional variance, $F_{change}(1, 183) = .47$, ns. It should be noted that the same pattern of results was found when the interaction terms were entered in the re-

verse order, and that individual–group similarity and the moderator effect of reciprocity were found also when using data from the second year of the study.

The simple slopes for individual problem behavior regressed on group problem behavior when reciprocated nominations were high, average, and low (+1 SD, M, and −1 SD) are presented in Figure 1. The regression coefficients used to calculate these simple slopes were taken from the last step of the multiple regression model. It can be seen that as reciprocity of nominations increased, the relation between individual and group behavior became more positive.

Finally, it is possible that the observed individual–group homogeneity could be attributed to the absence, rather than the presence, of problem behavior. To rule out this possibility the zero-order correlation between individual and group problem behavior was calculated for all 190 participants included in the present analyses, $r = .39$, $p < .001$, and for a subsample of 151 participants after excluding the lowest 20% on the problem behavior score, $r = .32$, $p < .001$. As can be seen, these correlations were of similar magnitude, indicating that this similarity was not due to the absence of problem behavior.

Identification, Reciprocity of Group Nominations, and Change in Individual Delinquency

To test the hypothesis that group influence on individual delinquency would be moderated by group
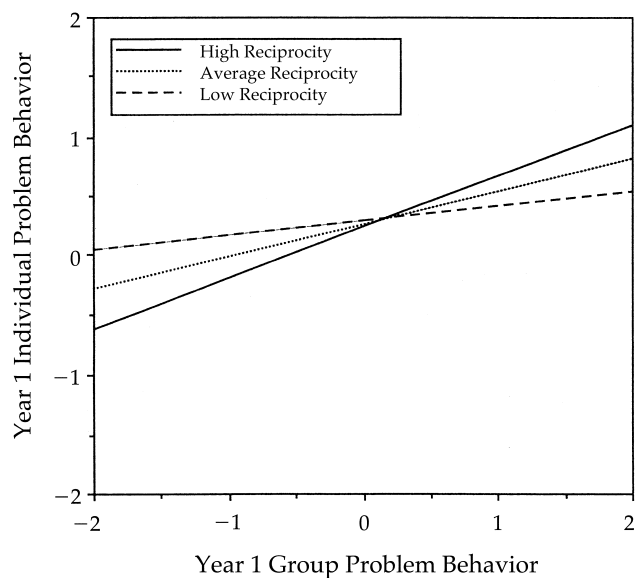
Figure 1   Simple slopes for Year 1 individual problem behavior (standardized) regressed on Year 1 group problem behavior (standardized) at three levels of reciprocity.

identification, a four-step hierarchical multiple regression was conducted using the individual's Year 2 delinquency score as the dependent variable. In the first step, the individual's delinquency score was regressed on gender, the individual's Year 1 delinquent behavior score, and the group's Year 1 problem behavior composite score. In the second step, Year 1 group identification and reciprocity of group nominations were added. In the third step, the interaction term between reciprocity and group problem behavior was entered. Finally, in the fourth step, the interaction between identification and group problem behavior was included in the model. In this analysis, the group score of problem behavior was the same composite score that was used in the first analysis, whereas the individual score was the individual's delinquency score. The composite group score was used because it was based on multiple informants, thus providing the most valid measure of problem behavior for the group. The individual delinquency score, on the other hand, was used because, as noted earlier, the behaviors included in this measure represented more severe delinquent behaviors for which peer influence and change during adolescence should have been particularly relevant. We hypothesized that group problem behavior and the interaction term between group identification and group problem behavior both would significantly predict the individual's Year 2 delinquent behavior, even after controlling for the individual's Year 1 delinquency. Again, one-tailed tests of significance were used for all effects except for the main effects of reciprocated nominations and group identification (Myers, 1990; Pedhazur, 1982). To facilitate interpretation, all variables were standardized to have $M = 0$ and $SD = 1$ (Aiken & West, 1991).

Results of the multiple regression model are presented in Table 3. In the first step, 22% of the variance was explained by gender, the individual's Year 1 delinquency, and the group problem behavior scores, $F(3, 186) = 17.56$, $p < .001$. Both the individual's Year 1 delinquency score and group problem behavior scores contributed significantly to the model. The positive and highly significant regression coefficient for the individual's Year 1 delinquency score indicates that individual differences on this scale were stable across the 1 year studied. The positive regression coefficient for the group's Year 1 problem behavior score means that individuals belonging to high-risk groups at Year 1 reported higher levels of delinquency at Year 2, even after controlling for the individual's Year 1 delinquency. In the second step, group identification and reciprocated nominations were added to the model and explained approximately 1% of additional variance, which was not statistically sig-

nificant, $F_{change}(2, 184) = 1.18$, ns. In the third step, the interaction term between reciprocity and the group's Year 1 score was entered and explained no additional variance, $F_{change}(1, 183) = .001$, ns. Finally, the interaction term between identification and group problem behavior was entered into the model and explained an additional 2.6% of the variance, $F_{change}(1, 182) = 6.25$, $p < .05$. The positive regression coefficient for this interaction indicates that higher levels of group identification were associated with a stronger relation between the group's Year 1 problem behavior score and the individual's Year 2 delinquency score, after controlling for the individual's Year 1 delinquency score. In other words, individuals who strongly identified with their group were more likely to change their behavior in relation to the group's Year 1 behavioral characteristics than individuals who did not identify strongly with their group. It should be noted that as in the previous analysis, the same pattern of results was found when the interaction terms were entered in the reverse order.

Presented in Figure 2 are the simple slopes of Year 2 individual delinquency regressed on the group's Year 1 problem behavior score for three levels of identification: high (+1 SD), average (M), and low (−1 SD). As for Figure 1, the regression coefficients used to calculate these simple slopes were taken from the last step of the multiple regression model. Examination of Figure 2 shows that for low identifiers there was no relation between the individual's Year 2 delinquency and the group's Year 1 problem behavior. On the other hand, when identification was high, the relation was significantly positive. Moreover, in the last step of the regression model, the main effect of the group's Year 1 problem behavior score was signifi-

**Table 3 Regression Model Predicting Year 2 Individual Delinquency**

	Predictor	b	R^2 Change	Cumulative R^2
Step 1	Year 1 delinquency[a]	.42***		
	Year 1 group behavior[a]	.13*		
	Gender[a]	−.03	.220***	.220***
Step 2	Reciprocated nominations	−.07		
	Group identification	−.06	.010	.230***
Step 3	Group Behavior × Reciprocated nominations[a]	.00	.00	.230***
Step 4	Group Behavior × Identification[a]	.15**	.026*	.256***

*Note: b*s are from nonstandardized solution.
[a] One-tailed test of significance.
* $p < .05$; ** $p < .01$; *** $p < .001$.
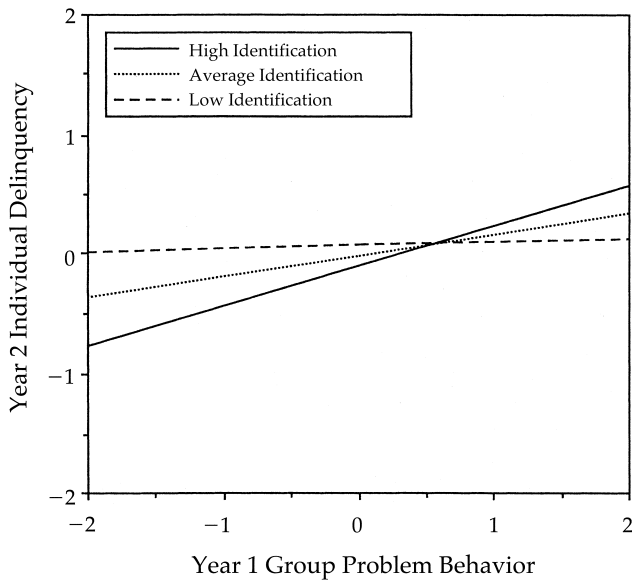
Figure 2   Simple slopes for Year 2 individual delinquency regressed on Year 1 group problem behavior (standardized) at three levels of group identification.

cant, $b = .18$, $p < .02$. This indicates that the simple slope for when identification was average, as seen in Figure 2, was also significantly different from 0.

Peer Status, Reciprocated Nominations, and Gender as Predictors of Group Identification

To examine which variables explained individual differences in group identification a multiple regression analysis was conducted using social preference, reciprocated nominations, and gender as predictor variables. The correlations among the variables used in the following analyses are presented in Table 4. Because gender was coded with males = 0 and females = 1, it can be seen that males showed a reliably higher level of social preference than females.

The overall model predicting identification explained 7.1% of the variance, $F(3, 186) = 4.7$, $p < .01$. The standardized regression coefficients for each of the predictors were $\beta = .15$ for gender, $\beta = .16$ for reciprocated nominations, and $\beta = .14$ for social preference, all ps $< .05$. Thus, all three variables significantly contributed to the explained variance. The positive regression coefficients indicate that girls reported higher levels of group identification than boys, that individuals felt stronger identification with groups in which there was a high level of reciprocated nominations, and that individuals with high social preference reported higher levels of identification (alternatively, rejected individuals reported lower levels of identification).

Table 4   Correlations among Variables Used in the Multiple Regression Models Predicting Group Identification

Predictor	Gender	Social Preference	Reciprocated Nominations
Social preference	−.21**		
Reciprocated nominations	.22**	.10	
Group identification	.16*	−.21**	.20**

Note: All correlations are based on the 190 participants included in the regression analyses.
$^*p < .05$; $^{**}p < .01$.

DISCUSSION

The present study was conducted to test whether group identification would be related to individual–group similarity on problem behavior, and whether group identification would moderate the effects of the peer group on the individual's change in delinquent behavior across a 1-year period. In doing so, parallel effects of reciprocity of group nominations was also controlled.

Results showed that reciprocated group nominations, but not group identification, covaried with individual–group similarity on problem behavior. That is, individuals were typically similar to their group when reciprocity was high, whereas there was little similarity between the individual and group when reciprocity was low. These data suggest that the frequently demonstrated similarity between individuals and their friends may be partly dependent on using reciprocated group (or friendship) nominations. This finding is similar to previous results that have shown that reciprocally nominated friends were more similar on aggression than unilateral friends (Cairns et al., 1988; Poulin & Boivin, 2000). Thus, individual–group similarity may not be a function of individual selection, but rather mutual selection.

The second primary hypothesis tested in this study was that group identification with a self-nominated peer group would moderate peer group influence on the individual's change in delinquent behavior across a 1-year period. Group identification did in fact moderate the relation between the group's Year 1 problem behavior and the individual's Year 2 delinquent behavior, even after controlling for the individual's Year 1 delinquency. Moreover, a main effect for the group was found, even without considering the individual's level of identification. Thus, these data provide support for group influence using self-nominated and subjectively defined groups, as well as for group identification as a moderator of this influence. Specifically, when group identification was low the group had no

effect on the individual, whereas when identification was average or high the group did have an influence.

The peer group influence observed in this study may have been the result of at least two processes: reinforcement and imitation. Moreover, both of these processes may have been moderated by group identification. For example, individuals may be more sensitive to reinforcement (i.e., deviancy training; Dishion et al., 1996) by others with whom they strongly identify. One can easily imagine that positive feedback from an admired friend or group member will have a greater influence on behavior than positive feedback from a stranger or a member of some other group. The second process, imitation (Bandura & Walters, 1963), may also be moderated by group identification: Individuals may be more likely to imitate the behavior of another with whom they strongly identify than a person with whom they do not identify. These interpretations are consistent with prior findings showing that the effectiveness of reinforcement (Prince, 1962) and the elicitation of imitative behavior (Asch, 1948; Lefkowitz, Blake, & Mouton, 1955) depend on the prestige of the person who provides the reinforcement or model. Although group identification is very different from prestige, we argue that both may moderate the effects of imitation or reinforcement through differences in the subjective experience or importance of the relationship.

The present formulation of group identification may be compared to "bonding" within social control theory. According to early versions of social control theory, bonding with prosocial figures (schools and parents) prevents the individual from being delinquent (Hirschi, 1969). Thus, it is the lack of bonding that is responsible for involvement in delinquency. In the present conceptualization of identification, it is the interaction between identification and the characteristics of the group with which the individual identifies that determines the type of effects that the group may have on the individual. When identification is high, the individual should become more like the group (either prosocial or antisocial). If identification is low, the group is not expected to have a significant influence on the individual. This is similar to more recent social control theorists' suggestions that bonding with deviant peers plays a moderating role in delinquency (Elliott, Huizinga, & Menard, 1989).

Another important finding from this study is the demonstration that reciprocity of group nominations had no moderating effect on peer group influence. Thus, the moderator effect of group identification did not appear to be the result of this structural characteristic of the group. One implication of this finding is that a group does not need to be real to have an effect on the individual; that is, the group may exist only in the mind of the individual. The important factors appear to be that the individual believes to have a particular group and that the individual identifies with that group. This finding leads to conclusions similar to those of previous research by Aloise-Young, Graham, and Hansen (1994). These researchers found that with regard to initiation of smoking, individuals with no reciprocated friendships were actually more strongly influenced by those whom they nominated as a best friend than individuals who did have reciprocated friendships. These authors concluded that individuals may be changing their behavior in order to initiate friendships, and that much of peer influence may occur prior to the formation of an actual reciprocated friendship. Thus, restricting the study of peer influence to reciprocated relationships may limit the ability to detect peer influence.

An important consideration is that there may be different avenues of influence depending on whether the individual is an actual member of the group or simply identifies with that group. The present study, as well as the work by Aloise-Young et al. (1994), provide strong support for the idea that peers can influence an individual even if the relationship is not recognized by both sides. The mechanism of influence may be different, however, depending on the reality of the relationship. For example, early on individuals may change their behavior to facilitate entry into a group whereas after one becomes a group member, behavioral change may depend more on reinforcement such as deviancy training (Dishion et al., 1996). Additionally, it is possible that there are real social interactions even when group membership (or friendship) is not reciprocated, and that these social interactions result in peer influence. The present study was not able to examine possible differences in types of influence; therefore questions regarding different mechanisms of influence remain open for future research.

The present findings suggest that one possible approach to prevention programs may be to develop the individual's identification with prosocial groups and decrease identification with delinquent groups. Certainly for many individuals who have no existing ties with a prosocial peer group this would be difficult, and may require initial social skills training. On the other hand, it seems plausible that for most individuals there are prosocial groups (extended family, sports groups, special-interest groups) that could be exploited for such intervention efforts. The critical questions then become "What factors contribute to the level of identification that one feels toward a group" and "How can stronger identification with more prosocial groups be encouraged?"

The present study provides information on two

constructs that may be important for determining individual differences in group identification. First, reciprocity of nominations was found to positively correlate with group identification. That is, nominating a group of peers who reciprocate the nominations is related to higher levels of identification. This suggests that being recognized as a group member by the other members may increase the individual's sense of identification. In an applied setting, this could involve making sure that a target individual plays a role on which the other members are reliant. For example, if the desire is to increase an individual's level of identification with a group of classmates, that individual could be assigned certain responsibilities on which the other classmates depend. In this way the individual may be seen more clearly by the others as an important group member. Being recognized as a member may then increase the individual's identification with the group.

A second factor that appears to contribute to the individuals' level of identification is their level of social success. Low-preference (i.e., rejected) individuals reported lower levels of group identification than high-preference (i.e., popular) individuals. These findings are consistent with findings by Parker and Asher (1993) who found that low-accepted children reported lower levels of friendship quality than other children. Two explanations are possible. First, low-status individuals may have little choice with regard to whom they spend time with and, therefore, do not feel a strong attachment with the other group members, even though they self-nominated the group members. This recalls a lament once made by Groucho Marx, who said that he would never want to belong to any group that would accept him as a member.[1] This explanation is consistent with findings by Dishion, Andrews, and Crosby (1995) who suggested that the friendships of a sample of antisocial boys were typically friendships of convenience. The rejected adolescents in the present study may have depended on similar friendships of convenience, which may have been associated with lower levels of importance being placed on the relationship (i.e., low levels of identification with a group). If this was indeed the case, then helping rejected individuals find groups of peers who share similar prosocial interests may be key to facilitating more meaningful relationships with which the individual could more strongly identify.

An alternative explanation is that individuals are aware of their level of social success, and their level of identification represents an evaluation of the "importance of social success." In this case, rejected individuals would downplay the importance of social groups because they have experienced social failure, whereas

popular individuals would emphasize the importance of social groups because they have experienced social success. Research by Zakriski and Coie (1996), however, has shown that both aggressive–rejected and nonaggressive–rejected children hold unrealistic beliefs about their own social status. Thus, more research is needed to evaluate the plausibility of this explanation.

In the present analyses no relations were found between social preference and problem behavior. This is somewhat surprising given that other researchers have found these relations (Coie et al., 1982). It should be noted that other analyses of these data using a peer-status categorization (popular, average, rejected) did reveal group differences, with rejected individuals showing higher levels of problem behavior. However, because our attempts to create sociometric categories resulted in a distribution across categories different from what is typically found in North American samples (participants were almost equally distributed across the popular, rejected, and average categories), we decided to use the continuous measure of social preference. It also should be noted that this difference in the distribution of peer status may have been the result of the high stability of classroom composition in Italian schools, as described earlier.

Two other findings should be noted. First, most participants who had no group (both within and outside of the school) were low on social preference. Thus, not only were they low status according to their classroom peers, but they could not even nominate a group to which they belonged. This suggests that some of these individuals were experiencing social failure or isolation across settings. These individuals may be at especially high risk for social maladjustment (behavioral and emotional). Second, the finding that 67% of the participants had no overlapping members across their in- and out-of-school groups, suggests that the peer experiences of these early adolescents may be very different across different settings. Thus, it will be important for future research to examine the behavioral characteristics and the potential for peer influence from groups across contexts.

Certain limitations of the present study should be mentioned. First, because the opportunity for deviancy training within the school may be limited, negative peer influence may be more relevant to out-of-school groups. Unfortunately, in the present study, we were unable to examine the behavioral characteristics of the out-of-school group. We are presently conducting a separate study that will allow us to identify group members of both in-school and out-of-school groups. A related point is that individuals were able to nominate only members of one group from each context. It is possible that an individual may belong to two or more groups in each setting. For example,

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[1] The authors thank an anonymous reviewer for this reference.

outside of the school an individual may belong to an organized sports group and an informal neighborhood group. These groups may have different and even opposite effects on the individual. Future research should attempt to examine the effects of multiple group contexts.

Another limitation of the present study is that of the 249 participants in the first year of the study, the 59 participants who were excluded from the present analyses demonstrated higher scores on self- and teacher reports of problem behavior. Therefore, conclusions were somewhat limited to the less problematic participants in the sample.

Finally, although the present study indicates that group identification was related to both social preference and the level of reciprocated nominations by the other group members, we do not know how group identification is related to other subjective aspects of peer adjustment. For example, what is the relation between identification with a group and the subjective quality of the relationships within the group? One could hypothesize that identification would be strongly linked to relationship quality. On the other hand, it is also possible that one could identify strongly with a group, even though the group provides little support or basis for high-quality relationships. Thus, further research examining the subjective nature of peer-group membership, group identification, and relationship quality is needed.

In conclusion, the present study provided support for the hypothesis that group membership and group identification are important with respect to problem behavior in early adolescence. Moreover, these findings suggest that interventions aimed at reducing problem behavior in adolescence should consider the individual's group membership and the importance of that group to the individual. Considering these factors may add strength to interventions that focus primarily on the individual.

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ADDRESSES AND AFFILIATIONS

Corresponding author: Jeff Kiesner, Dipartimento di Psicologia DPSS, Università di Padova, via Venezia 8, 35131 Padova, Italy; e-mail: kiesner@psy.unipd.it. Mara Cadinu and Monica Bucci are also at the Università di Padova; François Poulin is at the Université du Québec à Montréal, Canada.

REFERENCES

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions.* Newbury Park, CA: Sage.

Aloise-Young, P. A., Graham, J. W., & Hansen, W. B. (1994). Peer influence on smoking initiation during early adolescence: A comparison of group members and group outsiders. *Journal of Applied Psychology, 79,* 281–287.

Asch, S. E. (1948). The doctrine of suggestion, prestige, and imitation in social psychology. *Psychological Review, 55,* 250–276.

Bandura, A., & Walters, R. H. (1963). *Social learning and personality development.* New York: Holt, Rinehart, & Winston.

Bauman, K. E., & Ennett, S. T. (1994). Peer influence on adolescent drug use. *American Psychologist, 49,* 820–822.

Berndt, T. J., Hawkins, J. A., & Jiao, Z. (1999). Influences of friends and friendships on adjustment to junior high school. *Merrill-Palmer Quarterly, 45,* 13–41.

Boivin, M., Dodge, K. A., & Coie, J. D. (1995). Individual-group behavioral similarity and peer status in experimental play groups of boys: The social misfit revisited. *Journal of Personality and Social Psychology, 69,* 269–279.

Brown, B. B. (1990). Peer groups and peer cultures. In S. S. Feldman & G. R. Elliott (Eds.), *At the threshold* (pp. 171–196). Cambridge, MA: Harvard University Press.

Brown, B. B., Eicher, S. A., & Petrie, S. (1986). The importance of peer group ("crowd") affiliation in adolescence. *Journal of Adolescence, 9,* 73–96.

Brown, B. B., & Lohr, M. J. (1987). Peer-group affiliation and adolescent self-esteem: An integration of ego-identity and symbolic-interaction theories. *Journal of Personality and Social Psychology, 52,* 47–55.

Brown, R., Condor, S., Mathews, A., Wade, G., & Williams, J. (1986). Explaining intergroup differentiation in an industrial organization. *Journal of Occupational Psychology, 59,* 273–286.

Cairns, R. B., Cairns, B. D., & Neckerman, H. J. (1989). Early school dropout: Configurations and determinants. *Child Development, 60,* 1437–1452.

Cairns, R. B., Cairns, B. D., Neckerman, H. J., Gest, S. D., & Gariépy, J. (1988). Social networks and aggressive behavior: Peer support or peer rejection. *Developmental Psychology, 24,* 815–823.

Coie, J. D., Dodge, K. A., & Coppotelli, H. (1982). Dimensions and types of social status: A cross-age perspective. *Developmental Psychology, 18,* 557–570.

Dishion, T. J., Andrews, D. W., & Crosby, L. (1995). Antisocial boys and their friends in early adolescence: Relationship characteristics, quality, and interactional process. *Child Development, 66,* 139–151.

Dishion, T. J., Capaldi, D., Spracklen, K. M., & Li, F. (1995). Peer ecology of male adolescent drug use. *Development and Psychopathology, 7,* 803–824.

Dishion, T. J., Eddy, J. M., Haas, E., Li, F., & Spracklen, K. M. (1997). Friendships and violent behavior during adolescence. *Social Development, 6,* 207–225.

Dishion, T. J., Patterson, G. R., Reid, J. B., Capaldi, D. M., Forgatch, M. S., & McCarthy, S. (1984). *Child Telephone Interview.* (Available from OSLC, 207 East 5th St., Suite 202, Eugene, OR 97401)

Dishion, T. J., Spracklen, K. M., Andrews, D. W., & Patterson, G. R. (1996). Deviancy training in male adolescent friendships. *Behavior Therapy, 27,* 373–390.

Elliott, D. S., Huizinga, D., & Menard, S. (1989). *Multiple problem youth: Delinquency, substance use, and mental health problems.* New York: Springer-Verlag.

Ennett, S. T., & Bauman, K. E. (1994). The contribution of influence and selection to adolescent peer group homogeneity: The case of adolescent cigarette smoking. *Journal of Personality and Social Psychology, 67,* 653–663.

Ethier, K. A., & Deaux, K. (1994). Negotiating social identity when contexts change: Maintaining identification and responding to threat. *Journal of Personality and Social Psychology, 67,* 243–251.

Henry, K. B., Arrow, H., & Carini, B. (1999). A tripartite model of group identification: Theory and measurement. *Small Group Research, 30,* 558–581.

Hinkle, S., Taylor, L. A., Fox-Cardamone, L. D., & Crook, K. F. (1989). Intragroup identification and intergroup differentiation: A multicomponent approach. *British Journal of Social Psychology, 28,* 305–317.

Hirschi, T. (1969). *Causes of delinquency.* Berkeley: University of California Press.

Jackson, J. W., & Smith, E. R. (1999). Conceptualizing social identity: A new framework and evidence for the impact of different dimensions. *Personality and Social Psychology Bulletin, 25,* 120–135.

Kandel, D. B. (1978). Similarity in real-life adolescent friendship pairs. *Journal of Personality and Social Psychology, 36,* 306–312.

Kiesner, J. (1997). *The effects of a homework monitoring intervention on school engagement of high risk middle school students.* Unpublished doctoral dissertation, University of Oregon, Eugene.

Kupersmidt, J. B., Burchinal, M., & Patterson, C. J. (1995). Developmental patterns of childhood peer relations as predictors of externalizing behavior problems. *Development and Psychopathology, 7,* 825–843.

Lefkowitz, M. M., Blake, R. R., & Mouton, J. S. (1955). Status factors in pedestrian violation of traffic signals. *Journal of Abnormal Social Psychology, 51,* 704–706.

Mounts, N. S., & Steinberg, L. (1995). An ecological analysis of peer influence on adolescent grade point average and drug use. *Developmental Psychology, 31,* 915–922.

Myers, R. H. (1990). *Classical and modern regression with applications* (2nd ed.). Belmont, CA: Duxbury Press.

Newcomb, A. F., & Bukowski, W. M. (1983). Social impact and social preference as determinants of children's peer group status. *Developmental Psychology, 19,* 856–867.

Ollendick, T. H., Weist, M. D., Borden, M. G., & Greene, R. W. (1992). Sociometric status and academic, behavioral, and psychological adjustment: A five-year longitudinal study. *Journal of Consulting and Clinical Psychology, 60,* 80–87.

Parker, J. G., & Asher, S. R. (1987). Peer relations and later personal adjustment: Are low-accepted children at risk? *Psychological Bulletin, 102,* 357–389.

Parker, J. G., & Asher, S. R. (1993). Friendship and friendship quality in middle childhood: Links with peer group acceptance and feelings of loneliness and social dissatisfaction. *Developmental Psychology, 29,* 611–621.

Parker, J. G., Rubin, K. H., Price, J. M., & DeRosier, M. E. (1995). Peer relationships, child development, and adjustment: A developmental psychopathology perspective. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology: Risk, disorder, and adaptation* (pp. 96–161). New York: Wiley.

Pedhazur, E. J. (1982). *Multiple regression in behavioral research: Explanation and prediction* (2nd ed.). Fort Worth, TX: Harcourt Brace.

Pombeni, M. L., Kirchler, E., & Palmonari, A. (1990). Identification with peers as a strategy to muddle through the troubles of the adolescent years. *Journal of Adolescence, 13,* 351–369.

Poulin, F., & Boivin, M. (2000). The role of proactive and reactive aggression in the formation and development of boys' friendships. *Developmental Psychology, 36,* 233–240.

Poulin, F., Cillessen, A. H. N., Hubbard, J. A., Coie, J. D., Dodge, K. A., & Schwartz, D. (1997). Children's friends and behavioral similarity in two social contexts. *Social Development, 6,* 224–236.

Prince, A. I. (1962). Relative prestige and the verbal conditioning of children. *American Psychologist, 17,* 378.

Rubin, K. H., Bukowski, W., & Parker, J. G. (1998). Peer interactions, relationships, and groups. In N. Eisenberg (Ed.), W. Damon (Series Ed.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (5th ed., pp. 619–700). New York: Wiley.

Schulenberg, J., Maggs, J. L., Dielman, T. E., Leech, S. L., Kloska, D. D., Shope, J. T., & Laetz, V. B. (1999). On peer influences to get drunk: A panel study of young adolescents. *Merrill-Palmer Quarterly, 45,* 108–142.

Smith, E. R., Murphy, J., & Coats, S. (1999). Attachment to groups: Theory and measurement. *Journal of Personality and Social Psychology, 77,* 94–110.

Spears, R., Doosje, B., & Ellemers, N. (1997). Self-stereotyping in the face of threats to group status and distinctiveness: The role of group identification. *Personality and Social Psychology Bulletin, 23,* 538–553.

Stattin, H., Gustafson, S. B., & Magnusson, D. (1989). Peer influences on adolescent drinking: A social transition perspective. *Journal of Early Adolescence, 9,* 227–246.

Tremblay, R. E., Mâsse, L. C., Vitaro, F., & Dobkin, P. L. (1995). The impact of friends' deviant behavior on early onset of delinquency: Longitudinal data from 6 to 13 years of age. *Development and Psychopathology, 7,* 649–667.

Turner, J. C. (1987). *Rediscovering the social group: A self-categorization theory.* Oxford, U.K.: Basil Blackwell.

Wright, J. C., Giammarino, M., & Parad, H. W. (1986). Social status in small groups: Individual-group similarity and the social "misfit." *Journal of Personality and Social Psychology, 50,* 523–536.

Zakriski, A. L, & Coie, J. D. (1996). A comparison of aggressive-rejected and nonaggressive-rejected children's interpretations of self-directed and other-directed rejection. *Child Development, 67,* 1048–1070.