

Teachers' Peer Buddy Selections for Children with Autism: Social Characteristics and Relationship with Peer Nominations

Jennie N. Jackson · Jonathan M. Campbell

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Abstract We examined social and behavioral characteristics of children selected by their teachers to serve as peer buddies for a child with autism. Thirty-one general education teachers and 576 children from five public elementary schools completed social status, behavioral, and peer buddy nomination measures. When compared to non-selected students, teacher selected buddies were: (a) more often boys, (b) popular, and (c) viewed as prosocial leaders by their peers. Agreement between teacher and peer nominations of social status and behavioral characteristics ranged from low to high; agreement between teacher and peer selected buddies was moderate.

Keywords Autism · Inclusion · Peer buddies · Teacher nominations · Attitudes

Introduction

Under federal law, children with autism (CWA) are to be educated in the least restrictive environment possible, which means that CWA may be included in general education classes with appropriate supports. Peer-mediated interventions have been successful in supporting CWA in regular education settings, such as peer tutoring or peer buddy techniques, class-wide peer tutoring, peer networks, social skills groups, and direct instruction of CWA to initiate social interaction with peers confederates (DiSalvo and Oswald 2002). A frequently implemented strategy

involves enlisting the help of peer buddies to support CWA in the classroom, which often involves the peer providing assistance, instruction, and feedback to CWA (Bass and Mulick 2007). Peer buddy interventions have garnered empirical support; for example, Laushey and Heflin (2000) reported improved social skills for two CWA by using a peer buddy intervention with kindergarteners. Likewise, Carter et al. (2005) demonstrated social benefits of their Peer Buddy training program with high school students with intellectual disabilities, 30% of whom were diagnosed with autism.

An important aspect of peer-mediated intervention are the peers chosen to intervene on behalf of CWA. Peer-mediated interventions frequently, although not exclusively, enlist the help of socially competent peers due, in part, to their ability to model and reinforce appropriate social behavior (DiSalvo and Oswald 2002). Investigators have used peer and teacher ratings of social status to select peer tutors or buddies for CWA (Sasso and Rude 1987). For interventions where social status informs peer selection, teacher-rated social status is appealing due to time savings; therefore, it has been suggested that teachers' nominations of sociometric status be used as a proxy for the peer group. Overall, research findings provide some support for the use of teacher-rated social status as a peer proxy. For example, in a meta-analytic review, Renk and Phares (2004) found that peers and teachers produce similar ratings of sociometric status (e.g., $M_r = .51$).

Although teachers and peers agree modestly regarding social status, teachers do not enjoy complete access to students' complex social relationships or the larger peer ecology (Rodkin and Hodges 2003). For example, teachers often are unaware of aggression between students, underestimate bullying (Rodkin and Hodges 2003) and perceive peer teasing as a less serious form of harassment than

J. N. Jackson · J. M. Campbell (✉)
Department of Educational Psychology and Instructional
Technology, University of Georgia, 325-J Aderhold Hall,
Athens, GA 30602-7143, USA
e-mail: jmcampbl@uga.edu

unpopular students (Newman and Murray 2005). Teachers' lack of awareness of aggression is illustrative because research on peer influence has revealed complex relationships between social status, social influence, and aggression. For example, aggressive elementary school-aged boys are not always unpopular and may be socially influential. In contrast, boys viewed as "nice," sensitive to the needs of others, and interested in academic success often do not enjoy social status and influence (see Rodkin and Hodges for review). Within the context of the present study, teachers' incomplete awareness of the peer ecology may result in peer buddy selections that differ from peers. For example, teachers may nominate a peer buddy who is invested in academic success, sensitive, and nice, but may have little social influence. As such, utilizing teachers to expedite the peer selection process may unwittingly identify students who limit social acceptance within the peer group. We are not aware of research examining agreement between peer and teacher selected buddies, and understanding potential differences would seem to hold some importance based on the complexities of the peer ecology.

Conceptualization and Measurement of Peer Social Status

Peer social status, which refers to the extent that children are socially accepted or rejected by their peers, has been shown to be a factor influencing children's socio-emotional functioning, behavioral adjustment, and cognitive development (Coie and Dodge 1983). Social status is often measured using a variety of sociometric measures, and sociometric data are used for a variety of purposes. For example, sociometric data are sometimes used to predict academic and social behaviors, provide a basis for classroom instruction, provide a basis for intervention, and serve as outcome measures for social skills interventions (Vasa et al. 1994).

Social Status as Sociometric Popularity

The two-dimensional sociometric status grouping developed by Coie et al. (1982) has been widely used to assess the social status of school children. The technique yields social groupings of popular, average, rejected, neglected, and controversial children (Coie and Dodge 1983). In this tradition, sociometric groups are constructed based on the number of "like most" (LM) and "like least" (LL) nominations and result in sociometric popularity information. The validity of two-factor sociometric groups has been established, in part, by documenting behavioral differences between the groups (e.g., Gifford-Smith and Brownell 2003). For example, popular children demonstrate higher levels of prosocial behavior and cognitive abilities, possess

and demonstrate strong leadership skills, are socially sophisticated, are cooperative, and are more supportive of others compared to children categorized as average or rejected (e.g., Gifford-Smith and Brownell 2003). Popular children demonstrate desirable qualities for implementing peer-mediated interventions and research has demonstrated that popular peers are effective social change agents (Sasso and Rude 1987).

Children categorized as rejected exhibit increased levels of aggression, fighting, disruptive behavior, off-task behavior, and antisocial behavior compared to children categorized as popular or average (Gifford-Smith and Brownell 2003). Children classified as controversial tend to exhibit a combination of the behaviors described for the previous two social groups. Controversial children tend to be leaders and often engage in prosocial behaviors, but can also exhibit antisocial and aggressive behavior (Hill and Merrell 2004). Children classified as neglected exhibit fewer antisocial behaviors compared to the rejected group of children, engage in more social withdrawal, display fewer social interactions, and are often viewed as shy or unnoticed by their peers (Gifford-Smith and Brownell 2003).

Additional Distinctions of Social Status and Popularity

Newer conceptualizations of peer social status have expanded the notions of popularity and status. For example, Lease et al. (2002) and Parkhurst and Hopmeyer (1998) have examined distinctions between "perceived popularity" and "sociometric popularity" for elementary and middle school students. The distinctions arise from differences between psychology-based research (sociometric popularity) and sociological research (perceived popularity), and yield different meanings of 'popularity' (Lease et al. 2002). Sociometric studies conceptualize popularity as meaning well liked, accepted, or preferred as a friend; while research on perceived popularity often defines popularity based on a person's attainments, attributes, possessions, and activities of social prestige and influence (Parkhurst and Hopmeyer 1998). Teachers report some awareness of these distinctions, and report that both types of popularity play important roles in social interactions within the classroom environment (Lease et al. 2002).

Perceived popularity is assessed using students' nominations of *most popular* and *least popular* classmates, whereas sociometric popularity is derived from *like most* and *like least* nominations. Different behavioral characteristics have been found to be associated with each group. Perceived popular children are often identified as "cool," socially prominent, prestigious, and hold a level of dominance within the peer group; whereas, sociometric popular children are found to be prosocial and likeable, but not necessarily dominant or powerful amongst peers (Lease

et al. 2002). Lease et al. found that perceived popularity and sociometric popularity are related, but that children perceive popularity as more than just likeability and dominance. We are not aware of research that has examined the benefits of recruiting perceived popular peers as interventionists.

Teacher-Rated Social Status

Collecting social status data from peers is often time consuming and is a process sometimes received with reservations from parents and school personnel when negative peer sociometric choices are used. Investigators often use teachers or parents as raters of social status or behavior, but results have been mixed regarding agreement with peer ratings (Huesmann et al. 1994). As mentioned earlier, peers and teachers have different access to the social milieu and may draw different conclusions based on the same observance of behavior (Ladd and Profilet 1996). Even so, investigators argue that teachers may constitute a reasonable alternative when peer sociometric measures are not viable (Ladd and Profilet 1996).

Purposes of the Study

With these ideas serving as backdrop, the purposes of the study were to: (a) investigate social and behavioral correlates of teachers' peer buddy selections for a CWA as viewed from the peer group, (b) evaluate agreement between teacher and peer nominated buddy selections for an unfamiliar CWA, and (c) examine if teachers' buddy selections endorse more positive attitudes toward an unfamiliar CWA when compared to their non-selected counterparts. Our overarching questions are, do teachers select *socially valid* peer buddies, as assessed by the peer group, and *appropriate* peer buddies as evidenced by buddies' attitudes toward autism? We predicted that teacher nominated buddies would be viewed as well-liked, popular and socially skilled by peers. Further, we predicted that teacher nominated buddies would endorse more favorable attitudes toward the unfamiliar CWA when compared to non-selected students.

Method

Participants

Participants were 31 general education teachers and 576 children (194 third-, 172 fourth-, and 210 fifth-graders) from 31 classrooms within five public elementary schools in Northeast Georgia. Classrooms did not include CWA and children were screened regarding prior knowledge of autism (7% reported hearing of autism but were unable to define it). Experimenters explained to participants that they

were interested in “learning what they thought about a new child who might be coming to their school.” Following this introduction, children with parental consent provided assent prior to participation. Participation rates ranged from 76.47 to 100% across classrooms ($M = 87.75$; $SD = 6.21$) and did not differ across grades or schools. Child participants were 294 boys and 282 girls who ranged in age from 8.00 to 12.50 years ($M = 10.06$; $SD = .98$). Self-identified race was: African-American, 8.9%; Caucasian, 80.6%; Hispanic/Latino, 4.5%; Asian-American, 0.7%; and Other, 5.2%, which was representative of the larger school population. The sample was comprised of a low socioeconomic group as evidenced by the high percentage of students eligible to receive free or reduced-price lunch ($Mdn = 50.1$, range 19.5–54%). Participating teachers were 12 third-grade, 9 fourth-grade, and 10 fifth-grade regular education teachers; 26 teachers were female and five were male. We did not assess teachers' knowledge of autism.

Procedure

Students completed peer nominations of social status, behavioral characteristics, and social influence using rosters of participating classmates. After completing nominations, classrooms watched two videotapes and responded to questions about them. The data were collected as part of a larger study examining the effect of informational messages about autism on children's attitudes (Campbell et al. 2004); classes were randomly assigned to view videotapes with or without explanatory information about autism. Each class watched a videotape of a 12-year-old male actor displaying symptoms of autism frequently associated with lower functioning individuals, such as hand flapping, immediate echolalia, and body rocking (Swaim and Morgan 2001). Four individuals familiar with symptoms of autism (i.e., a parent of a CWA, a school psychologist, a child clinical psychologist, and an advanced graduate student in child clinical psychology) reviewed the videotape and agreed that the child actor accurately portrayed autistic symptomatology (Swaim and Morgan 2001). After viewing the videotape, children completed two attitudinal measures and identified classmates who would make a good peer buddy for the CWA as well as who would make the “best” buddy. During student data collection, teachers completed similar nominations of social status, behavioral characteristics, and social influence.

Measures

Behavioral Characteristics and Social Influence

Children completed nominations of behavioral characteristics and social influence using a modified version of the

Revised Class Play (RCP; Masten et al. 1985). In the present study, an 11-item version of the RCP was used to measure behavioral characteristics and social influence; ratings were standardized within classroom and gender (i.e., $M = 0$; $SD = 1$).

Peer Nominations of Sociometric Status

Children nominated three classmates they “like to play with the most” (LM) and three classmates they “like to play with the least” (LL; Coie and Dodge 1983). LM and LL nominations were standardized within classroom and gender and used to generate social preference (SP) and social impact (SI) scores. SP scores equal the difference between LM_Z and LL_Z scores ($LM_Z - LL_Z$), while the SI scores are the sum of the LM_Z and LL_Z scores ($LM_Z + LL_Z$). SP and SI scores were standardized within classroom and gender (i.e., $M = 0$; $SD = 1$). Coie and Dodge’s classification strategy was used to classify children into sociometric groups: (a) *popular*, $SP > 1.0$, $LM_Z > 0$, and $LL_Z < 0$; (b) *rejected*, if $SP < -1.0$, $LM_Z < 0$, and LL_Z score > 0 ; (c) *controversial*, SI score > 1.0 , and LM_Z and $LL_Z > 0$; (d) *neglected*, if SI score < -1.0 , and LM_Z and $LL_Z < 0$; (e) *average*, all other unclassified children.

Peer Nominations of Perceived Popularity and Peer Buddy Nominations

Children nominated three classmates they believed were the “most popular at school” and three classmates thought to be the “least popular at school.” After watching the videotape, students nominated three classmates they would “pick as a ‘buddy’ to help [the videotaped child] fit in with other kids” in the class. Students also circled the person that would make the “best buddy” for the CWA. Nominations were standardized within classroom and gender.

Adjective Checklist (ACL)

The ACL (Siperstein and Bak 1977) has been used widely in research that examines school children’s attitudes toward children with disabilities. The ACL lists 32 adjectives; 16 positive (e.g., smart) and 16 negative (e.g., dumb). Students endorsed adjectives that described each child in the videotape. The ACL is scored as: [# positive – # negative] + 20; internal consistency reliability is adequate (e.g., .91; Swaim and Morgan 2001).

Shared Activities Questionnaire, Short Form (SAQ)

The SAQ was developed to assess the willingness of elementary school children to engage in social (SOC), academic (ACA), and recreational activities (REC) with a

target child (Morgan et al. 1996). A 12-item short form of the SAQ was used that consisted of four items per domain. Internal consistencies were: ACA $\alpha = .84$, SOC $\alpha = .85$, and REC $\alpha = .86$ (Campbell et al. 2004).

Teacher Nomination Form (TNF)

The TNF aligned with the peer nomination form, with wording changes to reflect teacher perspective (e.g., who do you believe are *liked most*). The TNF contained 11 questions corresponding to the student RCP, four questions of social status, and four peer buddy nomination questions. Teachers also nominated three peer buddies and a “best” peer buddy for the CWA. Teachers also nominated three students they would *not* choose as peer buddies (Not Selected). Students neither Selected nor Not Selected constituted a Not Nominated group.

For the current study, data were converted to represent information based on the 31 classrooms; therefore, data were analyzed at the classroom level. For questions addressing the three teacher buddy selection groups (e.g., Selected, Not Nominated, Not Selected), scores were averaged by buddy selection and classroom. For example, for classroom one, Selected and Not Selected buddy scores were averaged to create new variables (e.g., Selected ACL; Not Selected ACL). The procedure was completed for each classroom for all dependent variables.

Results

Characteristics of Teacher-Selected Buddies

A chi-square analysis revealed a significant gender difference across teacher buddy selections $\chi^2(2, N = 412) = 69.90, p < .01$, with males selected with greater frequency than females (Table 1). Males were also more frequently selected as inappropriate peer buddies.

A chi-square analysis of teacher buddy selection and peer-rated sociometric group revealed significant differences (Table 1). Popular students were represented in the Selected group more frequently than rejected or controversial students. Similarly, rejected and controversial students fell in the Not Selected group more frequently than expected.

Social Status Nominations

Four separate repeated-measures ANOVAs resulted in main effects for *Like Most*, *Like Least*, *Most Popular* and *Least Popular* nominations (Table 2). For *Like Most* and *Most Popular* variables, Selected buddies received higher nominations than either Not Selected or Not Nominated

Table 1 Observed and expected frequencies of teacher-nominated peer buddy selections for gender and sociometric category

Gender	Teacher-nominated peer buddy status			χ^2	df	p
	Selected	Not selected	Not nominated			
Male	55 (43)	71 (41)	168 (210)	69.9	2	.001
Female	29 (41)	9 (39)	244 (202)			
<i>Sociometric category</i>						
Popular	22 (13)	4 (12)	61 (62)	41.9	8	.001
Rejected	4 (13)	23 (12)	60 (62)			
Average	37 (43)	35 (41)	222 (210)			
Controversial	8 (6)	12 (6)	22 (30)			
Neglected	13 (9)	6 (9)	47 (48)			
Total	84	80	412			

Note: Expected count is in parentheses

students. For *Like Least* and *Least Popular* nominations, Selected buddies received fewer nominations than either of the other two groups.

Behavioral Characteristics and Social Influence (RCP)

To reduce data, the six behavioral items were submitted to a principal components factor analysis with varimax rotation, which produced a two-factor structure similar to Lease et al. (2002; results available upon request). Two variables, *Prosocial/Bright* and *Socially Visible*, were created by averaging the z-scores for variables loading on the relevant factors. Seven single group repeated-measures analyses (two behavioral factors, five influence items) were conducted and main effects found for: *Prosocial/Bright*, *Socially Visible*, *Leader*, *Admire*, *Influence*, and *Self-Confident* with Selected buddies generally receiving more favorable ratings when compared to the other groups. Post hoc contrasts ($p < .05$) are reported in Table 2.

Teacher and Peer Nominations of Buddy Selection for a Student with Autism

Separate single group repeated-measures ANOVAs were used to compare teacher buddy nominations and peer: (a) buddy nominations and (b) “best” buddy nominations for a CWA. Teacher selected groups did not differ according to peers’ buddy selections, Wilks $\Lambda = .858$, $F(2, 29) = 2.40$, *ns*; however, teacher selections differed on peers’ “best” buddy nominations, Wilks $\Lambda = .787$, $F(2, 29) = 3.76$, $p < .035$, $\eta^2 = .213$, with teacher Selected buddies receiving more nominations than the other groups. Post hoc contrasts ($p < .05$) are reported in Table 2.

Table 2 Means and standard deviations for peer-nominated social status, social/behavioral characteristics, and buddies across teacher buddy selection category

Peer nomination	Teacher buddy selection		
	Selected	Not selected	Not nominated
Social status			
Like most	.42 (.62) ^{a,b}	-.08 (.57) ^a	.02 (.22) ^b
Like least	-.28 (.75) ^{a,b}	.54 (.64) ^{a,c}	.02 (.23) ^{b,c}
Most popular	.42 (.60) ^{a,b}	-.02 (.53) ^a	-.01 (.20) ^b
Least popular	-.26 (.81) ^{a,b}	.32 (.59) ^{a,c}	.06 (.22) ^{b,c}
<i>Social/behavioral factors</i>			
Prosocial/bright	.69 (.49) ^{a,b}	-.30 (.25) ^{a,c}	.01 (.14) ^{b,c}
Socially visible	.43 (.59) ^{a,b}	-.04 (.59) ^a	-.01 (.18) ^b
<i>Social/behavioral items</i>			
Leader	.60 (.71) ^{a,b}	-.20 (.59) ^a	-.03 (.22) ^b
Admire	.49 (.63) ^{a,b}	-.08 (.57) ^a	.00 (.19) ^b
Influence	.64 (.68) ^{a,b}	-.11 (.50) ^a	-.03 (.20) ^b
Control	.12 (.64)	.08 (.72)	.04 (.17)
Self-confident	.64 (.55) ^{a,b}	-.31 (.45) ^{a,c}	.09 (.19) ^{b,c}
Peer buddy selections	.33 (.75)	.09 (.55)	.03 (.20)
Peer best buddy selections	.37 (.76) ^{a,b}	.00 (.60) ^a	-.06 (.27) ^b

Note: Standard deviations are in parentheses. Scores represent the average of peer nominations (represented as z-scores, standardized within classroom and gender). Within each row, means with like superscripts differed on Bonferroni post hoc tests ($p < .05$)

Relationship Between Teacher and Peer Nominations of Social and Behavioral Characteristics

Differences between teacher and peer nominations of social status were evaluated using paired sample *t* tests with teacher selection identified as the independent variable and peer nominations identified as the dependent variable (Table 3). Paired sample *t* tests yielded correlation coefficients that were used to compare agreement between teacher and peer nominations. Results revealed significant correlations that ranged in magnitude from low of .33 (Tries Hard in School) to a high of .94 (Smart; Table 3).

Cognitive Attitudes and Behavioral Intentions of Teacher Buddy Selections

Cognitive Attitudes (ACL Data) and Behavioral Intentions (SAQ Data)

A one-way repeated measures ANOVA with buddy status as the within subjects factor resulted in no differences between groups for cognitive attitudes, $F(2, 60) = 2.97$, *ns*. Regardless of teacher-nominated status, children endorsed similar cognitive attitudes toward the CWA (Table 4). A two-way ANOVA was used to analyze the three SAQ

Table 3 Comparisons between peer- and teacher-nominated social status, behavioral characteristics, and social influence variables

	Mean difference	<i>t</i>	<i>df</i>	<i>p</i>	<i>r</i>	<i>d</i>
Like most	.67	7.05	30	.001	.79	2.02
Like least	1.20	7.55	30	.001	.81	2.20
Most popular	1.22	10.68	30	.001	.89	3.05
Least popular	1.31	9.03	30	.001	.86	2.50
Prosocial/bright	.85	10.27	30	.001	.88	1.77
Socially visible	1.23	13.48	29	.001	.93	3.73
Really cool	1.19	10.21	29	.001	.88	2.93
Leader	1.35	10.17	30	.001	.88	2.80
Admiration	1.15	8.69	30	.001	.85	2.49
Solving problems	1.03	6.86	30	.001	.78	2.03
Helps others	.56	4.59	30	.001	.64	1.35
Influence	.87	5.71	30	.011	.72	1.67
Control	1.19	9.59	28	.001	.87	2.70
Sports	1.29	10.77	30	.001	.89	2.87
Smart	1.52	14.48	30	.001	.94	4.11
Tries hard	.28	1.88	30	.069	.33	.53
Self-confidence	.62	5.38	30	.001	.70	1.55

Note: *r* = correlation statistic computed using paired sample *t*-statistic; *df* = degrees of freedom; *d* = effect size computed using standard deviations and mean differences

domain scores with buddy status (Buddy) and SAQ domain (Domain) as within subjects factors (Table 4). We found a main effect for Domain, $F(2, 60) = 11.73$, $p < .001$, but no significant effect of Buddy, or Domain \times Buddy interaction. Follow-up contrasts using Bonferroni correction revealed that students were less willing to engage in recreational activities when compared to either academic or social activities. Students did not differ in their willingness to engage in academic or social activities.

Discussion

The purposes of this investigation were to: (a) investigate correlates of teachers' peer buddy selections, and (b)

evaluate the similarities between teacher and peer nominated peer buddy selections for a CWA. As such, we consider our investigation as a means of socially validating the selections made by teachers as referenced by the peer group. That is, what are the social and behavioral profiles of teacher-selected peers from the perspective of the classroom peer group? We also considered initial perceptions of a CWA as another important variable in validating teacher selections for peer interventionists. In our discussion, we review study findings and describe possible educational and clinical implications of study outcomes.

Teacher Selected Peer Buddies: Gender Differences and View from the Peer Group

Teachers selected male students more frequently than female students to serve as peer buddies for a male CWA. Teachers may have done so due their awareness of the strong same-sex preference that students exhibit in middle childhood. Children reliably segregate into same-sex groups for play and social activities in middle childhood, which would make selection of a same-sex peer a reasonable choice when facilitating acceptance with a new peer group at this age.

From the perspective of the peer group, Selected buddies were viewed as more likeable when compared to the other teacher-buddy groups and overrepresented by socio-metrically popular students. Similarly, Selected buddies were more often perceived as popular within the classroom as evidenced by higher most popular ratings. In contrast, Not Selected students were frequently viewed as not well-liked and unpopular among peers, while Not Nominated students were often viewed as average across domains of peer preference and popularity. Overall, teachers selected peer buddies who were considered popular by their peers.

Behavioral Characteristics and Social Influence

Peers viewed Selected buddies as: smart, athletic, helpful, good problem solvers, leaders, self-confident, influential,

Table 4 Means and standard deviations for attitudes and behavioral intentions across teacher buddy selection category

	Selected	Not selected	Not nominated	
Adjective checklist (ACL)	23.45 (5.10)	21.22 (6.53)	22.99 (4.40)	
SAQ: Social	8.89 (1.41)	8.50 (2.35)	8.52 (1.21)	Est. M_{Domain} 8.64 (.21) ^a
SAQ: Academic	8.99 (1.66)	8.89 (2.31)	8.68 (1.21)	8.85 (.22) ^b
SAQ: Recreational	8.46 (1.66)	8.18 (2.41)	8.10 (1.20)	8.25 (.23) ^{a,b}
Est. M_{Tutor}	8.78 (.25)	8.52 (.40)	8.43 (.21)	

Note: SAQ = Shared activities questionnaire. Standard deviations are in parentheses. Italicized values are estimated marginal means and standard errors for SAQ data. Within columns, means with like superscripts differed on Bonferroni post hoc tests ($p < .05$)

and admired. The research literature has suggested that, in concert with high social status, these positive qualities are valuable assets for peers implementing peer-mediated interventions. This point is perhaps best illustrated by Sasso and Rude (1987) who demonstrated the effectiveness of using high status peers to influence the behavior of classroom peers in addition to implementing a social skills intervention. When compared to low status peers, high status peers produced increased numbers of peer initiations towards students with intellectual disability or autism, a finding which may reflect the influence of social status on altering peer behavior in the social milieu.

Concordance of Teacher and Peer Nominations

Results revealed moderate (.79) to high (.89) correlations between teacher and peer nominations of social status (e.g., *Like Most, Most Popular*); therefore, teachers and peers showed good agreement when identifying popular students. For specific behavioral characteristics, teacher and peer nominations were also in general agreement, with the notable exception of identifying peers who “try hard” to perform well in school ($r = .33$). Overall, it appears that teachers and students may have differing perceptions of students who try hard at school while perceptions of students who earn good grades (“Smart,” $r = .94$) reach consensus. Overall, the findings of this study continue to support the literature on the modest concordance of peer and teacher measures of social behavior (e.g., Renk and Phares 2004), and, in general, teachers appear to have reasonably accurate perceptions of the social dynamics in their classrooms.

Peer Buddy Selections

Teacher and peer buddy nominations for a CWA were somewhat dissimilar. Teacher Selected buddies did not receive greater numbers of nominations from the peer group; however, teacher “best” buddy nominations received a greater number of “best” nominations from the peer group. Peer nominations of peer buddies were not analyzed with respect to determinants of peers’ selections (e.g., most liked, cool, leader). It appears, however, that peers may not share the same perceptions about what constitutes an appropriate peer buddy to help an unfamiliar CWA “fit in” within the classroom setting.

Attitudinal and Behavioral Ratings of Teacher Buddy Selections

Contrary to our predictions, Selected buddies reported similar attitudes and behavioral intentions toward the CWA when compared to the other groups. In general, students

reported greater willingness to engage in academic and social activities over recreational activities with the unfamiliar CWA. Although the factor structure of the SAQ indicates that the Academic and Social domains are separate, it is important to note that the domains consist of items that are largely constrained to the school setting, such as working on academic tasks together, sharing books, and inviting a student to become a member of a club. The recreational domain taps extra-curricular activities, such as going to the movies, zoo, or picnic together. As such, it appears that students are more willing to interact with an unfamiliar CWA at school in academic related activities as opposed to recreational activities. Educational professionals should consider utilizing these preferences when selecting peer buddy activities within school settings, with academic tasks selected for peer-mediated intervention prior to recreational activities. Initially involving peer buddies in academic activities seems appropriate due to the structure inherent in many academic tasks which may benefit the CWA. For the peer buddy, increased contact via academic tasks may also result in greater comfort and acceptance prior to being involved in recreational activities.

Peers’ attitudes and behavioral intentions play important roles in supporting inclusive education for children with disabilities. For example, Roberts and Lindsell (1997) found that peers’ attitudes toward children with disabilities predicted behavioral intentions toward those same children. We know that children’s initial attitudes toward CWA are negative (Swaim and Morgan 2001); however, peer buddies’ attitudes toward children with special needs and the potential impact of their attitudes on intervention effectiveness has not been studied to our knowledge. Research has documented that peer attitudes contribute to predicting behavioral intentions; therefore, interventionists should consider assessing potential peer buddies’ attitudes toward CWA prior to selection. The ACL and SAQ may be beneficial in contributing to the process of peer buddy selection.

Limitations of Study and Suggestions for Future Research

The results and conclusions of this study must be considered within the context of its limitations. First, the study is an experimental analogue and is therefore limited with regard to its social validity. Students were only asked their opinions and perceptions of autism based on watching a videotaped vignette of a boy displaying autistic features as opposed to interacting with a CWA. Similarly, reports of attitude and behavioral intentions are incomplete predictors of children’s actual classroom behavior. A second limitation involves the restricted nomination items that were

provided for teachers and students. Participants responded only to positive behavioral items, which omitted the possibility to identify students who might demonstrate negative behavioral characteristics (e.g., aggressive). Important distinctions might have been made between the buddy nomination groups if negative behavioral items had been included. For example, teachers might not select a peer buddy who is aggressive toward peers while peers might associate some degree of aggression with power and influence and nominate such peers to help a CWA “fit in.” Future investigations should use both positive and negative behavioral characteristics to offer more distinction between groups of students. Third, the majority of the students were Caucasian, of lower socioeconomic status, and in the third-, fourth-, and fifth grades; therefore, interpretation of results should be restricted to this group. Future investigations should include a more diverse sample of students. Fourth, we only assessed peer buddy nominations for a male student as opposed to contrasting nomination patterns between a male and female student. Future research may examine if different social and behavioral profiles emerge for female students. Finally, we did not assess teachers’ knowledge of autism despite using the term autism in our data collection, which may have yielded inaccurate student nominations for peer buddies.

Future longitudinal investigation may assess the social validity of teacher selected peer buddies by including CWA within the sociometric data collection before and after implementing an intervention. If teacher selections are socially valid, one might reasonably expect the social standing of the CWA to improve over the course of the intervention. Also, future research may focus on teacher characteristics that produce more socially valid peer buddy selections (i.e., stronger agreement with student nominations). For example, teachers who are invested in creating supportive classroom environments via knowing about their students’ friendships, cliques, and problematic relationships may produce greater agreement with their students’ selections.

Peer-mediated interventions have been found to be successful in improving the social and academic skills of CWA in inclusive settings. Findings from this study support the use of teacher-nominated peer buddies for CWA as evidenced by social validation from the peer group. Teacher and peer nominations of social status and behavioral characteristics demonstrated moderate to high correlation rates; therefore, teacher ratings of social status and behavioral characteristics may serve as useful substitutes when peer sociometric ratings are prohibitive. Based on the present findings, teachers provide a reasonably accurate picture of the social milieu of their classrooms and appear to use this knowledge to inform their peer selections for CWA.

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