Perceived popularity and perceived teacher preference were investigated in a sample of 351 (179 boys, 172 girls) 10th-grade students from an urban community experiencing a moderate degree of economic distress. Students completed rating scale sociometric and behavioral nomination measures. Data on GPAs and unexplained absences were obtained from the school. Multiple regression analyses revealed that different behaviors were associated with perceived popularity and perceived teacher preference. Low GPA, low submissiveness, and high rates of absenteeism were associated with high perceived popularity and a low perceived teacher preference. Snobbishness and prosociality were more strongly associated with perceived popularity than perceived teacher preference. Students who were perceived as high on both dimensions simultaneously maintained a commitment to their scholastic success at school while behaving in a highly friendly nonsubmissive manner. A relation was also found between individuals’ ratings of students’ peer popularity and their own behavioral and academic attributes. © 2002 Society for the Study of School Psychology. Published by Elsevier Science Ltd

Keywords: Adolescence, Popularity, Teacher preference, Behavioral style, Academic adjustment.

When individuals enter early adolescence and achieving status among peers becomes increasingly important, some individuals appear to believe that their social standing in the peer group will be sacrificed if they are engaged academically—earn good grades, attend school on a regular basis, and form positive affective relationships with their teachers (e.g., Fordham & Ogbu,
Convergent evidence is offered by Hersch (1998) in her ethnographic study of adolescent peer culture in a middle-class community. When Chris, one student in her study, enters eighth grade, he feels that academic success is not valued among his peers. Chris, absolutely committed to good grades, finds the spotlight an embarrassment. He becomes preoccupied with calculating what is necessary to remain socially relevant to peers and what is required to ace his classes. His own internal drive for excellence is driven underground. (Hersch, 1998, p. 240)

Chris’ sentiments highlight the challenge some adolescents confront in attempting to coordinate multiple social and academic goals. Students who are able to successfully coordinate multiple goals are more successful at school than their peers (for a review of this literature, see Wentzel, 1999). However, to the extent that students view certain school-based goals as incompatible (i.e., achieving acceptance and status among peers and forming and maintaining positive relationships with teachers), they may feel that they have to establish priorities and selectively pursue some goals at the expense of others (Juvonen, 1996). Indeed, there is some indication that in midadolescence academic engagement and success are devalued by peers and negatively associated with students’ standing in the peer group (Ishiyama & Chabassol, 1985). These authors speculate that in midadolescence academic disengagement, as indexed by poor school attendance and low effort expenditure on class work, is admired by peers because it symbolizes defiance of adult authority. This notion is exemplified by another of Hersch’s (1998) participants. Courtney, a ninth-grade student, displays no respect for school rules and has devised a scheme to miss as many classes as possible without getting an automatic “F.” She explains, “Kids don’t like to do what they have to do. Just like they don’t like to obey their parents because they have to” (Hersch, 1998, p. 288).

The attributes associated with perceived popularity and perceived teacher preference have typically been studied separately. Two research traditions are prevalent in the study of peer popularity. The sociometric tradition has defined “popular” as meaning “well-liked, or accepted by a large number of people.” Researchers within this tradition have adopted one of two major strategies. In one strategy, students who receive the most nominations of liking or friendship from their peers are identified as popular (e.g., Clifford, 1963; Gottman, Gonso, & Rasmussen, 1975; Kuhlen and Lee, 1943). In the other strategy, students who have the highest social preference scores, together with above average liking and below average dislike scores, are identified as popular (e.g., Coie & Dodge, 1983; Coie, Dodge, & Coppotelli, 1982; Parkhurst & Asher, 1992). Using these approaches, researchers have found that popular elementary and middle
school aged students are characterized as unlikely to start fights, disrupt the group, or be stuck up compared with other children (e.g., Coie, Dodge, and Kupersmidt, 1990; Parkhurst, Roedel, Bendixen, & Potenza, 1991; Williams and Asher, 1987). In addition, they are judged to be cooperative, kind, honest, trustworthy, and fun to be with compared with children in other sociometric groups.

A second research tradition, concerned mostly with adolescents, has studied individuals’ perceptions of their own and others’ popularity and the characteristics adolescents associate with popularity (e.g., Butcher, 1986; Weisfeld, Block, & Ivers, 1983; Weisfeld, Block, & Ivers, 1984). A number of studies adopting this approach also point to the behavioral attributes which students believe are associated with peer popularity in middle childhood (Rodkin, Farmer, Pearl, & Van Acker, 2000) and early adolescence (e.g., Butcher, 1986; Eder, 1987; Luthar & McMahon, 1996; Parkhurst and Hopmeyer, 1993). These studies indicate that perceived popularity involves both positive and negative behavioral attributes. Luthar and McMahon (1996), in a study with ninth grade, inner-city students, found that peer popularity was positively associated with prosocial and aggressive/disruptive behaviors. Other studies have also found that peer popularity is positively associated with a number of recognized measures and markers of social dominance. The latter have included acceptance by the leading crowd, being a leader, being self-confident, winning disputes, and not being ridiculed by peers (e.g., Eder, 1987; Eder & Kinney, 1995, Schneider & Coutts, 1985). Parkhurst and Hopmeyer (1993), in a study of middle class, predominately White seventh- and eighth-grade students, found that students who were high on perceived popularity, but were not sociometrically popular, were characterized as dominant, aggressive and stuck-up.

Similar to the research on popularity in adolescence, researchers have examined teacher preference using two different approaches. In one approach, researchers have assessed elementary school teachers’ actual preference of students using both self-report and direct observational methodologies (e.g., Good & Brophy, 1972; Willis & Brophy, 1974). These studies indicate that teachers prefer students who are motivated academically, compliant, and prosocial (Wentzel & Asher, 1995). Additionally, Taylor and Trickett (1989) found that positive social skills and low levels of antisocial behaviors predicted personal preference among teachers of both younger (prekindergarten through first grade) and older (second through fifth grade) children. Among the older, but not younger students, academic competence also emerged as a significant predictor of teacher preference. In the other approach, children’s and adolescents’ perceptions of the student characteristics associated with teacher preference have been identified. Research looking at a broad range of behavioral and academic attributes, with elementary school students, indicates that students believe that teachers prefer children who excel academically, are
active in classroom activities, and are compliant and friendly (e.g., Tal and Babad, 1989, 1990).

Less research has looked at the attributes adolescents perceive to be associated with teacher preference. Research by Juvonen & Murdock (1993, 1995), using White upper-middle class samples, suggests that adolescents believe that teachers prefer students who are diligent. Juvonen and Murdock (1993) asked eighth-grade students to evaluate how popular peers versus teachers would react to hypothetical students who were described as varying in their achievement level and their level of ability and effort. The results showed that the students believed that regardless of achievement and ability level, teachers prefer students who are hard working. In contrast, they believed that diligent students would not be popular among their peers.

Following up on this research, Juvonen and Murdock (1995) examined fourth-, sixth-, and eighth-grade students’ willingness to portray themselves as diligent to teachers and popular peers. The results showed that the fourth and sixth graders were willing to portray themselves as effortful to both teachers and popular peers. In contrast, the eighth graders were more reluctant to convey that they worked hard to popular peers than to teachers. The older students perceived that while teachers value diligence, low effort expenditure would enhance their popularity among peers. It is important to note that in the Juvonen and Murdock (1993, 1995) studies, adolescents responded to hypothetical peer and teacher targets and peer popularity and teacher preference were not directly assessed. Nonetheless, inferences can be drawn from their work. Taken together, these studies suggest that in early adolescence, individuals believe that students’ achievement level and effort expenditure on school work are differentially associated with peer popularity versus liking by teachers.

Two key issues are raised by Juvonen and Murdock’s (1993, 1995) research. First, although the researchers focused on only two academic-related behaviors (i.e., achievement level and effort expenditure), their findings suggest that adolescents might believe that it takes a completely different set of behavioral and academic attributes to be popular with peers versus preferred by teachers. Accordingly, one goal of the present study was to examine the association between a broader range of academic and behavioral attributes and perceived popularity versus perceived teacher preference. The academic dimensions of interest included students’ grade point average (GPA) and number of unexplained absences. It was felt that these two sources of data would provide a good index of students’ level of academic engagement. The behavioral dimensions of interest included several aspects of students’ behavioral style (i.e., prosociality, aggressiveness, submissiveness), and peer perceptions of students as being stuck-up. Drawing upon prior research (e.g., Butcher, 1986; Eder, 1987; Luthar and McMahon, 1996; Parkhurst and Hopmeyer, 1993), it was hypothesized that perceived popularity would be associated with academic disengagement.
Given the limited research on the attributes associated with perceived teacher preference in adolescence it was not certain which attributes would be associated with perceived esteem by teachers. Drawing upon the work of Juvonen and Murdock (1993, 1995) it was hypothesized that academic engagement, as indexed by higher GPAs and infrequent absences from school, would be positively associated with teacher preference. Tal and Babad’s (1989, 1990) finding that elementary school students believe that teachers prefer children who are friendly also led to the hypothesis that prosociality would be positively associated with perceived teacher preference. It was not clear, however, whether submissiveness would be associated with perceived teacher preference. On the one hand, if students who are viewed as preferred by teachers are judged to be compliant this might lead to the more general perception that they are submissive. It might also be the case that students who are engaged academically are more likely to adopt the values of authority figures and less likely to engage in behaviors that might be devalued by school staff and administrators. For instance, when confronted by peers they might be more likely to acquiesce or remove themselves from the situation rather than escalate a conflict. These behaviors would likely lead them to be judged submissive by peers. Alternatively, because submissiveness is generally associated with dislike by peers (e.g., Coie & Kupersmidt, 1983; Coie et al., 1982; Dodge, 1983) and in preadolescence has been identified as a marker of deviance (Juvonen, 1991), adolescents might believe that students who are overly submissive tend not to be held in high regard by teachers.

It was not clear whether students high on perceived teacher preference would be viewed as stuck-up. On the one hand, their superior academic success and possible disengagement from the peer group to invest time in their schoolwork might lead peers to perceive these students as stuck-up. Alternatively, because it was hypothesized that most students perceived as high in teacher preference would not be identified as high in peer popularity and that students high in peer would be labeled as stuck-up, it was also conceivable that these students would not be viewed as stuck-up.

The second issue raised by Juvonen and Murdock’s research (1993, 1995) is that it might be impossible for midadolescents to be perceived as both popular with peers and well-liked by teachers. Accordingly, a second goal of the present study was to determine if these two identities can coexist. If indeed they do, it was of interest to identify the academic and behavioral attributes of students who manage to be perceived as both high in peer popularity and preferred by teachers. It was speculated that these students would combine the characteristics associated with perceived popularity and perceived teacher preference. It was predicted that they
would maintain a commitment to their academic success (get good grades and be infrequently absent from school), be highly sociable, and not engage in behaviors which lead them to be judged as submissive by peers (e.g., Adler & Adler, 1998; Butcher, 1986). In making these predictions, it was anticipated that their behavioral style would offset any negative appraisals of their academic success. It was also predicted that the two groups of students identified as high in perceived popularity might in fact be popular with different groups of students.

In summary, the present study sought to address two main questions: (1) What are the behavioral and academic correlates of perceived popularity and perceived teacher preference in midadolescence? and (2) What are the behavioral and academic characteristics of students who managed to be perceived simultaneously as high on both perceived popularity and perceived teacher preference? An additional issue of interest was whether there was a relationship between individuals’ ratings of students’ peer popularity and their own behavioral and academic attributes. A number of studies indicate that students tend to associate with classmates who exhibit a similar motivational orientation toward school (e.g., Kindermann, 1993; Sage & Kindermann, 1999; Tesser, Campbell, & Smith, 1984). Indeed, work by Kindermann (1993) indicates that students form peer networks which support their level of school performance and academic engagement. Given these findings, it was anticipated that students would be rated as high in peer popularity by individuals who shared some of their important academic and behavioral attributes. Perceived popularity and perceived teacher preference were examined given the finding that adolescents’ descriptions of peer, parent–child, and teacher–student relationships, although often not viridical with the reports of other informants, are important predictors of their behavior (e.g., Fuligni & Eccles, 1993; Mboya, 1995; Ohannessian, Lerner, Lerner & von Eye, 2000).

The study relied on peer report rating scale sociometric and behavioral nomination measures to identify students’ behavioral characteristics. Data on GPAs and unexplained absences which were used to gauge students’ academic engagement, were obtained from the school. Tenth-grade students were selected for the sample because it was felt that by this age adolescents would have well-established beliefs about peer popularity and teacher preference in the high school environment (cf. Juvenon & Murdock, 1995). The study was conducted in a moderately sized urban high school serving an ethnically diverse student body. The school is located in a community currently experiencing a moderate degree of economic distress. Additionally, according to school records only 20–25% of each graduating class typically attend a 4-year college. This was an appropriate setting given that the students would likely vary in their level of school engagement (cf. Hymel, Comfort, Schonert-Reichl, & McDougall, 1996). This sample also afforded the opportunity to extend the findings of prior studies which
have focused primarily on white middle-class students. Data from students of
different socioeconomic status backgrounds were not included, so the
effects of socioeconomic status on the correlates of perceived popularity
and perceived teacher preference were not directly assessed. Nonetheless,
the current data extend the findings of prior research by examining a
community different than typically investigated.

METHOD

Participants

Participants were 351 10th-grade students (179 boys, 172 girls) from a high
school in Burbank, CA, who were participating in a longitudinal project on
adolescents’ experiences of loneliness at school. Burbank is an incorpo-
rated city that is located approximately 10 miles north of central Los
Angeles. This area of the Southern California region is currently experi-
encing a moderate degree of economic distress, with approximately 15% of
households having incomes below federal poverty levels and about 40% of
households subsisting on incomes less than US$35,000 a year (United Way
of Greater Los Angeles, 1999).

Consistent with the ethnic/racial composition of the school population
and the surrounding neighborhoods (United Way of Greater Los Angeles,
1999), the participants were predominately Caucasian and Latino. The
composition of the sample (ascertained through school records) was as
follows: 50% Caucasian, 35% Latino, 7% Asian and Pacific Islander, 5%
Armenian, 2% African American, and 1% Native American.

Written parental consent was obtained for all students, who also indi-
cated in writing that they were willing to participate in the project. Nineteen parents (5.06%) denied their children permission to participate in the
project and five students (1.33%) indicated that they were not willing to
participate. Questionnaires were group-administered in 10th-grade English
classes during the Fall semester, in a session lasting approximately 50 min.

Questionnaire Preparation

When peer-report rating-scale sociometric and behavioral nomination
measures are used in elementary school, each participant is typically asked
to evaluate every student in his or her classroom (e.g., Hymel, 1986; Ladd &
Oden, 1979; Singleton & Asher, 1977). This approach is not practical in a
high school setting, since students encounter a large number of peers in
different classes. Accordingly, an approach similar to that used by Parkhurst
and Asher (1992) with a middle school sample was adopted. A random
computer-generated list of exactly 50 students was created for each par-

ticipating in the study). The lists of students were generated with two constraints. First, that each participant’s name appeared on exactly 50 lists. Second, that each participant’s name did not appear on his or her own list. The same list of classmates appeared on every page of the questionnaire.

**Materials**

Perceived popularity was assessed using a rating scale measure, whereas perceived teacher preference was assessed using peer nominations. Data on behavioral characteristics was also obtained using peer nominations. The behavioral dimensions of interest included several aspects of students’ behavioral style (i.e., aggressiveness, submissiveness, prosociality), and peer perceptions of students as being stuck-up. In the present study, peer rather than teacher reports were used to assess adolescents’ behavioral style. This approach was adopted since the literature suggests that starting in middle childhood children’s agemates have a more complete perspective on students’ peer status and behavioral style than teachers. This occurs, in part, because as students get older, teachers have less “access” to the range of environments where children are likely to exhibit certain behaviors (for a detailed discussion of this issue see Rubin, LeMare, & Lollis, 1990).

**Perceived popularity.** A rating scale sociometric measure was used to assess students’ levels of peer popularity at school. Students were asked to indicate how popular each of the 50 students on their list was at school on a scale ranging from 1 (not at all popular) to 5 (very popular). Students were also told that if they did not know the student or did not know the student well enough to make this evaluation, then they should circle “0.” A student’s score on the measure was the average rating he or she received from classmates who provided an evaluation, with higher scores indicating greater levels of popularity (for a similar approach see Parkhurst & Asher, 1992; Parkhurst and Hopmeyer, 1993).

**Perceived teacher preference.** Two peer assessment items were used to assess students’ perceived preference by teachers. The two teacher preference items were: (a) Who is best liked by teachers at your school? and (b) Who do teachers prefer at your school? \[r(351)=0.91, P<0.001\]? Each item appeared on a separate page. Directly below each item was the list of students to be evaluated. Participants were asked to circle the names of classmates who fit this description with the understanding that they could circle as many or as few names as they wanted.

**Behavioral assessments.** Eight peer assessment items were used to assess four dimensions of students’ behavioral style: aggressiveness, snobbishness, submissiveness, and prosociality. The two aggressiveness items were: (a) Who gets mad easily? and (b) Who is mean? \[r(351)=0.78, P<0.001\]. The two
snobbishness items were: (a) Who is stuck up? and (b) Who thinks that they are better than other students? \[ r(351)=0.85, P<0.001 \]. The two submissiveness items were: (a) Who does not defend themselves when other students give them a hard time? and (b) Who is afraid to stand up for themselves? \[ r(351)=0.84, P<0.001 \]. The two prosocial items were: (a) Who is cooperative and includes others? and (b) Who is friendly? \[ r(351)=0.82, P<0.001 \].

Each item appeared on a separate page. Directly below each item was the list of students to be evaluated. Participants were asked to circle the names of classmates who fit this description with the understanding that they again could circle as many or as few names as they wanted.

Proportion scores were calculated to determine students’ perceived teacher preference and behavioral style. A participant’s score was based on the number of nominations he or she received on a particular item divided by the number of students who indicated that they knew the participant.

In other words, in calculating the proportion scores, data from students who indicated that they did not know the participant at all or well enough to evaluate his or her popularity were not included. For each participant, separate scores for perceived teacher preference, aggressiveness, snobbishness, submissiveness, and prosociality were derived by calculating the mean of the scores received on the two items that assessed each construct.

Based on research evidence (Maassen, van der Linden, Goossens, & Bokhorst, 2000; Terry, 2000), it can be expected that evaluations by a relatively small subsample will still yield reliable results. Accordingly, it was inferred that 10 raters would be sufficient to yield internally consistent composite ratings of perceived popularity, perceived teacher preference, and behavioral style. In the current study, the number of students who provided an evaluation for each individual ranged from 10 to 43. The average number of students who evaluated each individual was 28.59 with a standard deviation of 6.69. When analyses were rerun, excluding the six individuals who were evaluated by less than 15 students, the results remained the same. Therefore, results are presented which include the entire sample.1

1 Correlations between the number of individuals who evaluated students and how they were judged by peers were examined. Number of evaluators was moderately correlated with perceived popularity \[ r(351)=0.45, P<0.001 \] and perceived teacher preference \[ r(351)=0.22, P<0.001 \]. There was a moderate positive association between number of raters and snobbishness \[ r(351)=0.22, P<0.001 \] and prosociality \[ r(351)=0.34, P<0.001 \]. There a weak positive association between number of raters and aggressiveness \[ r(351)=0.11, P<0.05 \]. There was also a weak negative association between number of raters and submissiveness \[ r(351)=-0.13, P<0.05 \].
are also nominated (for a more detailed discussion of this issue, see Parkhurst & Asher, 1992).

**GPA and unexplained absence data.** Overall GPA and data on unexplained absences were provided by the school at the end of the semester. In this study, GPAs represent the average of the students’ five academic course grades over the Fall semester. GPAs ranged from 0.0 to 4.0. In this study, unexplained absences were a tally of the number of times students were absent from school without a valid explanation. The number of unexplained absences in the Fall semester ranged from 0 to 70. Unexplained absences did not include absences due to suspension.

Means and standard deviations of the perceived popularity, perceived teacher preference, behavioral style and school adjustment scores for the entire sample are presented in Table 1.

**Analysis Strategy**

The questions of interest in the present study were examined using four main sets of analyses. First, the behavioral and academic attributes associated with perceived popularity and perceived teacher preference in midadolescence were examined. This question was approached using two sets of analyses. The first set of analyses evaluated the degree of association between perceived popularity and perceived teacher preference as well as the pattern of associations between each of the variables using bivariate correlations. A second set of analyses evaluated the degree of association between the behavioral and academic variables and the two main constructs (perceived popularity, perceived teacher preference) in the context of separate multiple

### Table 1

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressiveness †</td>
<td>0.10</td>
<td>0.10</td>
</tr>
<tr>
<td>Snobbishness †</td>
<td>0.12</td>
<td>0.11</td>
</tr>
<tr>
<td>Submissiveness †</td>
<td>0.10</td>
<td>0.10</td>
</tr>
<tr>
<td>Prosociality †</td>
<td>0.36</td>
<td>0.15</td>
</tr>
<tr>
<td>Perceived teacher preference †</td>
<td>0.17</td>
<td>0.17</td>
</tr>
<tr>
<td>Perceived popularity</td>
<td>2.39</td>
<td>0.68</td>
</tr>
<tr>
<td>GPA</td>
<td>2.66</td>
<td>0.95</td>
</tr>
<tr>
<td>Unexplained absences</td>
<td>5.07</td>
<td>8.85</td>
</tr>
</tbody>
</table>

The behavioral nomination and perceived teacher preference scores, indicated by a “†,” represent the average of individual students’ proportion scores. Proportion scores were calculated by dividing the number of nominations each student received on a particular item by the number of students who indicated that they knew the participant. The perceived popularity score is the average popularity rating on a five-point scale. The GPA score is calculated on a 4.0 scale. The unexplained absences score is the average number of days missed during the Fall semester.
regression analyses. The regression approach identified the unique proportion of variance accounted for by each predictor variable. To further clarify these results an ANOVA strategy was employed. More specifically, the ANOVA analyses examined whether the behavioral and academic correlates of popularity differed depending on whether an individual was high or low in teacher preference. For the regression and ANOVA analyses, preliminary analyses were conducted to see if there were any interactions between gender, ethnicity/race, and the behavioral and academic variables. In the regressions, when gender and ethnicity/race by predictor interactions were included, none of the interaction terms added significantly to the prediction of perceived popularity and perceived teacher preference. Therefore, the reported models do not include the interaction terms. In the ANOVAs, there were no significant two- or three-way interactions found between group membership (i.e., high teacher preference, high peer popularity, high on both dimensions, and average on both dimensions), gender, and ethnicity/race in their relation to the behavioral and academic variables. Therefore, analyses are presented which do not include gender and ethnicity/race as separate factors. Finally, also using an ANOVA strategy, the association between individuals’ ratings of students’ peer popularity and their own behavioral and academic attributes was examined. Here, too, preliminary analyses revealed no significant two- or three-way interactions between group membership (i.e., high raters of high peer popularity students and high raters of both students), gender, and ethnicity/race in their relation to the behavioral and academic variables. Therefore, analyses are presented which do not include gender and ethnicity/race as separate factors.

RESULTS

Relations Among Variables

Preliminary bivariate correlations. There was a weak positive association between perceived popularity and perceived preference by teachers \([r(351)=0.14, P<0.01]\). In order to interpret this modest degree of correlation, the different characteristics of students perceived as popular with peers versus students perceived as preferred by teachers were identified.

Table 2 depicts the pattern of correlations between the academic and behavioral predictors and perceived popularity and perceived teacher preference. Following a procedure outlined by Cohen and Cohen (1983), it was evaluated whether the behavioral and academic variables were correlated to a significantly different degree with perceived popularity and with perceived teacher preference. Snobbishness was more strongly related to perceived popularity than perceived teacher preference \([t(348)=11.5, P<0.001]\). In contrast, GPA \([t(348)=-13.56, P<0.001]\), prosociality \([t(348)=-4.7, P<0.01]\), and aggressiveness \([t(348) = 5.7, P<0.01]\)
were more strongly related to perceived teacher preference than perceived popularity. The direction of the association between the variables was also significant for unexplained absences \[t(348)=17.57, P<0.001\], and submissiveness \[t(348)=-13.66, P<0.001\].

**Regression analyses.** In order to further interpret the association between perceived popularity and perceived teacher preference, multiple regression analyses with all of the variables entered in a single step were conducted. Examination of the correlation matrix of the predictors, as shown in Table 2, indicates that many are correlated. Therefore, it was anticipated that the multiple regression analyses would reveal different relations between the predictor and criterion variables.

The relatively high intercorrelations among the predictors raised the potential problem of multicolinearity (for a full discussion of the issues associated with multicolinearity, see Stevens, 1992). The variance inflation factor (VIF) for each predictor was examined. It is generally accepted that a VIF exceeding 10 is problematic. In the present study, none were found to exceed 2.0.

The results of the multiple regression analyses predicting perceived popularity and perceived teacher preference are shown in Table 3. The table displays the standardized regression coefficients (\(\beta\)) and squared semipartial correlation coefficients (the percentage of variance accounted for uniquely by the parameter) for each variable. Respondent gender and ethnicity/race were included as variables. Gender was coded as a dichotomous variable (males = 0, females = 1). Ethnic/racial group status was collapsed into a three-category variable: Caucasian (\(n=175\)), Latino (\(n=123\)), and Other (\(n=53\)).

Consistent with the correlational results presented above, the analyses show a different pattern of relations between the predictor variables and perceived popularity versus perceived teacher preference. Snobbish behavior (\(\beta=0.375, P<0.001\)), prosocial behavior (\(\beta=0.531, P<0.001\)), and unexp-
explained absences from school \((\beta = 0.113, P < 0.01)\) were all significant and independent predictors of high perceived popularity. Submissive behavior \((\beta = -0.472, P < 0.001)\) and GPA \((\beta = -0.097, P < 0.01)\) were significant and independent predictors of low perceived popularity. Sixty percent of the variance in perceived popularity was accounted for by the model \(F(9,311) = 55.36, P < 0.001\).

Turning next to perceived teacher preference, snobbish behavior \((\beta = 0.144, P < 0.001)\), submissive behavior \((\beta = 0.195, P < 0.001)\), prosocial behavior \((\beta = 0.493, P < 0.001)\), and GPA \((\beta = 0.506, P < 0.001)\) were significant and independent predictors of low perceived teacher preference. Unexplained absences from school \((\beta = -0.144, P < 0.001)\) was a significant and independent predictor of low perceived teacher preference. Sixty-six percent of the variance in perceived teacher preference was accounted for by the model \(F(9,311) = 69.49, P < 0.001\).

Following the procedures outlined in the SAS statistical package, the regression coefficients obtained in the two analyses were compared (SAS Institute, 1994). These comparisons revealed significant differences for grades \(F(1,311) = 22.45, P < 0.001\), prosociality \(F(1,311) = 85.14, P < 0.001\), submissiveness \(F(1,311) = 149.39, P < 0.001\), and snobbishness \(F(1,311) = 49.98, P < 0.001\).

### Analyses of composite groups

Given how some variables were negatively associated with perceived popularity and positively associated with perceived teacher preference (e.g., submissiveness), it was of particular interest to identify the characteristics of students who managed to be perceived simultaneously as high on both dimensions. To do this, a targeted follow-up strategy similar to that adopted by Parkhurst and Hopmeyer (1993) was employed. Students were classified

<table>
<thead>
<tr>
<th>Predictor variables</th>
<th>Perceived popularity</th>
<th>Perceived teacher preference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(\beta)</td>
<td>sr(^2)</td>
</tr>
<tr>
<td>Race1</td>
<td>0.072</td>
<td>0.002</td>
</tr>
<tr>
<td>Race2</td>
<td>0.054</td>
<td>0.001</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.156**</td>
<td>0.019</td>
</tr>
<tr>
<td>GPA</td>
<td>-0.093*</td>
<td>0.005</td>
</tr>
<tr>
<td>Absences</td>
<td>0.119**</td>
<td>0.010</td>
</tr>
<tr>
<td>Prosocial</td>
<td>0.530***</td>
<td>0.192</td>
</tr>
<tr>
<td>Aggressive</td>
<td>-0.052</td>
<td>0.001</td>
</tr>
<tr>
<td>Submissive</td>
<td>-0.427***</td>
<td>0.161</td>
</tr>
<tr>
<td>Snobby</td>
<td>0.368***</td>
<td>0.081</td>
</tr>
</tbody>
</table>

Standardized beta weights are reported. The sr\(^2\) is the squared semipartial correlation coefficient, the percentage of variance accounted for uniquely by the parameter.

*\(P < 0.05\). **\(P < 0.01\). ***\(P < 0.001\).
as low on perceived popularity if they scored 1/2 standard deviation (S.D.) or more below the mean. Students were classified as average on perceived popularity if their scores fell between 1/2 S.D. below the mean and 1/2 S.D. above the mean. Students were classified as high on perceived popularity if they scored 1/2 SD or more above the mean, based on the proportion of students nominating them as popular. The same general approach was used to classify students as low, average, and high in teacher preference. Using this information, students were classified into composite categories: students low on perceived popularity and high on perceived teacher preference (high teacher preference, \(n=29\)), students high on perceived popularity and low on perceived teacher preference (high peer popularity, \(n=44\)), and students high on both dimensions (both, \(n=30\)). These three groups were compared to one another and to a group of students found to be average on both perceived popularity and perceived teacher preference (average, \(n=40\)). Students whose scores fell between a 1/2 and full S.D. above or below the mean on both dimensions remained unclassified (\(n=208\)).

The resulting means and standard deviations on perceived popularity for the four groups were: (a) high teacher preference (\(M=1.78, \text{S.D.}=0.23\)); (b) high peer popularity (\(M=3.13, \text{S.D.}=0.26\)); (c) both (\(M=3.34, \text{S.D.}=0.42\)), and (d) average (\(M=2.38, \text{S.D.}=0.22\)). The resulting means and standard deviations on perceived teacher preference for the four groups were: (a) high teacher preference (\(M=0.39, \text{S.D.}=0.14\)); (b) high peer popularity (\(M=0.04, \text{S.D.}=0.03\)); (c) both (\(M=0.43, \text{S.D.}=0.15\)), and (d) average (\(M=0.14, \text{S.D.}=0.04\)).

One issue which was considered before undertaking the planned analyses was that students identified as high in peer popularity or both might be identified as popular by only a few others, and might be essentially unknown by everyone else. Accordingly, the number of students who evaluated individuals classified into the four composite categories were compared. The means and standard deviations for the four groups were: (a) high teacher preference (\(M=28.72, \text{S.D.}=4.54\)); (b) high peer popularity (\(M=32.03, \text{S.D.}=5.32\)); (c) both (\(M=32.81, \text{S.D.}=7.57\)), and (d) average (\(M=27.81, \text{S.D.}=5.72\)). The results showed that the number of raters differed significantly across the four composite groups [\(F(3,115)=5.10, P<0.002\)]. Follow-up analyses conducted using Tukey’s Studentized range tests, with the alpha level set at .05, indicated that students in both popular

\[2\] The initial intent had been to group the students as low, average, and high on perceived popularity and perceived teacher preference using the approach adopted by Parkhurst and Hopmeyer (1993) in their study of popularity among middle school students. They classified students as low on perceived popularity if they scored 1 S.D. or more below the mean, average on perceived popularity if their scores fell between 1 S.D. below the mean and 1 S.D. above the mean, and high on perceived popularity if they scored 1 S.D. or more above the mean, based on the proportion of students nominating them as popular. Unfortunately, using these cut-offs, very few students in the present sample were perceived as high on both dimensions.
groups were rated by a significantly larger number of individuals than average students. The number of raters of the other groups did not differ significantly from each other. These findings offer some reassurance that both groups of popular students were identified as popular by a reasonable number of peers. Furthermore, the finding that both groups of popular students were known by more peers than average students is consistent with the view that popular students are highly visible among their peers (e.g., Eder, 1987; Weisfeld et al., 1984).

Chi-square analyses were conducted to examine both the gender composition and the ethnic/racial composition of the four comparison groups (high teacher preference, high peer popularity, both, and average). As with the regression analyses, ethnicity/race was treated as a three-category variable (Caucasian, Latino, Other). No significant differences were found in the gender composition of the groups, $\chi^2(3, N=143) = 7.64$, ns. Additionally, no significant differences were found in the ethnic/racial composition of the groups, $\chi^2(6, N=143) = 12.54$, ns.

The results showed significant differences for GPA $[F(3,129)=39.60, P<0.001]$ and unexplained absences $[F(3,132)=9.26, P<0.001]$. The results also showed significant differences for prosociality $[F(3,139)=24.88, P<0.001]$, aggressiveness $[F(3,139)=12.97, P<0.001]$, submissiveness $[F(3,139)=54.94, P<0.001]$, and snobbishness $[F(3,139)=10.59, P<0.001]$. Means and standard deviations for the four groups can be found in Table 4. The effect sizes for the analyses were: GPA (ES = 0.48), unexplained absences (ES = 0.17), prosociality (ES = 0.35) aggressiveness (ES = 0.22), submissiveness (ES = 0.54), and snobbishness (ES = 0.19). Although there are no set criteria for interpreting the magnitude of effect sizes, Cohen (1988) suggests that effect sizes are small at 0.20, medium at 0.50, and large at 0.80.

Follow-up analyses were conducted using Tukey’s Studentized range tests, with the alpha level set at 0.01. The results of all of the pair-wise comparisons, among the four groups, are shown in Table 4. The second goal of this study was to identify the behavioral and academic characteristics of students who managed to be perceived simultaneously as high on both perceived popularity and perceived teacher preference. Accordingly, the academic and behavioral attributes which set apart students high on both dimensions (both) from the other three groups of students are described in the text. Turning first to comparisons of students high on both dimensions with high peer popularity students, Table 4 shows that they did not differ significantly on snobbishness and submissiveness. Both groups of students were judged to be snobby and nonsubmissive. In contrast, students classified as both were less aggressive, more prosocial, obtained higher grades, and were absent from school less often than the high popularity students.

Turning next to the comparison of students high on both dimensions and high teacher preference students, similar to the high teacher preference
group, students classified as both earned high grades and were infrequently absent from school. Additionally, both groups of students were judged to be equally nonaggressive and did not differ in their level of snobbishness. In contrast, the students classified as both were judged to be more prosocial and less submissive than the high teacher preference group.

Finally, comparison of students classified as both and average showed that both groups were judged to be equally nonaggressive and nonsubmissive. In addition, both groups of students were infrequently absent from school. In contrast, students high on both dimensions were judged to be more snobby, more prosocial, and obtained higher grades than the average group.

### Analyses of the associations between rater characteristics and evaluations of popularity

Next, it was examined whether the high peer popularity and both students might in fact be popular with different types of students. Comparison of the characteristics of students who rated the high peer popular students high in popularity with the characteristics of students who rated the both students high in popularity. A series of univariate analyses of variance were conducted in order to compare the perceived popularity, perceived teacher preference, behavioral style, GPA, and unexplained absence scores of students who rated high peer popularity students high in perceived popularity with those who rated the both students high in perceived popularity. Individuals were identified as high raters if they assigned a student a score of “4” or “5” on perceived popularity. Using these criteria, 489 individuals were classified as high raters of the high peer popularity students and 396 students were classified as high raters of the both students. The means

<table>
<thead>
<tr>
<th>Attributes</th>
<th>High teacher preference (n = 29)</th>
<th>High peer popularity (n = 44)</th>
<th>Both (n = 30)</th>
<th>Average (n = 40)</th>
</tr>
</thead>
<tbody>
<tr>
<td>School adjustment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPA</td>
<td>3.45a</td>
<td>1.88b</td>
<td>3.46a</td>
<td>2.64c</td>
</tr>
<tr>
<td>Unexplained absences</td>
<td>2.21a</td>
<td>10.23b</td>
<td>2.27a</td>
<td>3.65a</td>
</tr>
<tr>
<td>Behavioral</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prosocial</td>
<td>0.42a</td>
<td>0.33b</td>
<td>0.59c</td>
<td>0.38ab</td>
</tr>
<tr>
<td>Aggressive</td>
<td>0.07a</td>
<td>0.18b</td>
<td>0.07a</td>
<td>0.06</td>
</tr>
<tr>
<td>Submissive</td>
<td>0.25a</td>
<td>0.03b</td>
<td>0.05b</td>
<td>0.08b</td>
</tr>
<tr>
<td>Snobby</td>
<td>0.10a</td>
<td>0.19b</td>
<td>0.18ab</td>
<td>0.07a</td>
</tr>
</tbody>
</table>

Superscripts refer to the post hoc Tukey comparisons made within each row. Row means that do not share at least one superscript differ significantly at \( P < 0.01 \).
and standard deviations of the high raters of the high peer popular and both groups are shown in Table 5. The results showed significant differences for perceived teacher preference \[ F(1,883)= 30.23, P< 0.001 \], prosociality \[ F(1,883)= 12.93, P< 0.001 \], and GPA \[ F(1,850)=15.43, P< 0.001 \]. High raters of the students in the both group were perceived as higher in teacher preference, more prosocial, and obtained higher grades than high raters of students in the high peer popularity group. These findings indicate that students are popular with individuals who share some of their important attributes.

**DISCUSSION**

The present study sought to address two main questions: (1) What are the behavioral and academic correlates of perceived popularity and perceived teacher preference in midadolescence? and (2) What are the behavioral and academic characteristics of students who managed to be perceived simultaneously as high on both perceived popularity and perceived teacher preference? An additional issue of interest was whether there was a relation between individuals’ ratings of students’ peer popularity and their own behavioral and academic attributes. Multiple regression analyses, with all variables entered in a single step, showed that perceived popularity was negatively associated with submissiveness, and GPA, and positively associated
with unexplained absences. In contrast, perceived teacher was positively associated with submissiveness and GPA and negatively associated with unexplained absences. Snobbishness and prosociality were positively associated with both constructs.

Comparison of the regression coefficients obtained in the two analyses revealed two distinct patterns. In the first pattern, the direction of the relation between the predictor and criterion variables was significantly different. This occurred for GPA and submissiveness. These results are consistent with Juvonen and Murdock's (1993, 1995) finding that in early adolescence, individuals believe that students' achievement level and effort expenditure on schoolwork are differentially associated with perceived popularity versus liking by teachers. Additionally, the findings expand upon their work by indicating that a low social dominance is associated with high perceived teacher preference and low perceived popularity. In a related finding, Wentzel and Asher (1995) found that submissive–rejected students were not disliked by teachers. It is not clear from the present study, however, why submissiveness is an attribute associated with perceived teacher preference. Future research should explore the relation between submissiveness and perceived teacher preference.

In the second pattern, the strength of the association between the predictor and criterion variables differed. Snobbishness and prosociality were more strongly associated with perceived popularity than with perceived teacher preference. The stronger association between snobbishness and perceived popularity versus perceived teacher preference is consistent with prior literature which indicates that self-importance is a trait primarily ascribed to popular girls, who are choosy about who they associate with (Eder, 1987). The reason for the stronger association between perceived popularity and prosociality is less evident. Given that being highly sociable is a hallmark of social competence, it was anticipated that prosociality would be equally associated with both perceived popularity and perceived teacher preference. One possible explanation for this finding is that students who are engaged academically and devote considerable amounts of time to studying may be somewhat more likely to gain a reputation as being unfriendly.

The regression strategy that was employed invites a “main effect” type of interpretation. However, consistent with Luthar and McMahon (1996) and Rodkin et al. (2000), it was found that a more differentiated perspective of perceived popularity emerges when the behavioral and academic variables which characterize the subtypes of popular students are examined—high peer popularity and both. It was found that students identified as high peer popularity were judged to be more aggressive and less prosocial than the other groups of students. They were also judged to be significantly more stuck-up than the average and high teacher preference students although they did not differ significantly from the both students on this dimension. In
addition, they obtained lower GPAs and were more frequently absent from school than the other groups of students. In contrast, students high on both dimensions (i.e., perceived popularity, perceived teacher preference) distinguish themselves by doing well academically, infrequently missing school and behaving in a highly prosocial and nonsubmissive manner. These students maintain a commitment to their scholastic success at school while also being friendly and assertive (e.g., Butcher, 1986). Indeed, the both students were judged to be significantly more prosocial than the other groups of students. This is consistent with Adler and Adler’s (1998) finding that elementary-school aged students who pursue academics and are socially skilled in other ways are not identified as unpopular. In summary, the correlates of popularity differ depending on whether a student is perceived as high or low in teacher preference.

In the present study, it was also considered that the two groups of popular students (i.e., high peer popularity and both) might in fact be popular with different types of students. To test this hypothesis, the characteristics of students who rated the high peer popularity students high in popularity with the characteristics of students who rated the both students high in popularity were compared. The results showed that high raters of the students in the both group were perceived as higher in teacher preference, more prosocial, and obtained higher grades than high raters of students in the high peer popularity group. These findings suggest that not only are there two distinct groups of popular students but that students are popular with individuals who share some of their important attributes. These findings are consistent with studies which show that students tend to associate with classmates who exhibit a similar motivational orientation toward school (e.g., Kindermann, 1993; Sage & Kindermann, 1999; Tesser et al., 1984). Work by Kindermann (1993) indicates that students form peer networks which support their level of school performance and academic engagement and that the networks are quite stable over the school year despite changes in individual memberships.

It was found that the behavioral and academic correlates of perceived popularity and perceived teacher preference were the same for students classified as Caucasian, Latino, and Other. It is important to recognize, however, that students were classified solely on the basis of school records. There likely is substantial diversity in belief systems, degree of acculturation, and ethnic self-concepts among students identified by school records as belonging to the same ethnic/racial group (for a fuller discussion of these issues, see Amirkahan et al., 1995; Phinney, 1996). Accordingly, heterogeneity within the ethnic/racial groups identified in the study may have obscured meaningful differences between the groups. Future research should be conducted which takes these variables into account.

The correlational design of the present study did not allow identification of the causal relations among the variables. One possibility is that students’
level of academic engagement and behavioral style directly influences how they are perceived by peers. Alternatively, students’ current reputation as popular or preferred by teachers might influence how peers evaluate and judge their behaviors. It is also possible that students are perceived as popular or as preferred by teachers because of reputations they carried over from earlier grades (cf. Kindermann, 1993). This seems especially likely if groups of students make school transitions together. Future research employing longitudinal designs is needed to explore these alternative explanations.

The present findings indicate a distinctive pattern of behaviors which differentiate students who are perceived as popular or perceived as preferred by teachers. However, the same pattern may not emerge in all schools. Much may depend on the community of students being studied. Accordingly, another direction for future research is to examine the effects of socioeconomic status on the correlates of perceived popularity and perceived teacher preference.

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