

## ***School Entrance Age, Social Acceptance, and Self-Perceptions in Kindergarten and 1st Grade***

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Concerns about the effect of school entrance age have generally focused on academic achievement. The effect of school entrance age on the social acceptance and self-perceptions of kindergarten and 1st-grade students was examined in two studies. In Study 1, the social acceptance and competence of 476 children was assessed in kindergarten and first grade through peer nominations and ratings, teacher ratings, and report card grades. In Study 2, a subgroup of 116 students was interviewed in kindergarten and first grade to assess their perceptions of their school adjustment, loneliness at school, cognitive and physical competence, and peer and maternal acceptance. Few differences were found related to school entrance age. Teachers' ratings and peer nominations generally described initial social problems for the youngest children which were overcome by first grade. There were no differences in self-reported school adjustment, loneliness, perceptions of competence, or acceptance related to school entry age.

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Parents, educators, and policy makers have concerns about how old children should be when they start school. Recently, age at school entry in the United States has varied due to a combination of factors including state budgetary considerations and educators' concerns about the maturity required for increasingly demanding academic curriculum in the early grades. In addition, many middle-class parents have expressed their concerns about the maturity needed for school success by holding their children out of kindergarten until they are 6 years old (Holloman, 1990; Meisels, 1992).

Psychologists and educators who advocate the maturational views of Gesell (Gesell, Ilg, & Ames, 1974) have issued caveats concerning the fate of "over-placed" children who begin school before they are developmentally ready. The consequences described for overplaced children include lower academic achievement; greater likelihood of grade retention and referrals for special educational services; emotional and physical immaturity; lack of peer acceptance; poor school adjustment; and even a higher rate of suicide by adolescence or young adulthood (Hammond, 1985; Uphoff & Gilmore, 1985; Weinstein, 1968–1969).

Although concerns over the "right" age to start school have revolved around identification of an absolute age that is appropriate for kindergarten, research on the effects of school entry age have examined the impact of relative age, comparing the achievement of children who are among the youngest in the class with that of children who are among the oldest. Recent methodology (Morrison, 1992) comparing children on either side of a District's cutoff date, whose chronological ages are almost the same but whose school experiences vary, has allowed consideration of the impact of absolute age. The results of this research suggest that children who have been in school 1 year longer show advanced cognitive skills compared to children of the same age who have just begun school. This implies that absolute age does not serve as a developmental limit for these cognitive skills.

It is likely that research on the issue of absolute age will not resolve all the concerns expressed about school entry age; concern will continue to be directed to the youngest children who met the cutoff date. Relative age (i.e., standing within the age distribution of the group), may still be considered as an explanation for differences observed in the behavior, achievement, and special needs of elementary school children. Teachers may respond positively to the relative maturity of the oldest children in the group, or negatively to the relative immaturity of the youngest children. Because of differences between school district cutoff dates, the younger, less successful group in one study might well overlap the age range of the older, more successful group in another study. This perspective suggests that relative age, rather than absolute age, may be an important determination of school adjustment and achievement.

Most of the research on the relationship between age at school entry and success in school has focused on relative age and academic performance. In

general, the children who are the oldest in the class are more academically successful in the early grades, but differences in achievement, whereas statistically significant, are small (Bickel, Zigmond, & Strayhorn, 1991; Breznitz & Teltsch, 1989). These differences usually dissipate by the third grade (Shepard & Smith, 1986).

Other researchers have examined academic success related to relative age by comparing rates of grade retention and referrals to special educational services for younger versus older students (DiPasquale, Moule, & Flewelling, 1980; Uphoff & Gilmore, 1985; Weinstein, 1968–1969). Retentions and referrals are initiated by teachers who may be acting in part on concerns about the youngest students in the group. In support of this assertion, Shepard and Smith (1986) found that 68% of kindergarten teachers consider age to be a major factor in decisions to promote or retain marginally successful students. Decisions to retain or promote students with the same achievement levels were explicitly influenced by the age of the student relative to the group as a whole. Such teacher beliefs can greatly affect the use of retention or referral as a measure of academic risk.

The effect of school entry age on nonacademic areas, such as social competence or school adjustment, has not been adequately explored. The social competence of children who are young for their grade may be of equal importance to their academic competence (Pellegrini, 1992). Research with children in the upper elementary grades indicates the lack of peer acceptance at school is a risk factor associated with such longterm outcomes as dropping out of school, juvenile crime, and mental health problems (Kupersmidt, Coie, & Dodge, 1990; Parker & Asher, 1987). Although it is not known whether social acceptance in kindergarten and first grade is stable enough to predict long-term outcomes, it may be associated with such short-term outcomes as poor school adjustment, loneliness, or lowered self-perceptions of competence in these early grades. These self-perceptions may also arise directly from being among the youngest in the group, even if the child is socially accepted. If social acceptance or self-perceptions are predicted by relative age within the classroom, the social and emotional consequences of being young-for-grade may be more significant to school success than the relatively small differences in academic achievement attributable to age.

Two recent studies (Bickel, Zigmond, & Strayhorn, 1991; May & Welch, 1985) considered the social adjustment of young-for-grade students by examining the following factors: (a) teacher referrals to special education services; (b) retention rates; or (c) teacher ratings of conduct on report cards comparing older and younger children in kindergarten and in later elementary school. Neither of these studies found differences due to age in teacher referrals, retentions, or report card ratings. However, the data used in these studies did not address children's social acceptance directly. They relied on measures of teacher judgment rather than measures of the opinion of peers or the self-perceptions of the children themselves.

Another recent study (Breznitz & Teltsch, 1989) used peer nominations and self-reports as well as achievement measures to examine the academic skills, social acceptance, anxiety, and global self-esteem of oldest and youngest 4th-grade Israeli students. Differences between the two age groups were found in academic skills and in trait anxiety with older children showing less anxiety and doing better in school. No differences were found in social acceptance or in self-esteem. Earlier studies (Miller, 1957; Weinstein, 1968–1969) using peer nominations to assess the social acceptance of younger and older children within the classroom group, had inconsistent results. No differences were found between younger and average-aged sixth graders (Miller, 1957) with respect to the number of peer nominations received whereas youngest boys received more negative nominations in a sample of 1st-through-6th-grade boys (Weinstein, 1968–1969) with no analysis reported by grade level.

These studies present three limitations. First, the particular nature of the nominations used often included references to out-of-school experiences that may not reflect the degree of social acceptance children have within the classroom. Second, these studies do not adequately address the degree of social acceptance obtained by young-for-grade students in their first school years (kindergarten and first grade) when these effects would be expected to be most evident. If being the youngest in the group is associated with less sophisticated social skills, these deficits should be most apparent when children begin formal schooling and are exposed to the challenges of classroom group experiences.

Third, only the Breznitz and Teltsch (1989) study addressed whether the child's *own* assessment of the school experience varies with the age of school entry. This assessment was restricted to anxiety and global self-esteem in fourth graders. A focus of the present study is to determine whether the younger children in the first years of school report feelings of more loneliness, less school adjustment, less academic or physical competence, or less social or maternal acceptance than the older children in the class. Even if no objective differences are found in the social acceptance or adjustment of younger children, if their personal interpretations of school experiences differ from those of older children, then relative age will remain a legitimate concern for educators and parents.

The overall goal of the research is to examine the possible social and emotional consequences of being among the youngest in the class, both in kindergarten and in first grade. The researchers hypothesized that younger children would be less well-accepted by their classmates, be given less favorable ratings of social behavior and acceptance by their teachers, and report more loneliness and concern about social acceptance than older children. Two studies were conducted to meet this goal. In the first study, the social acceptance of 476 children was assessed in both kindergarten and first grade. In the second study, a subgroup of 116 of the Study 1 children were

interviewed in kindergarten and first grade to assess their self-perceptions of school adjustment, social acceptance, physical and academic competence, and loneliness at school. These studies provide a comprehensive portrait of the effect of age at school entry on the social acceptance and self-perceptions of children as they begin school.

### *STUDY 1*

The first study overcomes the limitations of prior work by utilizing several indices of social acceptance including peer sociometric ratings and nominations as well as teachers' reports of social acceptance and adjustment. The purpose of the first study was to assess whether children who begin kindergarten as the youngest students in the class are less likely to be socially well accepted, or more likely to suffer peer rejection in kindergarten and first grade.

#### *Method*

**Subjects.** Sociometric interviews were conducted with 512 kindergartners from 42 classrooms in 9 schools in 2 Southern California school districts between December, 1990 and March, 1991. The same 512 children were again interviewed in first grade between October, 1991 and May, 1992. Some of the classrooms where sociometric information was collected were on year-round schedules beginning in July. Sociometrics were collected only after classes had been together at least 3 months. The average rate of participation by classroom was 66% (range of 60%–92%), based on written parental permission.

Ethnic and socioeconomic status information was not available on individual students but a majority of students in each classroom participated. The ethnic distributions were similar at all schools. The average percentage in each ethnic group was 44.6% Anglo, 42% Latino, 9% Black, and 4.5% Asian or other. Spanish-speaking children were interviewed in Spanish. The percentage of students eligible for free or reduced lunch (AFDC or low income) at each school ranged from 14.5% to 84% with an average of 44.2%.

Children ranged in age from 5 years to 6 years, 9 months at the cutoff date for kindergarten entrance (December 2, 1990). Thirty-six children who were 6 years old or older as of the cutoff date were eliminated from the study in order to focus on children of traditional age entering kindergarten for the first time,  $N=476$ ; 224 boys, 252 girls; all analyses were conducted with and without these oldest students. Elimination of these students from the study had no effect on the results. The 476 children in kindergarten who remained in the study had a mean age of 5 years, 6 months at the cutoff date.

**Measures.** Three types of social acceptance data were collected in kindergarten and first grade: (a) data from classmates which included sociometric ratings and sociometric and behavioral nominations, (b) data from teachers in the form of ratings of popularity and social behavior, and (c) data from kindergarten report card grades. Individual photographs of each child in the class were used during interviews with children to increase the reliability of the responses. Using a 3-point scale, children were asked to rate how much they liked to play with each child. Choices were indicated by placing each child's photograph in one of three boxes: (a) a happy face box (like to play with a lot); (b) a plain face box (sort of like to play with); or (c) a sad face box (do not like to play with). This type of rating scale was found to be reliable with young children (Asher, Singleton, Tinsley, & Hymel, 1979). Peers also provided sociometric and behavioral nominations. Children were shown a display of all the photographs and asked to nominate 3 children with whom they liked to play a lot, and 3 who help, share, and take turns. Children were given the opportunity to nominate up to 3 children with whom they did not like to play, and 3 who fight and say mean things (Musun-Miller, 1990).

Teachers were asked to rate all children in their class on popularity and social behavior (prosocial, aggressive, disruptive, and shy/withdrawn). In order to minimize potential dependency in the ratings teachers provided for different items, each item was presented on a different page. On each page a roster of all students' names appeared beneath the item, with a 5-point scale next to each name. Teachers indicated how characteristic or uncharacteristic the following statements were: (a) is well-liked by other children; (b) is not well-liked by other children; (c) helps, shares, and takes turns; (d) says mean things; (e) hits, kicks, or bites; (f) and avoids other children (see Cassidy & Asher, 1992 for similar ratings). Three teachers completed the ratings a second time 1 month later on a total of 96 students to assess test-retest reliability. Item correlations for each teacher ranged from .83 to 1.0 with an average correlation of .93. To establish the validity of the teacher ratings, The Classroom Behavior Inventory (CBI; Schaefer & Edgerton, 1979, 1982), a well-documented teacher rating scale, was completed by kindergarten and 1st-grade teachers for 116 students who participate in Study 2 (see description in Study 2) and subscales of the CBI were correlated with the ratings described above. The pattern of correlations showed significant correlations between all expected subscales of the CBI and the ratings teachers provided (i.e., ratings of avoidance are significantly related to the CBI subscale of Introversion but not to other CBI subscales; ratings of verbal aggression are positively related to the CBI subscales Hostile and Distractible and negatively related to the CBI subscales Task Focused and Considerate of Others).

School records were reviewed to verify children's birthdates and to assess academic and social ratings from kindergarten report card grades. In these

school districts, kindergartners were graded on a 2-point scale; "can do it most of the time", or "needs more growth". In academic areas, grades were given for each skill area only after that area had been introduced, a factor that varied across classrooms. The majority of children received satisfactory grades in most areas; therefore, the only grade information used for this analysis was the frequency of "needs more growth" grades received in any of the following areas: (a) math, (b) language, (c) social skills, and (d) physical skills.

### ***Results and Discussion***

Three categories of variables (peer ratings and nominations, teacher acceptance and social behavior ratings, and report card grades) were used in the analysis. Peer ratings and nominations were standardized within classroom as were teacher ratings for each of six areas rated (liked, disliked, prosocial, verbally aggressive, physically aggressive, and avoidant). Report card grades refer to the frequency of "needs more improvement grades" in each area (math, language, social skills, and physical skills) as well as the total number of such grades received.

To examine the relation between age and the peer and teacher ratings and peer nominations, correlation analyses were conducted for the total sample and for boys and girls separately. For the sample as a whole, age was positively but weakly correlated with kindergarten teacher ratings of popularity and prosocial behavior ( $r = .13$  and  $.13$  respectively,  $p < .05$ ), 1st-grade teacher ratings of popularity and prosocial behavior ( $r = .12$  and  $.14$  respectively,  $p < .05$ ), and 1st-grade peer prosocial nominations ( $r = .16$ ,  $p < .05$ ). For boys, similar relations were seen. Age was positively correlated ( $p < .05$ ) with kindergarten peer nominations for being fun to play with ( $r = .17$ ), kindergarten teacher ratings of popularity and prosocial behavior ( $r = .23$  and  $.16$  respectively), and 1st-grade peer nominations for prosocial behavior ( $r = .16$ ). For girls, only 1st-grade teacher ratings for prosocial behavior and 1st-grade peer nominations for prosocial behavior were correlated with age ( $r = .25$  and  $.17$  respectively,  $p < .05$ ).

Quartile splits were created to allow the comparison of oldest ( $N = 119$ ,  $M = 5$  years, 10.5 months at the kindergarten cutoff date; 50 boys and 69 girls) and youngest ( $N = 119$ ,  $M = 5$  years, 2 months at the kindergarten cutoff date; 60 boys, 59 girls) children. The distribution of traditional social status groups (determined using the method presented by Coie, Dodge, & Copotelli, 1982) by quartile for kindergarten is shown in Table 1 and for first grade is shown in Table 2. Chi square analysis found no relation between being the youngest or the oldest in the group and the social status classification in kindergarten,  $\chi^2 = (5, N = 238) = 5.23$ ,  $p = \text{n.s.}$ , or first grade,  $\chi^2 = (5, N = 238) = 9.02$ ,  $p = \text{n.s.}$

The same quartile groups were used in a series of multivariate analyses. The results of a  $2(\text{age}) \times 2(\text{sex}) \times 2(\text{year})$  within subject mixed design

**Table 1. Frequency of Social Status Groups by Youngest and Oldest Quartiles in Kindergarten**

	Kindergarten	
	Younger	Older
Popular	20	28
Average	36	37
Controversial	7	5
Neglected	15	7
Rejected	27	18
Unclassified	14	24
Total	119	119

$$\chi^2 = 5.23, df = 5, n.s.$$

**Table 2. Frequency of Social Status Groups by Youngest and Oldest Quartiles in First Grade**

	First Grade	
	Younger	Older
Popular	24	30
Average	44	40
Controversial	6	5
Neglected	19	12
Rejected	13	10
Unclassified	13	22
Total	119	119

$$\chi^2 = 9.02, df = 5, n.s.$$

analysis of variance (ANOVA) performed with the peer ratings and peer nominations (liked, disliked, prosocial, and aggressive) assessed in kindergarten and first grade indicated main effect of age of school entry on peer ratings of social acceptance. For peer nominations, a two-way interaction between age of school entry and year in school was found,  $F(4, 230) = 2.54$ ,  $p < .05$ . Univariate tests were performed to more precisely describe this finding (see Table 3). For the positive nominations (well-liked and prosocial), younger children received fewer nominations than older children and this difference increased from kindergarten to first grade,  $F(1, 233) = 4.87$ ,  $p < .05$ , and,  $F(1, 233) = 5.03$ ,  $p < .05$ , respectively. For the negative nominations (disliked and aggressive) younger children received more nominations in kindergarten but this difference had almost disappeared by first grade,  $F(1, 233) = 4.15$ ,  $p < .05$ , and,  $F(1, 233) = 9.78$ ,  $p < .01$ , respectively. A two-way interaction between year in school and gender was also found in the peer nominations for not well-liked,  $F(1, 233) = 18.30$ ,  $p < .01$ , aggressive,



**Table 3. Mean Peer Nominations**

	Kindergarten				First Grade			
	Girls		Boys		Girls		Boys	
	Younger	Older	Younger	Older	Younger	Older	Younger	Older
Well-liked	2.14 (2.15)	2.57 (2.63)	1.83 (2.01)	2.86 (2.70)	1.98 (2.04)	2.91 (2.98)	1.68 (1.52)	2.64 (2.31)
Not well-liked	1.51 (1.68)	1.41 (1.90)	2.45 (2.57)	2.00 (2.12)	.95 (1.12)	1.02 (1.26)	1.77 (2.45)	1.70 (2.29)
Prosocial	2.03 (1.88)	2.47 (2.62)	1.70 (1.60)	2.58 (2.09)	1.66 (1.73)	3.43 (3.64)	1.58 (1.20)	2.30 (1.72)
Aggression	.83 (1.26)	.60 (1.11)	2.72 (3.37)	2.40 (3.25)	.48 (1.07)	.47 (.72)	2.10 (3.12)	1.82 (3.02)

(N = 237)

Two-Way Interaction (Age  $\times$  Year)  $F(4, 230) = 2.54, p < .05$ Well-liked  $F(1, 233) = 4.87, p < .05$ Not well-liked  $F(1, 233) = 4.15, p < .05$ Prosocial  $F(1, 233) = 5.03, p < .05$ Aggression  $F(1, 233) = 9.78, p < .01$ 

$F(1, 233) = 22.36, p < .01$ , and prosocial,  $F(1, 233) = 6.08, p < .05$ . Boys consistently receive more nominations for being not well-liked and aggressive whereas girls receive more nominations for prosocial behavior. For not well-liked and aggressive nominations, the differences between boys and girls are greater in kindergarten than they are in first grade. For prosocial nominations, the differences between boys and girls are greater in first grade than in kindergarten.

Age of school entry was not related to peer ratings of social acceptance in either kindergarten or first grade and was not related to social status classification at either grade level. Children who were among the youngest in the class were not more likely to become rejected by their peers. The peer nominations show some social disadvantage for the youngest quartile in kindergarten; they receive slightly more nominations for being disliked and aggressive than the oldest quartile but by first grade there are no differences, perhaps reflecting socialization into the school setting. The youngest quartile also received fewer nominations for being well-liked and prosocial in kindergarten than does the oldest quartile and this difference increases in the 1st-grade nominations.

The results of a  $2(\text{age}) \times 2(\text{sex}) \times 2(\text{year})$  within subject mixed design ANOVA was conducted using the quartile splits described above and kindergarten and 1st-grade teacher ratings of popularity and social behavior (see Table 4). A two-way interaction between age of school entry and year in school was found,  $F(6, 202) = 3.38, p < .01$ . Univariate tests indicate no differences (Age  $\times$  Year) for ratings of prosocial behavior and avoidance. For

Table 4. Mean Teacher Ratings

	Kindergarten				First Grade			
	Girls		Boys		Girls		Boys	
	Younger	Older	Younger	Older	Younger	Older	Younger	Older
Well-liked	3.75 (.81)	3.89 (.95)	3.16 (1.23)	3.91 (.93)	3.75 (.74)	3.94 (.89)	3.52 (.97)	3.95 (.80)
Not well-liked	2.06 (.99)	2.05 (1.06)	2.64 (1.29)	1.98 (1.01)	2.01 (.78)	1.88 (.84)	2.37 (1.10)	1.90 (.88)
Prosocial	4.02 (.95)	4.34 (.94)	3.12 (1.31)	3.81 (1.10)	3.41 (.97)	4.07 (1.07)	3.29 (1.20)	3.56 (1.25)
Verbal aggression	1.77 (1.10)	1.82 (1.17)	2.42 (1.34)	2.11 (1.01)	1.66 (.83)	1.81 (1.10)	2.24 (1.19)	1.98 (1.16)
Physical aggression	1.90 (1.27)	1.81 (1.15)	2.48 (1.42)	2.04 (1.07)	1.57 (.79)	1.60 (.88)	2.32 (1.30)	2.00 (1.18)
Avoid others	1.87 (.98)	1.73 (.80)	2.00 (.97)	2.06 (1.24)	1.90 (1.07)	1.73 (.84)	2.18 (1.04)	1.83 (.99)

(N = 211)

Two-Way Interaction (Age  $\times$  Year)  $F(6, 202) = 3.38, p < .01$   
 Well-liked  $F(1, 207) = 9.10, p < .01$   
 Not well-liked  $F(1, 207) = 7.42, p < .01$   
 Verbal aggression  $F(1, 207) = 6.10, p < .05$   
 Physical aggression  $F(1, 207) = 7.17, p < .01$

ratings of being well-liked, younger children received lower ratings than older children in kindergarten and first grade with the difference decreasing in first grade,  $F(1, 207) = 9.10, p < .01$ . For ratings of being disliked, verbally aggressive or physically aggressive, younger children received higher ratings than older children in kindergarten and first grade with the differences also decreasing in 1st-grade ratings,  $F(1, 207) = 7.42, p < .01$ ;  $F(1, 207) = 7.17, p < .01$ ;  $F(1, 207) = 6.10, p < .05$ ; respectively. A two-way interaction between gender and year in school was also found in the teacher rating for well-liked, not well-liked, and verbally aggressive,  $F(1, 207) = 4.30, p < .05$ ;  $F(1, 207) = 15.66, p < .01$ ;  $F(1, 207) = 13.08, p < .01$ ; respectively. Boys had lower ratings for being well-liked and higher ratings for being not well-liked and verbally aggressive. In all cases the differences between girls and boys were greater in kindergarten ratings than in 1st-grade ratings.

The results of  $2(\text{age}) \times 2(\text{sex})$  between subject multivariate analyses performed with the kindergarten report card grades for social development, language, math, or physical skills indicated that these skills did not vary as a function of the students' age or gender.

Teachers perceived differences between younger and older children in their classes in their ratings but not in the report card grades they assigned. For both kindergarten and 1st-grade teachers, age was positively correlated

with ratings of popularity and prosocial behavior. Kindergarten teachers seemed to be more affected by the relative age of the child being evaluated than were 1st-grade teachers, rating younger children as lower in popularity and higher in being disliked, verbally aggressive, and physically aggressive than they did the oldest children.

Evidence to support the hypotheses that younger children will be less well-accepted by their classmates and be given less favorable ratings of social behavior and acceptance by their teachers than older children is mixed. There are few correlations between peer ratings and nominations and age at school entry; those that are found are weak. There is no relation between membership in the youngest quartile and sociometric status in the classroom or peer ratings of social acceptance. Children in the youngest quartile do receive more nominations for being disliked and aggressive than children in the oldest quartile in kindergarten although these differences decline or disappear by first grade. Children in the oldest quartile receive more nominations for being well-liked and prosocial than children in the youngest quartile and this difference increases between kindergarten and first grade. Positive reputational bias in the peer group or increased social skills due to positive peer experiences in kindergarten may account for this continued advantage.

Teachers do give children in the youngest quartile higher ratings of aggression and lower ratings of acceptance than they give to children in the oldest quartile but this difference also declines between kindergarten and 1st-grade teachers. No differences due to age are discernible in the report card grades. The picture created is one of possible initial difficulties with social skills when the youngest children begin kindergarten but these difficulties are not strong enough to cause these children to be rejected and are largely overcome by first grade. For the oldest children starting kindergarten there may be some social advantages in popularity and prosocial behavior.

## *STUDY 2*

Planning and data collection for the second study was concurrent with the first study to assess children's self-perceptions of the possible effect of school entrance age on children's social adjustment. The impact of school entry at a young age relative to the group on children's own perceptions of their adjustment, in contrast to the perceptions of others such as teachers or peers, has not been examined in past work. The objective of the second study was to examine several aspects of these perceptions, namely children's self-perceptions of their own school adjustment, self-perceptions of competence and acceptance, and their loneliness at school. If overplaced children suffer poor school adjustment as suggested by earlier research, than

the youngest children in the group should report poorer school adjustment and possibly lower judgments of their competence and acceptance than the older children in the group report. Although generally children in kindergarten and first grade tend to rate their intellectual competence highly when compared to children in the upper elementary grades (Stipek & MacIver, 1989), there is little evidence regarding age differences within the kindergarten and 1st-grade age ranges or with regard to ratings of other self-perceptions. If younger children experienced lack of peer acceptance, then more loneliness should be reported by this group than the oldest children in the class. Because self-perceptions do not always match more objective assessments, younger children may report more negative perceptions and loneliness than older children even if teachers and peers rate their adjustment and acceptance as equal to the older children. Such self-perceptions are the concern of Study 2.

### *Methods*

**Subjects.** Parents of a subsample of 116 kindergartners (65 boys, 51 girls) included in Study 1 agreed to participate in a more detailed study of the antecedents and the correlates of social acceptance in the early school years. The age range of this sample was 5 to 6 years old at the District cutoff date with an average age of 5 years, 6 months. The children in this sample varied with respect to their classroom social acceptance. Using traditional social status groups to classify these children (Coie, Dodge, & Copotelli, 1982), the sample included 36 popular children (18 boys, 18 girls), 39 average children (20 boys, 19 girls), and 41 rejected children (27 boys, 14 girls). No neglected, controversial, or unclassifiable children were included in this sample. The sample also included 51% Anglo, 2% Black, 28% Latino, 12% Latino/Anglo, and 7% children of other ethnicity based on parent report. Median family income was \$34,500 a year, with a range from less than \$10,000 a year to over \$48,000 a year.

**Measures.** Two types of assessments were conducted with this smaller sample of 116 children. First, kindergarten and 1st-grade teachers completed the CBI for each child. Second, children were interviewed individually during their kindergarten and 1st-grade years and had completed assessments of perceived competence, school adjustment, and loneliness. Each instrument selected has been used successfully in these age groups.

The CBI consists of 42 items describing classroom behavior and asking the teacher to rate how characteristic each behavior is for the child being rated on a 5-point scale. Ten subscales (Extraversion, Creativity/curiosity, Distractibility, Independence, Hostility, Verbal intelligence, Task orientation, Introversion, Consideration, and Dependence) are calculated by adding the ratings on appropriate items (Schaefer & Edgerton, 1979). The subscales

have demonstrated good reliability in ratings provided by kindergarten teachers (Schaefer & Edgerton, 1982) with alphas averaging .88 and ranging from .75 to .96.

Several paper-and-pencil measures were administered to children as individual interviews. Children's subjective ratings of their competence and acceptance were assessed using the Pictorial Scale of Perceived Competence and Social Acceptance for Young Children—Preschool-Kindergarten version (Harter & Pike, 1984) which contains four separate subscales: (a) cognitive competence, (b) physical competence, (c) peer acceptance, and (d) maternal acceptance. Assessments with kindergarten children of the internal reliability of these subscales using coefficient alpha (Harter & Pike, 1984) found somewhat lower alphas for self-perceptions of academic (.52) and physical competence (.55) than for perceptions of social (.75) or maternal acceptance (.81). Because children of this age tend to score high on this measure, there is a restriction of range in the scores which depresses the estimates of internal reliability. When subscales are combined, these estimates improve so that the total scale alpha is .86. All subscales were administered and analyzed in this study but the subscale of greatest interest measures perceptions of social acceptance (the alpha on this scale was acceptable at .75). Generally, on the social acceptance items, children are asked if they are more like children who have few friends or more like children who have many friends.

The second measure administered to children, *One Child's Day*, (Barth, 1988), assessed self-perceived school adjustment. This measure consists of 31 items asking children whether they like various aspects of their school day, (e.g., seeing the teacher when they first arrive, doing seatwork, lunch). Included in this assessment are several items related to social perceptions. Children are asked whether they like the other kids at school as playmates, as work partners, and as a social group. Consistent with previous research with this age group (Barth & Parke, 1993), the Cronbach's alpha of reliability for this scale was .90 for the kindergarten year and .82 for the 1st-grade year.

Children were also interviewed using a self-report assessment of loneliness (Asher, Hymel, & Renshaw, 1984; Cassidy & Asher, 1992). This instrument includes 16 items in which children indicated whether they have feelings of loneliness, concerns about social acceptance, and access to social resources in the classroom peer group and eight "filler" items. This scale has demonstrated high internal consistency (Cronbach's alpha = .90) when used with older children (Asher, Hymel, & Renshaw, 1984) and acceptable internal consistency when modified for use with 5 to 7 year olds (Cronbach's alpha = .79, Cassidy & Asher, 1992).

## **Results**

Two categories of variables (kindergarten and 1st-grade teachers' ratings of classroom behavior and children's self-perception measures assessed in kin-

dergarten and first grade) were used in the analysis. In order to examine the relation between age and these variables, correlation analyses were conducted for the total sample and for boys and girls separately. For the total sample, only one subscale of the kindergarten teachers' CBI ratings, Dependence, was correlated with age ( $r = -.19, p < .05$ ). For boys, two 1st-grade teachers' CBI subscales, Dependence, and Task Orientation, were correlated with age ( $r = -.42, p < .01$  and  $r = .28, p < .05$ , respectively). For girls, there were no significant relations between CBI subscales or measures of self-perceptions and age for either kindergarten or 1st-grade measures. Correlations between measures of self-perceptions and age were very close to zero for all measures in both kindergarten and first grade.

Quartile splits were created to compare the oldest quarter of the children ( $M = 5$  years, 10 months; ranging from 5 years 8 months–6 years old; 18 boys, 11 girls) with the youngest quarter ( $M = 5$  years, 1 month; ranging from 5 years–5 years, 3 months old; 16 boys, 13 girls). Using kindergarten social status designations, chi square analysis found no relation between social status group and age at school entry,  $\chi^2(4, N = 58) = .64, p = \text{n.s.}$

The same quartile groups were used in a series of multivariate analyses. The results of a  $2(\text{age}) \times 2(\text{sex}) \times 2(\text{year})$  within subject mixed design multiple analysis of variance (MANOVA) performed with self-perceptions of competence in cognitive, or physical skill and peer or maternal acceptance showed that these self-perceptions of competence and acceptance did not vary as a function of the child's age at school entry or gender. A main effect for year in school was found,  $F(4, 50) = 27.68, p < .001$ . Generally, children rated their cognitive competence and maternal acceptance higher and their physical competence and peer acceptance lower in kindergarten than in 1st grade. Loneliness also did not vary by age at school entry but a two-way interaction between gender and year was found,  $F(1, 53) = 10.20, p < .01$ . Girls reported less loneliness in kindergarten (19.19) than boys reported in kindergarten (22.31) or 1st grade (22.31) or than the girls reported in the 1st grade (24.40). Reported school adjustment was not found to vary as a function of the child's age at school entry, gender, or year in school.

The results of a  $2(\text{age}) \times 2(\text{sex}) \times 2(\text{year})$  within subject mixed design MANOVA performed with the subscales of the CBI rated by kindergarten and 1st-grade teachers showed no relation between age at school entry and CBI ratings; however, a two-way interaction between gender and year in school was found,  $F(10, 45) = 3.09, p < .01$ , for introversion, dependence, task focus, and consideration of others,  $F(1, 54) = 7.04, p < .01$ ;  $F(1, 54) = 11.14, p < .01$ ;  $F(1, 54) = 8.42, p < .01$ ;  $F(1, 54) = 8.49, p < .01$ ; respectively. Boys earned higher ratings for introversion and dependence than girls and these differences are greater in kindergarten ratings than in 1st-grade ratings. In the kindergarten ratings boys earn higher ratings for task focus and consideration of others than girls but this is reversed in the 1st-grade ratings.

Being among the youngest of students in kindergarten was not found to be associated with rejected social status, higher levels of loneliness, lower levels of perceived competence or acceptance, or poorer self-reported school adjustment. Kindergarten and 1st-grade teacher ratings on the CBI were also not related to school entrance age.

### *GENERAL DISCUSSION*

The most striking aspect of the results of these studies is the failure to find many significant effects of being one of the youngest in the class, even when extreme groups were compared. Correlational analysis of age of school entry with all other variables investigated produced very few significant correlations. The few correlations found tended to involve teacher ratings, rather than peer ratings or nominations or self-ratings, and popularity and prosocial behavior rather than rejection or negative social behavior. Even though these correlations were significant statistically, they were quite low ( $r < .25$ ).

Comparison of extreme groups using quartile splits based on age allowed detection of some differences related to age. These differences were found in teacher ratings and peer nominations but not in peer ratings, report cards, teacher ratings on the CBI or the self-reports of the children themselves. Generally the differences found were in the direction of the study hypotheses with younger children receiving less favorable ratings of social acceptance and behavior than older children. These differences dissipate by first grade except for peer nominations for being well-liked and prosocial. Being among the youngest in the class was not related to either rejected or neglected social status. It was also not related to the self-reports of Study 2 children on loneliness, self-perceived competence, or school adjustment. Generally these findings support earlier work examining peer ratings with regard to older students (Breznitz & Teltsch, 1989; Miller, 1957) and teacher referrals and report card grades (Bickel, Zigmond, & Strayhorn, 1991; May & Welch, 1985) which found that younger children were not at a social disadvantage. Indications of early social problems in kindergarten for the youngest children as rated by teachers and reflected in peer nominations seem to be greatly reduced by the time these children reach first grade. The results of this study expand earlier work by focusing on children in their first school years and including their self-perceptions.

Also of interest is the fact that although some of the teacher ratings vary by age of school entry, the report card grades given by teachers do not reflect the same pattern. This discrepancy may be due in part to the ratings used in this study being more sensitive indicators of teachers' personal opinions than report card grades, which must be shared with parents and administrators and justified to them. If teachers hold opinions that age at school

entry is a component in children's social success in the early grades, these opinions might be more easily expressed through the ratings.

Gender differences found in these studies were in stereotypical directions. Both teachers and peers were more likely to rate boys as more aggressive and less liked and girls as more prosocial. Generally these differences were seen to be greater in kindergarten than in first grade. In Study 2 CBI ratings, boys were rated as more introverted, and dependent whereas girls were rated as more task-focused and considerate of others. These ratings may be the result of traditional views of sex-role behaviors among teachers and students or may reflect a focus on the part of the children being rated on developing 'appropriate' sex-role behaviors.

The findings of this study have important implications for educational policy. Consideration of excluding the youngest quartile of kindergartners from school entry by changing age limits in order to improve their chances of successful school adjustment may be misguided. Whatever initial social disadvantages younger children may face when entering kindergarten appear to be greatly reduced by first grade. Younger children were not more likely to be rejected by their peers, fail to find social acceptance, report loneliness, or suffer decrements in self-perceptions of competence or acceptance. Report card grades of younger children do not document deficits in language, math, social, or physical skills. Generally, the younger children in the early grades are indistinguishable from other children on most measures of social acceptance and adjustment provided by peers, teachers, or the children themselves. There is little evidence to support an educational policy which would exclude these children.

When investigating the sources of variance in social acceptance and school adjustment, factors other than age, such as prior group experience (Howes, 1990), ethnicity or socioeconomic status (Hartup, 1983), or the dynamics of parent-child interaction (Parke, Cassidy, Burks, Carson, & Boyum, 1992) should be considered. Research should also attend to the differences between the ratings of social acceptance and behavior provided by teachers and peers and the possibility that, over time, teachers may influence the opinions children have about each other. The major contribution of this research was to reduce concerns related to the effect of age of school entry on the social acceptance and self-perceptions of students in kindergarten and first grade.

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