

Who do students with mild disabilities nominate as cool in inclusive general education classrooms?

Philip C. Rodkin^{a,*}, Thomas W. Farmer^b, Richard Van Acker^c,
Ruth Pearl^c, Jana H. Thompson^b, Pledger Fedora^b

^a 224 Col. Wolfe School, Mail Code 422, Department of Educational Psychology,
University of Illinois at Urbana-Champaign, 403 E. Healey St., Champaign, IL 61820, United States

^b University of North Carolina at Chapel Hill, United States

^c University of Illinois at Chicago, United States

Received 2 November 2005; accepted 16 November 2005

Abstract

Examined the nominations that elementary students with mild disabilities made for peers they perceived as cool. The total sample was comprised of 948 students (496 girls, 452 boys) from the metropolitan Chicago area and North Carolina and included 107 (11.3%) students with mild disabilities. Overall, students with mild disabilities nominated prosocial and athletic peers who affiliate with students with mild disabilities. However, aggressive boys who are central in the social network were highly likely to view aggressive peers as cool. Results are discussed in relation to implications for social interventions for students with mild disabilities.

© 2005 Society for the Study of School Psychology. Published by Elsevier Ltd. All rights reserved.

Keywords: Inclusion; Mild disabilities; Social networks

With the growing emphasis on inclusion, there has been a corresponding interest in the social relations of students with mild disabilities in general education classrooms. One of the aims of inclusion is to enhance the social skills of students with mild disabilities by providing them with social experiences and peer models that are not

* Corresponding author. Tel.: +1 217 840 1550.

E-mail address: rodkin@uiuc.edu (P.C. Rodkin).

available in self-contained classrooms (Tapasak & Walther-Thomas, 1999). Whether this goal is being met has been brought into question by several studies documenting the social difficulties of students with mild disabilities who are included in general education environments. Compared to their nondisabled peers, students with mild disabilities tend to have social skill deficits (Gresham & MacMillan, 1997; Swanson & Malone, 1992) and are often not as well accepted by their peers (Frederickson & Furnham, 2001; Sale & Carey, 1995; Swanson & Malone, 1992; Vaughn, Elbaum, & Schumm, 1996). In addition, they are at-risk of associating with classmates who are aggressive or have problematic interpersonal characteristics (Farmer & Hollowell, 1994; Pearl et al., 1998) and they may develop social roles that support and sustain problem behavior (Farmer & Farmer, 1996; Farmer & Rodkin, 1996; Farmer, Van Acker, Pearl, & Rodkin, 1999).

While such research clearly documents the social difficulties of students with mild disabilities in general education classrooms, relatively little work has focused on identifying the classmates who are valued by students with mild disabilities. Such information may yield insight into the interpersonal characteristics of the peers who youths with mild disabilities view as social role models. From a social learning perspective (e.g., Bandura, 1962; Cairns, 1979), social behavior is learned by watching and imitating the behaviors of others who are considered to be salient in the social setting. This perspective is supported by both ethnographic and survey research in elementary school (Adler & Adler, 1998; Lease, Musgrove, & Axelrod, 2002). Children report that peers try to act like or imitate the behavior of classmates who are viewed as “cool” or “popular.” For example, Lippit, Polansky, Redl, and Rosen (1952) examined power dynamics in two separated (i.e., non-inclusive) summer camps of 10- to 13-year-old boys and girls: the “M-camp” composed of children with emotional and behavioral disturbances and the “W-camp” composed of otherwise matched children without emotional and behavioral disturbances. Powerful children were defined as those frequently nominated by peers as “best at getting... other[s].. to do what he [or she] wants” (p. 625). Among both M- and W-campers, powerful children were frequently nominated as likeable, likely to be identified with (i.e., “who would you most like to be?”), and physically superior with great fighting ability and prowess in camp-relevant skills. Behavioral observations showed that M- and W-camp children imitated and were more likely to accept direct influence attempts from their powerful peers. Lippit et al.’s (1952) focus on high social status was downplayed as research on children’s peer relations moved to an overwhelming concern with low social status, unpopularity, dislike, and rejection, particularly with regards to children with special education classifications (cf., Gifford-Smith & Brownell, 2003; Lloyd, Kauffman, & Kupersmidt 1990). However, recent work on linkages between aggression and high social status (LaFontana & Cillessen, 2002; Rodkin, Farmer, Pearl, & van Acker, 2000) enables a new look at the question of who children with mild disabilities perceive as enjoying high social status.

In this study we examine who students with mild disabilities nominate as *cool* in socially integrated general education classrooms. We conceptualize coolness an index of who students perceive to be psychologically powerful. For today’s youth, it is important to be cool even if not everyone can agree about who is cool and what cool means. Being cool is a social construction derived ultimately from interpersonal relations

between individuals and between individuals and their local cultures (Pountain & Robins, 2000). Children who affiliate, interact, and negotiate with one another and their larger social ecology determine their meaning of being cool (Adler & Adler, 1998). Alternate indices of psychological power such as social preference are conceived differently, namely as stable traits that sensitive perceivers discern and insensitive perceivers miss (Terry, 2000). Some evidence suggests that who children nominate as cool within educational contexts resemble the powerful children highlighted by Lippitt et al. (1952) sampling non-inclusive campground contexts. Graham and Juvonen (2002) found that 6th and 7th grade children who were frequently nominated as cool were also nominated as highly accepted, physically and verbally aggressive, were rarely nominated as victims, and rated themselves as having high self-esteem without being lonely or socially anxious. In the larger sample from which the present analyses were derived, children's perceptions of who was cool, when submitted to three-level hierarchical linear modeling techniques (i.e., individual, peer group, classroom), varied mostly according to peer group characteristics: children in aggressive groups nominated aggressive children as cool, and children in nonaggressive groups nominated nonaggressive children as cool. Children usually nominated as cool peers with whom they affiliated (Rodkin, Farmer, Pearl, & Van Acker, *in press*). Along similar lines, we expected that a targeted analysis of students with mild disabilities would reveal that they were most likely to nominate as cool classmates who affiliated with them and other students with mild disabilities.

Understanding who children with mild disabilities view as being the “coolest” classmates may help clarify the social benefit of inclusion. If youths with disabilities view their nondisabled peers who have strong prosocial characteristics as being the “coolest” classmates, it follows that these students have positive status symbols. On the other hand, if students with mild disabilities view peers with antisocial behaviors as “cool”, it would suggest that these youths are vulnerable to being influenced by negative status symbols. Previous research shows that students with mild disabilities are a heterogeneous group in terms of social and behavioral characteristics (Farmer, Rodkin, Pearl, & Van Acker, 1999). Further, some youths with mild disabilities associate with antisocial peers (Farmer & Hollowell, 1994; Pearl et al., 1998) and may be vulnerable to negative peer influences (Bryan & Pearl, 1989; Pearl & Bryan, 1990, 1992). It is reasonable to expect that some youths with mild disabilities view positive peers as the coolest, most salient classmates while other youths with mild disabilities are likely to view antisocial peers as social role models. Based on research indicating that socially prominent aggressive youths tend not to associate with socially marginalized aggressive peers (Farmer, Estell, Bishop, O'Neal, & Cairns, 2003; Farmer et al., 2002) and that such youths in fact may be adversaries (Rodkin, Pearl, Farmer, & Van Acker, 2003), it is also reasonable to expect that the nominations for peers who are cool are influenced by the prominence and aggressiveness level of the youths with mild disabilities who are making the nominations.

The overarching goal of this study was to examine the characteristics of the peers that students with mild disabilities view as being cool and to investigate factors that may contribute to these perceptions or judgments. Two research aims guided this investigation. The first aim was to determine the characteristics of peers that students with mild

disabilities view as being cool. Specifically, we sought to determine the behavioral characteristics of nominated classmates as well as whether they also had mild disabilities or associated with peers who had disabilities. The second aim was to examine whether the centrality and aggressiveness level of nominators with mild disabilities were related to the nominations they made for cool peers.

Method

This multi-method survey design included teacher-, peer-, and self-report measures. Teacher-assessments were used to construct behavioral configurations. Peer-assessments were used to examine peers' perspectives of students' characteristics. Peer and self-nominations of peer groups were used to identify classroom social networks. This study is part of a broader investigation examining elementary school classroom social dynamics and the social relations of students with mild disabilities in general education classrooms. Previous reports have focused on peer group membership and social centrality of students with mild disabilities (Farmer, Van Acker, et al., 1999; Pearl, et al., 1998), behavioral subtypes of students with mild disabilities (Farmer et al., 1999), social relations of subtypes of aggressive elementary students (Rodkin, Farmer, Pearl, & Van Acker, 2000), diversity in the peer affiliations of subtypes of aggressive elementary students (Farmer et al., 2002), and perceptions of being cool among the larger general education sample (Rodkin et al., in press).

Participants

Fourth-, fifth-, and sixth-grade classrooms were recruited from schools in the Chicago area and North Carolina. The Chicago area schools included both urban and suburban settings. The North Carolina schools were in a rural county and a small city. Recruitment focused on identifying classrooms that included students with disabilities. Only classes that contained at least two students with disabilities who were served in the general education setting for at least 50% of the school day were included in the sample. There were an average of 2.5 ($SD=1.7$, range 2–7) students with mild disabilities per classroom.

A total of 59 classrooms participated (Chicago Area 31; North Carolina 28). The sample comprised 948 students. Four hundred and ninety-six students were female (52%) and 452 were male (48%). Five hundred and fifty-eight students were in the Chicago area (287 females, 271 males) and 390 students were in North Carolina (209 females, 181 males). Fifty-four percent were white, 40% were African American, and 6% were Hispanic. For the full sample, 790 (83.3%) students were in general education, 51 (5.4%) were academically gifted students, and 107 (11.3%) were students with mild disabilities. Of students with mild disabilities, 71 (66.4%) were male and 36 (33.6%) were female. All but two of the academically gifted students were in the North Carolina sample. These students were identified for special education services based on IQ scores that were two standard deviations or more above the mean. Students identified as academically gifted were not included in the mild disabilities sample.

Students in the mild disability sample were identified by local school assessment procedures that reflected federal definitions and guidelines for learning disabled, behavioral disordered, health disability, noncategorical disability, mild mental retardation, speech disability, and hearing disability. The different definitions are not provided here because all students with disabilities were collapsed into a single category of mild disabilities. Farmer et al. (1999, Table 1) gives the distribution of study participants with and without mild disabilities according to their specific educational classification, gender, and study location; the same information including nonparticipants is given in Pearl et al. (1998, Table 1). All of the students in the mild disabilities sample were in the general education setting for a minimum of 50% of the school day and were mainstreamed or included into the general education setting for at least two consecutive months prior to the classroom surveys.

There were two reasons for placing all students with disabilities into a single mild disabilities category. First, preliminary analyses indicated a high level of similarity between the different special education classifications for teacher-, peer-, and self-assessed characteristics. However, variability in the sample sizes for different categories together with the very small sample size of some categories could lead to misinterpretations of the results. Collapsing students into a single mild disabilities category protected against inaccurate comparisons across disability areas. Second, the aim of this study was not to identify characteristics associated with specific disabilities.

Active consent was obtained from parents and students. A parental consent form was distributed to the parents of all students in the 59 classrooms. Consent forms briefly explained the purpose of the study and the types of measures used. Parents were asked to indicate whether they gave permission for their child to participate in the study and to have their child return the form to his or her teacher. At the time of the survey, students who had parental permission were told that participation was voluntary, and that even though their parents had given them permission to participate, they could choose not to participate. Overall, 1022 (66%) students returned forms indicating parental consent. Of students with parental consent, 74 (7.2%) were absent on the date of data collection, had missing data, or chose not to participate.

Measures

Interpersonal Competence Scale-Teacher (ICS-T)

The ICS-T is an 18-item questionnaire (including two distractor items) consisting of seven-point Likert scales that teachers completed for each participant in their class. The ICS-T yields composite scores on *popularity* (POP, composed of “popular with boys,” “popular with girls,” and “lots of friends”), *olympian* (OLY, composed of “good at sports,” “good looking,” and “wins a lot”), *affiliative* (AFF, composed of “always smiles” and “always friendly”), *academic* (ACA, composed of “good at math” and “good at spelling”), *aggressive* (AGG, composed of “always argues,” “gets in trouble,” and “always fights”), and *internalizing* (INT, composed of “always sad,” “always worries,” and “shy.”). Reliability coefficients are typical of similar self- and other-ratings on the factors assessed (i.e., .50–.70). Three-week test–retest reliability coefficients are moderately high (i.e., .80–.92) and median *rs* across the factors are .81 for girls and .87 for boys. One-year

coefficients are moderately strong (i.e., .40–.50) (Cairns, Leung, Gest, & Cairns, 1995). The ICS-T has convergent validity with direct observation, student record (i.e., grades, discipline reports) and peer nomination measures (Cairns & Cairns, 1994; Cairns, Cairns, Neckerman, Ferguson, & Gariépy, 1989; Cairns, Cairns, Neckerman, Gest, & Gariépy, 1988; Cairns, Leung, Buchanan, & Cairns, 1995; Cairns, Leung, Gest, et al., 1995; Leung, 1996) and it has predictive validity over an eight-year period for adult adjustment, early school drop out, and teenage parenthood (Cairns & Cairns, 1994; Cairns, Cairns, & Neckerman, 1989; Cairns, Cairns, Xie, Lueng, & Hearne, 1998). The factor structure found by Cairns et al. (1995) was replicated in the present sample using principal components analyses performed separately for each grade and for boys and girls. The only exception was that “shy” did not load with “always sad” and “always worries” on the INT factor. Therefore, shy was retained as a single-item factor and INT was computed by combining “always sad” and “always worried.”

Peer interpersonal assessments

Peer interpersonal assessments were used to determine classmates’ perceptions of peers’ social and behavioral characteristics. Students were asked to nominate up to three peers who best fit descriptors for ten specific items. They were told that they could nominate themselves and that they could nominate the same person for more than one item. The items are: *Cooperative* (Here is someone who is really good to have as part of your group, because this person is agreeable and cooperates — pitches in, shares, and gives everyone a turn); *Disruptive* (This person has a way of upsetting everything when he or she gets into a group — doesn’t share and tries to get everyone to do things their way); *Acts shy* (This person acts very shy with other kids. It’s hard to get to know this person); *Starts fights* (This person starts fights. This person says mean things to other kids or pushes them, or hits them); *Seeks help* (This person is always looking for help, asks for help even before trying very hard); *Leader* (This person gets chosen by the others as the leader. Other people like to have this person in charge); *Athletic* (This person is very good at many outdoor games and sports); *Gets in trouble* (This person doesn’t follow the rules, doesn’t pay attention, and talks back to the teacher); *Good student* (This person makes good grades, usually knows the right answer, and works hard in class); *Cool* (This person is really cool. Just about everybody in school knows this person). Three-week test–retest reliability was examined in five classrooms ($n=65$) and test–retest r ’s ranged from .72 to .93.

These items are identical or similar to peer assessment items used by other investigators (Coie, Dodge, & Coppotelli, 1982; Masten, Morison, & Pellegrini, 1985; Newcomb & Bukowski, 1983). Peer assessments are often used to determine the behavioral correlates of sociometric status (see Coie, Dodge, & Kupersmidt, 1990). Unlike sociometric status, which is derived through a series of computational steps, each peer assessment item is simply summed for each student and divided by the number of nominators. Percentage scores for peer assessments were calculated by the quotient of the summed number of nominations received by a student for an item over the number of classmates nominating at least one peer for that item multiplied by 100. Nominations for “starts fights,” “disruptive,” and “gets in trouble” were highly correlated (r ’s from .70 to .75) and combined into an overall *antisocial* factor.

Social cognitive maps (SCM)

Students were asked “Are there some kids in your classroom who hang around together a lot? Who are they?”. Students were instructed to list as many groups as they could think of. As output, SCM provides two indices of social positioning: (a) a classification of children as affiliating in one of j peer groups within the classroom social network (j typically ranges from two to seven), or isolated from all peer groups and (b) a measure of prominence or *social centrality* based on the proportion of peers naming children to a group. Group affiliations and social centrality scores were calculated according to procedures detailed in Rodkin et al. (2000) and Farmer et al. (2002). In the present study, social centrality is treated as an ordinal variable ranging from very low (i.e., isolate), to moderately low (i.e., peripheral), moderately high (i.e., secondary), and very high (i.e., nuclear).

SCM procedures have been used in an eighteen year longitudinal investigation (Cairns & Cairns, 1994) and in a variety of investigations throughout the United States and in other countries (e.g., Farmer & Farmer, 1996; Kindermann, 1993; Leung, 1996; Xie, Cairns, & Cairns, 1999). Three week test–retest reliabilities are stable (i.e., .74–.84) (Cairns, Leung, Gest, et al., 1995). Validity has been established through: observational and survey data demonstrating that students interact more frequently with members of their own group (Cairns, Perrin, & Cairns, 1985; Gest, Farmer, Cairns, & Xie, 2003); overlap between self-reported friendships and membership in the same peer group (Cairns et al., 1995); consensus (up to 96% in some classrooms) among students in their reports of peer group membership (Cairns et al., 1985; Kindermann, 1993; Leung, 1996); homogeneity or similarity in the behavioral and demographic features of members of the same peer group (Cairns & Cairns, 1994; Cairns et al., 1988; Farmer & Farmer, 1996; Leung, 1996) and correspondence between social network centrality and behavioral characteristics (Cairns & Cairns, 1994; Farmer & Rodkin, 1996; Xie et al., 1999).

Procedure

Data were collected in the fall. In Chicago, surveys were administered by two advanced doctoral students. In North Carolina, surveys were administered by one of the investigators and a research assistant with classroom teaching experience. Data collection took approximately 40 min per classroom. Students were asked to cover their responses and were assured that their answers would be kept confidential. In addition, students were asked not to talk, and were told that they could stop participating at any time. During the survey, one administrator read the instructions and questions aloud to the class while scanning the room for potential problems. The second administrator, in most cases, provided mobile monitoring and assisted students as needed. During the administration of the survey, teachers remained in the classroom and completed the Interpersonal Competence Scale for each participant. Measures to protect the confidentiality of participants and all classroom members were developed and approved by the Institutional Review Boards of two universities and the research review boards of several school districts. All surveys were identified, distributed, and coded in a manner that concealed the identity of students.

Results

Results are presented in two sections. The first section focuses on the characteristics of children whom students with mild disabilities nominate as the coolest kids in their class. We contrast children who are and are not nominated as cool by students with mild disabilities examining nominees' behavioral characteristics, educational classification, and likelihood of affiliating with students with mild disabilities. The second section focuses on differences among students with mild disabilities in social centrality, membership in a teacher-assessed aggressive behavioral configuration, and pattern of cool nominations. Here we ask: do aggressive versus nonaggressive students with mild disabilities, or students with mild disabilities who have prominent versus marginal roles in the classroom environment, agree on the kind of child they regard as cool? All analyses are performed separately for boys and girls.

Characteristics of cool nominees

Nominee sample

Using the peer interpersonal assessments, students were classified as either nominated or not nominated by at least one student with mild disabilities as cool. Cool self-nominations were excluded. Boys were included in the analysis only if at least one other boy in their class received a cool nomination from a student with mild disabilities. Similarly, girls were included only if at least one other girl in their class received a cool nomination from a student with mild disabilities. Using these selection criteria, the sample of potential nominees consisted of 427 boys from 32 classrooms and 225 girls from 18 classrooms. Of the 427 boys, 355 (83.1%) were not nominated as cool by a student with mild disabilities, 61 (14.3%) were nominated by one student with mild disabilities as cool, and 11 (2.6%) were nominated by two or more students with mild disabilities as cool. Of the 225 girls, 190 (84.5%) were not nominated as cool by a student with mild disabilities, 30 (13.3%) were nominated by one student with mild disabilities as cool, and 5 (2.2%) were nominated by two or more students with mild disabilities as cool.

Behavioral characteristics

Table 1 for boys and Table 2 for girls compares medians and interquartile ranges on peer-assessed behavioral characteristics for children who were and were not nominated by students with mild disabilities as cool. Taken together, Tables 1 and 2 show that students with mild disabilities nominate as cool children who are viewed by classmates as leaders, athletic, cooperative, and studious. In addition, Table 1 indicates that boys who were nominated as cool by students with mild disabilities tended to get into fights, into trouble, and to seek help from others.

To understand further whom students with mild disabilities perceive to be cool, we used Mann–Whitney tests to compare boys nominated as cool once and more than once on the nine behavioral characteristics. (There were not enough girls nominated multiple times as cool to allow a similar analysis). Results of the Mann–Whitney tests yielded three significant findings. Compared to boys nominated by only one student with mild disabilities as cool, boys nominated as cool by multiple students with mild disabilities

Table 1

Peer-assessed behavioral characteristics of boys nominated and not nominated as cool by students with mild disabilities

Nominated as cool by students with mild disabilities					
Peer nominations	Yes		No		Z_{MW}^b
	<i>Mdn</i>	<i>IQR</i> ^a	<i>Mdn</i>	<i>IQR</i>	
Leader	.090	(.250)	.000	(.100)	4.78***
Athletic	.195	(.350)	.050	(.140)	6.39***
Gets in fights	.085	(.230)	.000	(.150)	2.44*
Gets in trouble	.070	(.170)	.000	(.120)	2.16*
Disruptive	.065	(.170)	.050	(.160)	0.83
Cooperative	.070	(.150)	.050	(.090)	2.13*
Studious	.070	(.188)	.000	(.080)	3.55***
Shy	.000	(.070)	.000	(.070)	0.44
Seeks help	.075	(.158)	.000	(.110)	1.98*
<i>N</i>	72		355		
%	16.9		83.1		

Mann–Whitney tests were used because peer nominations have a skewed distribution.

* $p < .05$. ** $p < .01$. *** $p < .001$.^a *IQR* = Interquartile Range.^b Z_{MW} is the test statistic from the nonparametric Mann–Whitney test after transformation to a standard score distribution. $N = 427$.

were more likely to be seen as leaders (*Mdn*'s: .260 vs. .060; *IQR*'s: .300 vs. .210; $Z_{MW} = 3.38$, $p < .001$), as athletic (*Mdn*'s: .540 vs. .170; *IQR*'s: .610 vs. .320; $Z_{MW} = 2.35$, $p < .05$), and as studious (*Mdn*'s: .120 vs. .050; *IQR*'s: .220 vs. .150; $Z_{MW} = 2.26$, $p < .05$).

Table 2

Peer-assessed behavioral characteristics of girls nominated and not nominated as cool by students with mild disabilities

Nominated as cool by students with mild disabilities					
Peer nominations	Yes		No		Z_{MW}^b
	<i>Mdn</i>	<i>IQR</i> ^a	<i>Mdn</i>	<i>IQR</i>	
Leader	.120	(.150)	.050	(.125)	3.77***
Athletic	.080	(.150)	.000	(.080)	3.86***
Gets in Fights	.000	(.080)	.000	(.010)	1.78
Gets in Trouble	.000	(.050)	.000	(.050)	0.23
Disruptive	.000	(.130)	.000	(.093)	0.38
Cooperative	.150	(.240)	.065	(.180)	3.27***
Studious	.140	(.230)	.050	(.173)	1.90*
Shy	.000	(.110)	.060	(.143)	1.85
Seeks Help	.050	(.150)	.000	(.080)	0.51
<i>N</i>	35		190		
%	15.6		84.5		

Mann–Whitney tests were used because peer nominations have a skewed distribution.

* $p < .05$. ** $p < .01$. *** $p < .001$.^a *IQR* = Interquartile Range.^b Z_{MW} is the test statistic from the nonparametric Mann–Whitney test after transformation to a standard score distribution. $N = 225$.

Educational classification and associations with students with mild disabilities

For boys and girls, 2 (educational classification: mildly disabled vs. not mildly disabled) x 2 (nominated vs. not nominated as cool by a student with mild disabilities) contingency tables were analyzed to determine whether or not students with mild disabilities preferentially nominated other students with mild disabilities. Results were not significant for either boys or girls, indicating that students with mild disabilities nominated as cool other students with mild disabilities at rates that were proportional to their distribution in the larger sample [boys: $\chi^2(1, N=427)=0.40, p>.05$; girls: $\chi^2(1, N=225)=0.28, p>.05$]. Specifically, 17.5% of boys without mild disabilities, 14.7% of boys with mild disabilities, 13.7% of girls without mild disabilities, and 17.1% of girls with mild disabilities were nominated by a student with mild disabilities as cool.

Are children more likely to be perceived by students with mild disabilities as cool if they affiliate with students with mild disabilities? To answer this question, 2 (affiliate vs. does not affiliate with a student with mild disabilities) x 2 (nominated vs. not nominated as cool by a student with mild disabilities) contingency tables were analyzed for boys and girls. The results of both analyses were significant [boys: $\chi^2(1, N=427)=15.2, p<.0001$; girls: $\chi^2(1, N=225)=13.5, p<.001$]. Students with mild disabilities were much more likely to nominate as cool children who affiliated with students with mild disabilities in SCM-identified peer groups than children who did not affiliate with students with mild disabilities. For example, 81.9% of boys and 80.0% of girls who were nominated by students with mild disabilities as cool affiliated in groups including students with mild disabilities. Of children who were not nominated as cool by students with mild disabilities, only 58.6% of boys and 47.4% of girls affiliated in groups including students with mild disabilities.

Summary

The peers who were nominated by students with mild disabilities as being the coolest kids in the class were widely perceived by classmates as leaders, athletic, and as having prosocial characteristics (i.e., high levels of cooperativeness and studiousness). Students with mild disabilities also tended to nominate as cool boys with aggressive characteristics (i.e., often getting into fights and trouble). Nonetheless, the boys who were most frequently nominated by students with mild disabilities as cool had very high levels of leadership, athleticism, and studiousness. Students with mild disabilities nominated general education students and students with mild disabilities as cool at rates that were proportional to their distribution in the overall sample. There was a substantial tendency, however, for students with mild disabilities to concentrate their cool nominations among children who affiliated in groups that included students with mild disabilities.

Perceptions of coolness by nominator centrality and aggression

This section extends our investigation of who students with mild disabilities nominate as cool by examining how perceptions of coolness vary as a function of the social prominence and behavioral characteristics of boys and girls with mild disabilities. A series of multiple linear regressions (MLRs) using peer-assessed behavioral characteristics of children nominated as cool served as dependent variables. Nominator centrality, teacher-

assessed aggression, and the interaction of nominator centrality and aggression served as independent variables. First we describe technical issues of data preparation and MLR model selection. Then the results of significant MLR models are presented for boys and girls with mild disabilities separately.

Data preparation and model selection

Only students with mild disabilities who nominated at least one same-sex classmate (other than themselves) as cool were included in MLR analyses. There were 39 boys and 19 girls with mild disabilities who met this criterion. If students with mild disabilities nominated multiple same-sex peers as cool, nominees' scores were averaged for each of the nine peer-assessed behavioral characteristics.

The same peer assessment variables used in the previous section were also used in MLR models. To satisfy MLR normality requirements, peer variables were standardized by sex, log transformed (adding a small constant to remove negative and zero values), and restandardized by sex. This procedure resulted in all peer variables satisfying MLR normality requirements. Variables that shared high correlations were aggregated into composites. Two composites were created: (a) *prosocial* behavior from the average of cooperative and studiousness (r 's = .74 for girls and .84 for boys), and (b) *aggressive* behavior from the average of getting into fights, getting into trouble, and being disruptive. All told, there were six standardized, log transformed measures (leader, athletic, prosocial, aggressive, shy, seeks help) used as dependent variables in the MLR models.

Levels of aggression (i.e., aggressive or nonaggressive) for students with mild disabilities were determined from their membership in aggressive or nonaggressive behavioral configurations that were derived from teachers' perceptions of the entire sample of students with and without mild disabilities. The behavioral configurations were originally presented in Farmer et al. (1999, Tables 2 and 3), which details statistical and semantic issues related to the construction, validation, and naming of configural patterns (see also Rodkin et al., 2000, Table 1). Boys with mild disabilities who were members of model, passive, and low academic configurations were classified as nonaggressive, and boys with mild disabilities who were members of tough, bright antisocial, troubled, and extremely troubled configurations were classified as aggressive. Of the 39 boys with mild disabilities, 22 (56.4%) were in an aggressive configuration and 17 (43.6%) were in a nonaggressive configuration. Girls with mild disabilities who were members of model, studious, pleasant, and distressed configurations were classified as nonaggressive, and girls with mild disabilities who were members of troubled, bright antisocial, and very unruly configurations were classified as aggressive. Of the 19 girls with mild disabilities, 8 (42.1%) were in an aggressive configuration and 11 (57.9%) were in a nonaggressive configuration.

Each MLR model had the same independent variables. Independent variables were entered in two blocks. First, a main effect block included: (1) dummy-coded membership in an aggressive vs. nonaggressive behavioral configuration and, (2) a linear contrast for social centrality (ordered: isolated, peripheral, secondary, and nuclear). The second block contained the interaction between aggression and centrality. Interaction terms were retained in the final MLR model only if they improved model fit using a combination of

stepwise and backward selection procedures with an $F=2$ entry criterion (c.f., Mallows, 1973). Table 3 presents MLR models with a significant overall fit for boys and girls separately.

Boys with mild disabilities

The upper half of Table 3 shows that the overall MLR model was significant in the analysis of nominee prosocial and aggressive behavior. For nominee prosocial behavior, the analysis indicates that boys with mild disabilities who were aggressive and at lower centrality levels nominated more prosocial boys as cool than did nonaggressive or high centrality boys with mild disabilities. To clarify the nature of the significant interaction, nominators were divided for descriptive purposes into high centrality (i.e., nuclear, secondary) and low centrality (i.e., peripheral, isolated) categories. Mean levels of nominee prosocial behavior for the four groups created by crossing high vs. low centrality and membership in nonaggressive vs. aggressive configurations were: -0.39 SD ($n=5$) for high centrality–nonaggressive boys with mild disabilities, -0.01 SD ($n=5$) for high centrality–aggressive boys with mild disabilities, -0.17 SD ($n=12$) for low centrality–nonaggressive boys with mild disabilities, and $+1.51$ SD ($n=17$) for low centrality–aggressive boys with mild disabilities. Clearly, the interaction term indicates that aggressive boys with mild disabilities who were also low in centrality were much more likely to nominate prosocial boys as cool than either high centrality or nonaggressive boys with mild disabilities. This finding is complemented by the significant MLR model for nominee aggressive behavior. Higher centrality boys with mild disabilities were more likely to nominate aggressive boys as cool than lower centrality boys with mild disabilities.

Girls with mild disabilities

The lower half of Table 3 shows significant associations between the social centrality level of girls with mild disabilities and the level of leadership and prosocial behavior in the

Table 3

Cool nominations of boys and girls with mild disabilities: MLRs of nominee behavioral characteristics onto nominator aggressiveness and social centrality

Nominators characteristics								
Behavioral characteristics of cool nominees	F^a	R^2	Aggressive configuration		Social centrality		Aggression \times centrality	
			β	t	β	t	β	t
<i>Boys</i>								
Prosocial	4.07*	0.26	+0.31	2.12*	-0.28	1.95 [†]	-0.32	2.20*
Aggressive	3.79*	0.17	-0.24	1.59	+0.35	2.28*		ns
<i>Girls</i>								
Leader	2.83 [†]	0.26	-0.15	<1	+0.48	2.25*		ns
Prosocial	3.82*	0.32	-0.13	<1	+0.55	2.65*		ns

[†] $p < .10$; * $p < .05$.

^a Degrees of freedom for overall F tests are: boys–prosocial (3,35), boys–aggressive (2,36), girls–leader (2,16), girls–prosocial (2,16).

children they nominate as cool. Summarizing over both models, higher centrality girls with mild disabilities were more likely to nominate prosocial leaders as cool than were lower centrality girls with mild disabilities.

Summary

The perceptions of students with mild disabilities as to whom in their classroom is cool varies strongly, and in sex-specific ways, with their social connections in the classroom environment. High levels of social centrality among girls with mild disabilities was significantly associated with their nominations of girls who were prosocial leaders as the coolest kids in the class. But high levels of social centrality among boys with mild disabilities was significantly associated with their nominations of aggressive boys as cool. Prosocial boys were most likely to be nominated as cool by low centrality boys with mild disabilities who were also aggressive.

General summary

Students with mild disabilities have a strong tendency to nominate prosocial, athletic boys and girls who affiliate with students with mild disabilities as the coolest kids in their class. Aggressive boys with mild disabilities who are marginalized from the classroom social structure, and girls with mild disabilities who have central roles in the classroom social structure, are particularly likely to view cooperative, studious children as cool. On the other hand, aggressive behavior can also be viewed as cool by students with mild disabilities, particularly when boys are involved. Aggressive boys are more likely to be nominated as cool by students with mild disabilities than nonaggressive boys. Boys with mild disabilities who enjoy high levels of centrality in the classroom environment are particularly likely to associate coolness with aggressive boys.

Discussion

The results of this study provide a new perspective on the inclusion of students with mild disabilities. The current findings suggest that, for the most part, students with mild disabilities tend to view classmates who have strong prosocial characteristics as being the “coolest,” most salient peers in inclusive classroom settings. Such findings are encouraging in that they suggest that most students with mild disabilities who are included in general education classrooms recognize the value of positive peers. Based on a social learning perspective (e.g., Bandura, 1962; Cairns, 1979), it follows that students with mild disabilities are likely to learn from the social behaviors of these prosocial classroom leaders.

However, the present findings also suggest that distinct subtypes of aggressive boys with mild disabilities may have social experiences that negatively impact their social behavior and long-term adjustment. Aggressive boys with mild disabilities who are well integrated in the social structure tend to view antisocial peers as being cool. It seems possible, then, that these boys may be influenced by the negative behavior of these antisocial peers. Conversely, aggressive boys with mild disabilities who are peripheral or isolated in the social structure view prosocial peers as cool. From a social learning

perspective, this seems to be a positive finding as it suggests that these boys perceive prosocial peers as social role models. However, when considered in combination with other findings, a more problematic picture emerges. Popular aggressive and unpopular aggressive youth tend not to affiliate with each other (Farmer et al., 2003, 2002) and are more likely to dislike each other (Rodkin et al., 2003). Further, ethnographic, observational, and survey research suggests that unpopular aggressive youth are at increased risk of being victims of bullying by popular aggressive peers (Adler & Adler, 1998; Pellegrini, Bartini, & Brooks, 1999; Pepler, Craig, & Roberts, 1998; Salmivalli, Huttunen, & Lagerspetz, 1997). These findings point to the possibility that socially marginalized aggressive boys with mild disabilities may be at increased risk of victimization by antisocial peers. Therefore, their nominations of prosocial peers as cool may reflect the negative experiences they have had with popular aggressive peers as well as the possibility that prosocial peers refrain from bullying them and, in fact, may intervene on their behalf. While this cannot be determined with the present sample, it is a compelling possibility that warrants further investigation.

The fundamental similarity between the cool nominations of children with mild disabilities and those of the sample at large (cf., Rodkin et al., *in press*) is the importance of interpersonal affiliations. In contrast to an homophily perspective, in which children nominate those who are like them, students with mild disabilities did not preferentially nominate other students with mild disabilities as cool, or even other students who resembled them behaviorally. Instead, students with mild disabilities directed their nominations towards peers who interacted with them and/or with other students with mild disabilities, irrespective of homophily. Thus, unpopular-aggressive students with mild disabilities nominated prosocial children as cool, possibly because prosocial children are more likely to affiliate with or defend students with disabilities who are otherwise stigmatized or harassed. An analog to this finding in the larger sample is that students in aggressive groups nominated aggressive peers as cool, even if nominators were not aggressive themselves; conversely, students in nonaggressive groups nominated prosocial children regardless of nominators' own behavioral characteristics. The analysis of the larger sampled utilized data-intensive HLM models that were not feasible for the small subsample of students with mild disabilities. Nor is an analysis of all children of optimum value to school psychologists who directly face the concrete challenges of successfully integrating boys and girls with mild disabilities into their general education environments.

This study together with Rodkin et al. (*in press*) shows that children do not differentially perceive being cool in terms of who they are—aggressive or nonaggressive, with or without a special education classification—but rather in terms of who they affiliate with. By extension, it is tempting to speculate that the category of “mild disabilities,” like the category of “being cool,” derive impact from how they are used to interpret and organize social dynamics, in addition to their connection with a heterogeneous array of behavioral profiles. For all children, social status, social affiliations, and social behavior are interconnected. Building linkages between social status (e.g., being cool, popular, social preference) and social relations (e.g., peer groups, affiliations) marks a return to original sociometric principles that were extremely useful to educators in the past (Gronlund, 1959) and may have a critical role in the violence-reduction interventions of the future (Mulvey & Cauffman, 2001).

There are several limitations that must be considered when interpreting the current findings. First, this study does not directly examine who students with disabilities view as role models—rather it is inferred from their nominations for who they view as being cool in their classrooms. It is possible that they are naming peers that they consider others to view as cool and not necessarily peers that they hold in high-esteem. To continue this line of research, additional work is needed that directly asks youth with mild disabilities which classmates they view as being role models. It would then be possible to examine the interpersonal characteristics of the youth that they name. Second, the current measures are reliant on self-, peer-, and teacher- reports. While such data tends to be a valid and economical way to examine general trends in students' social relations, it may not yield more discrete information about students' actual relationships (Rubin, Bukowski, & Parker, 1998). Such information may be more accessible through observational techniques. To better clarify the role models of students with disabilities, additional work should include observational measures of visual regard, positive social ovals, and social interactions. Third, the current study is cross sectional and the results cannot be inferentially linked to students' social adjustment. There is a need for longitudinal studies that examine patterns in the social adjustment of students with disabilities in relation to their views of their classmates.

The current findings have important implications for interventions aimed at supporting the social inclusion of students with mild disabilities. When considered in light of other research on social relations of students with mild disabilities in general education classrooms, it appears that social interventions should address three distinct but complementary components. First, as indicated by research demonstrating that students with mild disabilities are at increased risk for social skill deficits (Gresham & MacMillan, 1997) and peer acceptance problems (Sale & Carey, 1995), there is a need to focus on social skills training to enhance such students' level of social competence. Second, as suggested by studies showing that social networks (Farmer & Hollowell, 1994; Pearl et al., 1998) and peer group dynamics (Farmer & Farmer, 1996; Farmer & Rodkin, 1996; Farmer, Van Acker, et al., 1999) may contribute to problem behavior for some students with mild disabilities, there is a need to train teachers in strategies that reduce the likelihood of problematic peer affiliations and social roles and that promote productive social dynamics in inclusive classrooms (see Farmer, 2000; Farmer and Cadwallader, 2000). Third, as suggested by the present findings, there also appears to be a need for interventions that focus on the selection of social of role models by youth with mild disabilities, especially aggressive boys. In some cases, only one of these areas may need to be addressed for a particular student. But in many cases it is likely that all three are relevant and are necessary to support sustained positive social behavior in youth with mild disabilities who have social difficulties.

Acknowledgements

This research was supported by the Office of Special Education Programs, U.S. Department of Education (Grants H023A50033 & H023C970103), Thomas W. Farmer & Ruth Pearl, Co-PIs, and in part by National Institute of Mental Health Grant

MH52429. The views expressed in this article are ours and do not represent the granting agencies.

References

- Adler, P. A., & Adler, P. (1998). *Peer power: Preadolescent culture and identity*. New Brunswick, NJ: Rutgers University Press.
- Bandura, A. (1962). Punishment revisited. *Journal of Consulting Psychology, 26*, 298–301.
- Bryan, T., & Pearl, R. (1989). Conformity to peer pressure by students with learning disabilities: A replication. *Journal of Learning Disabilities, 22*, 458–459.
- Cairns, R. B. (1979). *Social development: The origins and plasticity of interchanges*. San Francisco: W.H. Freeman.
- Cairns, R. B., & Cairns, B. D. (1994). *Lifelines and risks: Pathways of youth in our time*. New York, NY: Harvester Wheatsheaf.
- Cairns, R. B., Cairns, B. D., & Neckerman, H. J. (1989). Early school drop out: Determinants and configurations. *Child Development, 60*, 1437–1452.
- Cairns, R. B., Cairns, B. D., Neckerman, H. J., Ferguson, L. L., & Gariépy, J. -L. (1989). Growth and aggression: I. Childhood to early adolescence. *Developmental Psychology, 25*, 320–330.
- Cairns, R. B., Cairns, B. D., Neckerman, H. J., Gest, S., & Gariépy, J. -L. (1988). Social networks and aggressive behavior: Peer support or peer rejection? *Developmental Psychology, 24*, 815–823.
- Cairns, R. B., Cairns, B. D., Xie, H., Leung, M. -C., & Hearne, S. (1998). Paths across generations: Academic competence and aggressive behaviors in young mothers and their children. *Developmental Psychology, 34*(6), 1162–1174.
- Cairns, R. B., Perrin, J. E., & Cairns, B. D. (1985). Social structure and social cognition in early adolescence: Affiliative patterns. *Journal of Early Adolescence, 5*, 339–355.
- Cairns, R. B., Leung, M. -C., Buchanan, L., & Cairns, B. D. (1995). Friendships and social networks in childhood and adolescence: fluidity, reliability, and interrelations. *Child Development, 66*, 1330–1345.
- Cairns, R. B., Leung, M. -C., Gest, S. D., & Cairns, B. D. (1995). A brief method for assessing social development: Structure, reliability, stability, and developmental validity of the Interpersonal Competence Scale. *Behavior Research and Therapy, 33*, 725–736.
- Coie, J. D., Dodge, K. A., & Coppotelli, H. (1982). Dimensions and types of social status: A cross-age perspective. *Developmental Psychology, 18*, 557–570.
- Coie, J. D., Dodge, K. A., & Kupersmidt, J. B. (1990). Peer group behavior and social status. In S. R. Asher, & J. D. Coie (Eds.), *Peer rejection in childhood, Vol. 17–59*. New York: Cambridge University Press.
- Farmer, T. W. (2000). The social dynamics of aggressive and disruptive behavior in school: Implications for behavior consultation. *Journal of Educational and Psychological Consultation, 11*, 299–322.
- Farmer, T. W., & Cadwallader, T. W. (2000). Social interactions and peer support for problem behavior. *Preventing School Failure, 44*, 105–109.
- Farmer, T. W., Estell, D. B., Bishop, J. L., O'Neal, K. K., & Cairns, B. D. (2003). Rejected bullies or popular leaders? The social relations of aggressive subtypes of rural African American early adolescents. *Developmental Psychology, 39*, 992–1004.
- Farmer, T. W., & Farmer, E. M. Z. (1996). The social relationships of students with exceptionalities in mainstream classrooms: Social network centrality and homophily. *Exceptional Children, 62*, 431–450.
- Farmer, T. W., & Hollowell, J. L. (1994). Social networks in mainstream classrooms: Social affiliations and behavioral characteristics of students with emotional and behavioral disorders. *Journal of Emotional and Behavioral Disorders, 2*, 143–155.
- Farmer, T. W., Leung, M. -C., Pearl, R., Rodkin, P. C., Cadwallader, T. W., & Van Acker, R. (2002). Deviant or diverse peer groups? The peer affiliations of aggressive elementary students. *Journal of Educational Psychology, 94*, 611–620.
- Farmer, T. W., & Rodkin, P. C. (1996). Antisocial and prosocial correlates of classroom social positions: The social network centrality perspective. *Social Development, 5*, 174–188.

- Farmer, T. W., Rodkin, P. C., Pearl, R., & Van Acker, R. (1999). Teacher-assessed behavioral configurations, peer-assessments, and self-concepts of elementary students with mild disabilities. *Journal of Special Education, 33*, 66–80.
- Farmer, T. W., Van Acker, R., Pearl, R., & Rodkin, P. C. (1999). Social networks and peer-assessed problem behavior in elementary classrooms: Students with and without disabilities. *Remedial and Special Education, 20*, 244–256.
- Frederickson, N. L., & Furnham, A. F. (2001). The long-term stability of sociometric status classification: A longitudinal study of included pupils who have moderate learning difficulties and their mainstream peers. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 42*, 581–592.
- Gest, S., Farmer, T. W., Cairns, B. D., & Xie, H. (2003). Identifying children's peer social networks in school classrooms: Links between peer reports and observed interactions. *Social Development, 12*, 513–529.
- Gifford-Smith, M. E., & Brownell, C. A. (2003). Childhood peer relationships: Social acceptance, friendships, and peer networks. *Journal of School Psychology, 41*, 235–284.
- Graham, S., & Juvonen, J. (2002). Ethnicity, peer harassment, and adjustment in middle school: An exploratory study. *Journal of Early, 173*–199.
- Gresham, F. M., & MacMillan, D. L. (1997). Social competence and affective characteristics of students with mild disabilities. *Review of Educational Research, 67*, 377–415.
- Gronlund, N. E. (1959). *Sociometry in the classroom*. New York: Harper & Brothers.
- Kindermann, T. A. (1993). Natural peer groups as contexts for individual development: The case of children's motivation in school. *Developmental Psychology, 29*, 970–977.
- LaFontana, K. M., & Cillessen, A. H. N. (2002). Children's perceptions of popular and unpopular peers: A multi-method assessment. *Developmental Psychology, 38*, 635–647.
- Lease, A. M., Musgrove, K. T., & Axelrod, J. L. (2002). Dimensions of social status in preadolescent peer groups: Likability, perceived popularity, and social dominance. *Social Development, 11*, 508–533.
- Leung, M. (1996). Social networks and self-enhancement in Chinese children: A comparison of self reports and peer reports of group membership. *Social Development, 6*, 146–157.
- Lippitt, R., Polansky, N., Redl, F., & Rosen, S. (1952). The dynamics of power: A field study of social influence in groups of children. In G. E. Swanson, T. M. Newcomb, & E. L. Hartley (Eds.), *Readings in social psychology. Rev. ed.* (pp. 623–636). New York: Holt.
- Lloyd, J. W., Kauffman, J. M., & Kupersmidt, J. B. (1990). Integration of students with behavior disorders in regular education environments. *Advances in Learning and Behavioral Disabilities, 6*, 225–264.
- Mallows, C. L. (1973). Some comments on C_p . *Technometrics, 15*, 661–675.
- Masten, A. S., Morison, P., & Pellegrini, D. S. (1985). A revised class play method of peer assessment. *Developmental Psychology, 21*, 523–533.
- Mulvey, E. P., & Cauffman, E. (2001). The inherent limits of predicting school violence. *American Psychologist, 56*, 797–802.
- Newcomb, A., & Bukowski, W. M. (1983). Social impact and social preference as determinants of children's peer group status. *Developmental Psychology, 19*, 856–867.
- Pearl, R., & Bryan, T. (1990). Learning disabled adolescents' vulnerability to victimization and delinquency. *Learning disabilities: Theoretical and research issues* (pp. 1–20). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Pearl, R., & Bryan, T. (1992). Students' expectations about peer pressure to engage in misconduct. *Journal of Learning Disabilities, 25*, 582–585. 597.
- Pearl, R., Farmer, T. W., Van Acker, R., Rodkin, P. C., Bost, K. K., Coe, M., et al. (1998). The social integration of students with exceptionalities in general education elementary classrooms. *Elementary School Journal, 99*, 167–185.
- Pellegrini, A. D., Bartini, M., & Brooks, F. (1999). School bullies, victims, and aggressive victims: Factors relating to group affiliation and victimization in early adolescence. *Journal of Educational Psychology, 91*, 216–224.
- Pepler, D. J., Craig, W. M., & Roberts, W. L. (1998). Observations of aggressive and nonaggressive children on the school playground. *Merrill-Palmer Quarterly, 44*, 55–76.
- Pountain, D., & Robins, D. (2000). *Cool rules: Anatomy of an attitude*. London: Reaktion Books.
- Rodkin, P., Farmer, T. W., Pearl, R., & Van Acker, R. (2000). The heterogeneity of popularity in boys: Antisocial and prosocial configurations. *Developmental Psychology, 36*, 14–24.

- Rodkin, P.C., Farmer, T.W., Pearl, R., Van Acker, R. (in press). They're cool: Social status and peer group supports for aggressive boys and girls. *Social Development*.
- Rodkin, P. C., Pearl, R., Farmer, T. W., & Van Acker, R. (2003). Enemies in the gendered societies of middle childhood: Prevalence, stability, associations with social status, and aggression. In E. V. E. Hodges, & N. Card (Eds.), *Enemies and the darker side of peer relationships* (pp. 73–88). San Francisco: Jossey Bass.
- Rubin, K. H., Bukowski, W., & Parker, J. (1998). Peer interactions, relationships, and groups. In N. Eisenberg (Ed.), *Handbook of child psychology: Social, emotional and personality development* (5th ed.). New York: Wiley.
- Sale, P., & Carey, D. (1995). The sociometric status of students with disabilities in a full-inclusion school. *Exceptional Children*, 62, 6–19.
- Salmivalli, C., Huttunen, A., & Lagerspetz, K. (1997). Peer networks and bullying in schools. *Scandinavian Journal of Psychology*, 38, 305–312.
- Swanson, H. L., & Malone, S. (1992). Social skills and learning disabilities: A metaanalysis of the literature. *School Psychology Review*, 21, 427–443.
- Tapasak, R. C., & Walther-Thomas, C. S. (1999). Evaluation of a first-year inclusion program: Student perceptions and classroom performance. *Remedial and Special Education*, 20, 216–225.
- Terry, R. (2000). Recent advances in measurement theory and the use of sociometric techniques. In A. H. N. Cillessen, & W. M. Bukowski (Eds.), *Recent advances in the measurement of acceptance and rejection in the peer system* (pp. 27–53). San Francisco: Jossey-Bass.
- Vaughn, S., Elbaum, B. E., & Schumm, J. S. (1996). The effects of inclusion on the social functioning of students with learning disabilities. *Journal of Learning Disabilities*, 29, 598–608.
- Xie, H., Cairns, R. B., & Cairns, B. D. (1999). Social networks and configurations in inner-city schools: Aggression, popularity, and implications for students with EBD. *Journal of Emotional and Behavioral Disorders*, 7, 147–155.