

Changes Over Time in Kindergarten Holding Out: Parent and School Contexts

Yolanda Bellisimo

Colin H. Sacks

John R. Mergendoller

Beryl Buck Institute for Education

This study examined the prevalence of holding age-eligible children out of kindergarten in a single Northern California county, and the changes in this phenomenon over time. The sample included 861 boys and 843 girls in 1988 to 1989 and 975 boys and 894 girls in 1991 to 1992, from 30 schools. In 1988, approximately 19.3% of kindergarten boys and 9.1% of kindergarten girls throughout the county were older than their classmates as a result of having been held out of school. In 1991, the corresponding figures were 11.4% and 3.7% for boys and girls respectively. Parental socioeconomic status (SES) was associated with holding out boys, but not girls, in both 1988 and 1991. Specifically, schools with higher SES parents overall had a higher percentage of boys held out. A significantly greater percentage of parents in 1988 were concerned about the appropriateness of the kindergarten classroom for their child than parents in 1991. This study was unable to identify relationships between holding-out and teacher reports of change in kindergarten expectations, practices, and enrollment policies.

Throughout the past decade increasing attention has been paid to the phenomenon of holding age-eligible children out of kindergarten. Parents, often at the suggestion of preschool and primary school personnel, are keeping their children out of kindergarten even though the children are old enough to begin school.

Holding children out of school reflects the assumption that students have to be *ready* before they attend school. As expectations increase for what a student must do to prove readiness, more children are deemed by their parents to be not *ready* for the demands of kindergarten. Beginning in the 1980's, educational practices have narrowed the kindergarten curriculum and have raised standards for performance (Walsh, 1989). Shepard and

Correspondence and requests for reprints should be sent to Yolanda Bellisimo, Beryl Buck Institute for Education, 18 Commercial Blvd., Novato, CA 94949.

Smith (1988) criticize this "escalating academic demand" and argue that such inappropriate initiation into academic work impels parents to hold their children out of school until they are older and better able to cope.

Although holding out has received attention in the popular press (Meisels, 1990; Walsh, 1990; Zimmer, 1990), few empirical studies have documented or attempted to explain this phenomenon. Shepard, Smith, Graue and Catto (1989) studied holding out in 19 Colorado school districts representing approximately two-thirds of the Colorado kindergarten population. After examining the range of ages at which children entered kindergarten, they found that holding out was occurring in 12 of the 19 districts. Looking at school-by-school entry-age data, they determined that in 44% of the schools in their sample, 10% or more of the boys had been held out. In 30% of the schools, at least 10% of the girls had been held out. Shepard (1989) and Shepard and Smith (1987) found that boys are more often held out than girls and that middle and upper-middle class children are held out more often than poor children. They estimated that approximately 10% of kindergarten students in the United States had been held out for 1 year or more (Shepard, 1989; Shepard & Smith, 1987).

McCaig (1990) examined the birth dates of two cohorts of children who entered kindergarten in the Grosse Pointe, Michigan public schools in September, 1985 and September, 1987. Of these 1012 students, approximately 20% of boys and 12% of girls had been held out of school 1 year or more. The vast majority of both boys and girls held out of school would have entered kindergarten during the first half of their eligibility year, and were thus considered young for their cohort. Both gender and age were related to parents' decisions to delay their children's enrollment in school.

None of the previous studies of holding-out examined changes in this practice over time. This study was conducted to determine whether there was a change over time in the proportion of parents holding children out of kindergarten and to explore school and family characteristics thought to be associated with this phenomenon. Having determined in a previous study (Mergendoller, Bellisimo, & Horan, 1990) that 19.3% of age-eligible boys and 9.1% of age-eligible girls in a northern California county were held out of kindergarten by their parents, we wondered if the growing interest in developmentally appropriate practices (Bredekamp, 1989; California School of Readiness Task Force, 1988) would result in a decrease in the number of children held out of school. Developmentally appropriate practices seek to foster learning without the sit-still-and-listen workbook, worksheet methods that have characterized academic kindergarten classrooms and may have prompted parents to hold their children out of school. Would the movement toward developmentally appropriate kindergarten practices convince parents that responsibility for success falls to the school and not to the kindergarten child? If so, would parents be less likely to hold their children out of school?

We were also interested in the relationship between changes in school culture and changes in holding out. Graue (1992) argued that *readiness* is actually a social and cultural construct, generated by members of a school community, including parents and teachers. We tested whether changes in teacher or parental beliefs would correlate with changes in the actual prevalence of holding out across the 30 schools examined.

OBJECTIVES OF THE STUDY

We sought to answer the following questions:

1. Did holding out patterns change from 1988 to 1991?
2. Is there a relationship between age-at-kindergarten-entry and gender or parent socioeconomic status?
3. If holding out patterns have changed, is there a relationship between these patterns and changes in teachers' expectations and reported practices regarding kindergarten work?
4. What is the relationship between changes in schools' holding out patterns and parental attitudes and expectations?

Drawing on the work of Smith and Shepard (1988) Shepard and Smith (1988), and our previous research (Mergendoller et al., 1990), we predicted that the parents of boys and more affluent parents would more likely keep their children out of school. We also predicted that teachers' own beliefs about holding children out of school would influence parents' decisions to delay enrolling their children in school, and that parents would hold their children out of kindergarten classrooms whose teachers reported more rigorous expectations. We expected that changes in teacher attitudes and expectations would result in changes in holding out rates. Specifically, we predicted that holding out rates would decline between 1988 and 1991, and that these declines would reflect changes in parental and teacher attitudes during this period.

METHOD

Sample

This study was conducted within a single county located in the San Francisco Bay Area. The county is diverse demographically, and includes working farms, suburbs and small towns, and a small city that contains the county seat. Although lower income families live in parts of the county, the bulk of the population is middle class or above.

There are 12 public school districts within the county. In 1988 there were a total of 35 elementary schools containing 82 regular kindergarten classrooms and 3 prekindergarten classes (locally called Gesell classes). In

1991 there were 36 elementary schools and 84 regular kindergarten classrooms and no prekindergarten classes.

Of the 30 schools examined in the current study, 14 were impacted by the termination of prekindergarten classes between 1989 and 1991. Two school districts in the county had offered free prekindergarten to all age eligible children considered not ready for kindergarten. All 14 schools in these two districts could recommend students for the prekindergarten. In 1990 the state terminated funding of the prekindergarten classes and both school districts elected to discontinue the classes rather than fund them without state support. Because the loss of prekindergarten might affect our results, we compared holding out rates of those schools which had lost prekindergarten classes with those that had not.

Using school records, we collected the birthdates of every boy and girl attending public kindergarten during the 1988 to 1989 school year, and again during the 1991 to 1992 school year, at the 30 schools participating in the study. These schools represented all public elementary schools in the county except for four small, one-room schools, one elementary school that did not offer kindergarten, and a sixth school that did not open until after the study began.

Information Obtained From School Records

Using birthdates of all children entering kindergarten in September, 1988 (N= 1776) and September, 1991 (N= 1908), we calculated individual children's ages in months upon entry into kindergarten.

In California, children may enter kindergarten in September if they turn 5 on or before December 1 of the same school year. Children entering kindergarten at an appropriate age are thus between 57 and 68 months old at the beginning of their kindergarten year. We calculated the proportion of kindergarten students in each school who were 69 months or older. Of the children who were over 68 months of age, we distinguished between those who were retained/repeating kindergarten (1988 N= 72; 1991 N = 39) and those who were older as a result of having been held out of school (1988 N= 243; 1991 N = 148). Students who were retained were omitted from the analysis.

We also retrieved from state records a teacher-reported measure of parents' socioeconomic status (SES). Until 1990, the state academic testing program asked all third-grade teachers to rate the occupational status of parents of the students in their classes on a 3-point scale. The points on the scale represent unskilled workers, skilled-semiskilled workers, and semiprofessional-professional workers. Teachers' ratings of individual parents were then aggregated to a school-level average. Even though the state did not collect SES data for the 1991/1992 school year, the relative economic stability and the lack of transiency in the county suggest that SES scores would not

vary widely over the course of one year. In order to account for slight variation for each school, we computed the average SES score, based on the 3 years for which data were available (the 1988/1989, 1989/1990, and 1990/1991 school years). Across all 30 schools, the mean SES score was 2.54 ($SD=0.29$). We also conducted a 1 x 3 repeated measures analysis of variance (ANOVA) to test for systematic changes in SES across all 30 schools. As expected, this analysis yielded nonsignificant results, $F(2, 58) = 1.61$, $p = .21$, suggesting that SES scores were stable across the years of the current study.

Surveys and Interviews

To assess attitudes which might be relevant to holding out and to possible changes therein, we conducted a survey of kindergarten teachers in the 30 schools, and interviewed parents of kindergarten children in 4 of the schools selected from the study schools.

Teacher Survey: 1988/1989. Seven questionnaire items reflected commonly-heard reasons why age-appropriate children should not enter kindergarten. These "school readiness" items were introduced with the stem, "In your opinion, should a child who is old enough to enter kindergarten wait a year before entering if he or she:" and included the following items: (a) cannot recognize colors and shapes; (b) cannot recognize letters; (c) is physically small for age; (d) cannot sit quietly; (e) cannot express needs verbally; (f) cannot follow directions; and (g) is new to this country. Teachers responded on a 5-point scale ranging from *definitely* to *definitely not*.

Teacher Survey: 1991/1992. The 1991/1992 teacher survey included the same seven school readiness questions as the 1988/1989 survey to assess teacher attitude change over time. Change scores for these seven school readiness items were computed by subtracting 1988 scores from 1991 scores for each school.

The survey also included seven new items asking teachers to indicate what had changed about their academic expectations and classroom practices over the previous 3 years. Teachers responded to statements about their kindergarten program and ways it may have changed over the past 3 years on a 1 to 5 scale (*strongly agree, agree, somewhat agree, disagree, strongly disagree*), for example "Over the past 3 years we have changed our academic expectations regarding kindergarten student performance in reading and math"; "Our first grade teachers have become less concerned about children being able to read when they enter first grade." All seven items are shown in Table 5.

A second set of seven new questions asked about school policy regarding kindergarten students. The first 5 questions asked teachers to circle, on a 1 to 5 scale (*always, usually, sometimes, rarely, never*), the number that best

described their school in such areas as retention, principal, and teacher advice to parents, for example “How often do you retain children at the end of kindergarten”; “Our kindergarten teachers encourage parents to enroll young five-year-olds in kindergarten when age-eligible.” The final two questions used a slightly different scale (*all students, most students, some student, a few students, no students*) and asked whether kindergarten readiness testing was either encouraged or required. All seven items are shown in Table 6.

Parent Interviews. In 1988/1989, after examining the holding-out patterns for each school, we chose four schools which varied in the relative proportion of boys and girls held out of school in 1988/1989. The sampling frame contained: school 1: Redwood'-high number of boys held out, low number of girls held out; school 2: Brook-low number of both boys and girls held out; school 3: Miller-high number of both boys and girls held out; and school 4: Valley-low number of both boys and girls held out.

During the winters of 1989 and 1992, we interviewed parents of the kindergartners in each of these four schools. Parents participating in the interviews were selected randomly based upon the birthdates of their children. Parents were divided into three groups: (1) old group: Those whose children were over age as a result of having been held out, for example more than 5 years 9 months upon entering kindergarten; (2) mid group: Those whose children were between 5 years 9 months and 5 years 1 month, inclusive, upon entering kindergarten; (3) young group: Those whose children were young for the class, entering at less than 5 years 1 month of age. In 1989 we interviewed the parents of 40 children, 11 from Valley (5 boys, 6 girls), 10 from Brook (7 boys, 3 girls), 6 from Miller (5 boys, 1 girl) and 13 from Redwood (7 boys, 6 girls). There were a total of 24 parents of boys and 16 parents of girls. In 1992 we interviewed the parents of 34 children, 8 from Valley (5 boys, 3 girls), 8 from Brook (4 boys, 4 girls), 9 from Miller (5 boys, 4 girls), and 9 from Redwood (5 boys, 4 girls). There were a total of 19 parents of boys and 15 parents of girls. The number of parent interviews conducted by age and gender of the child is shown in Table 1.

We interviewed parents by telephone. The interview protocol contained both structured and open-ended questions, and the questions remained the same for both years.

Parents were asked specific questions about the number of years their child attended preschool, what preschool the child attended, the child's ordinal placement in the family, and whether the family needed day care for the child after school. Following these introductory questions, the interviewer asked closed-ended questions about concerns parents had when making the decision to start their child in kindergarten, including concerns

¹ All school names are pseudonyms.

Table 1. Kindergarten Parent Interviews Conducted in 1988/1989 and 1991/1992 School Years

	Valley			Brook			Miller			Redwood		
	Old	Middle	Young	Old	Middle	Young	Old	Middle	Young	Old	Middle	Young
1988/1989												
Boys	2	1	2	0	2	1	3	1	1	3	2	2
Girls	0	3	3		2	1	1	0	0	2	2	2
1991/1992												
Boys	2	1	2	2	2	0	2	1	2	1	1	3
Girls	1	1	1	0	1	3	1	2	1	1	2	1

Note. Age of Child

Old= More than 5 years, 9 months
 Middle= Between 5 years, 9 months and 5 years, 1 month
 Young= Less than 5 years, 9 months

about the school, classroom and teachers and about the academic and social readiness of their child for kindergarten. The first 5 closed questions used the stem, "Were you concerned about" and concluded with (a) classroom expectations; (b) the kindergarten teacher; (c) the social skills of your child; (d) the academic skills of your child; and (e) whether your child would be expected to read. The final two questions were: "Did you see kindergarten as a confrontation between your child and the school?" and "Did you think your child could meet the challenge of kindergarten?" Each parent's response was coded either "yes" or "no." In addition, we asked a series of open-ended questions about concerns parents had about specific teacher expectations and their child's maturity level.

PROCEDURE

Birthdates were collected at the beginning of the 1988/1989 school year and again at the beginning of the 1991/1992 school year at the 30 schools participating in this study. Information concerning parental SES was gathered during the spring of the 1988/1989 school year and again during the spring of the 1990/1991 school year. Comparable data were not available for the 1991/1992 school year.

In the winter of the 1988/1989 school year, surveys were mailed to all 95 kindergarten and kindergarten/first-grade teachers at the 30 study schools. Follow-up surveys were sent to teachers who did not respond initially. In all, 74 questionnaires were returned, yielding a response rate of 78%. Teachers in this sample had taught between 1 and 33 years, with an average experience of 18 years in the classroom ($M=20$ years; $SD=9.5$).

In the winter of 1991/1992 school year, the revised survey was mailed to the kindergarten and kindergarten/first grade teachers in the study schools. Only those teachers who had been in the school since the 1988/1989 school year were included in the survey. Five of these teachers were not teaching kindergarten in 1988/1989 when the study began, but all five of them had been teaching in the primary grades at that time. Of the 83 teachers sent questionnaires, 76 responded, for a response rate of 91%. All teachers responded at 25 of the 30 schools. Of the remaining 5 schools, one did not respond at all (one teacher) and the other four had at least half of the teachers respond.

Parents were interviewed in the winters of 1989 and 1992. Prior to our contacting the parents, the principal of each school telephoned parents we had selected randomly for the interviews, explained this study and asked if they would participate in a telephone interview about their decision to enroll their child in kindergarten. Affirmative replies were received from all parents contacted.

Table 2. Percentages of Kindergarten-Eligible Boys and Girls Held Out in 1988 and 1991

	Boys	Girls
1988	19.3% (166/861)	9.1% (77/843)
1991	11.4% (111/975)	3.7% (37/894)

Note. Raw figures are in parentheses.

RESULTS

Changes in Holding Out Patterns Between 1988 and 1991

The percentages of boys and girls held out in 1988 and 1991 are presented in Table 2, as are the raw numbers from which these percentages were computed.² As can be seen, holding out declined significantly between 1988 and 1991 for both boys, $\chi^2(1, N= 1836)=22.25$, $p < .0001$, and girls, $\chi^2(1, N= 1737) = 17.66$, $p < .0001$. Over 3 years, holding out declined by 40.9% for boys, and 59% for girls.

Because several of the schools involved in the current study had lost access to state-funded prekindergarten classes between 1989 and 1991, we considered the possibility that this loss might explain the decline in holding out. To examine this possibility, we first ran a 2×2 ANOVA in which we compared changes in holding out rates of schools which had lost prekindergarten classes with those that had not lost prekindergarten classes. If the loss of prekindergarten classes did affect holding out rates, we would expect a significant interaction effect, with a greater decline in holding out at schools which lost access to prekindergarten classes.

In fact, this interaction did not approach significance, $F(1, 28) = 1.60$, $p = .22$. Only the main effect for year was significant, $F(1, 28) = 17.55$, $p = .0003$, confirming the overall decline in holding out reported previously.

We then computed chi-squares, comparable to those reported previously, in which we eliminated the 14 schools which had lost prekindergarten classes.

² In 1991 there were 157 minority boys and 217 minority girls in the county's kindergarten classes. Nine minority boys were old (5.7%). The percentage of retained minority boys was 1.2%, which is lower than the percentage for all boys, 2.1%. Of the 84 Hispanic boys, 2.3% were retained, which is not significantly higher than the county average. The Hispanic hold out rate for boys is lower than the county average at 4.7%. Of the 217 minority girls, 12 were old (5.5%) while the county average for all girls was 6%. Hispanic girls retained amount to 3.5% which is higher than the 1.7% for all girls. Hispanic girls held out (4.5%) is about the same as the county average for girls. No ethnic data were available from the 1988/1989 sample. Because of the small sample size we could not conduct statistical analyses comparing minority with non-minority children in holding out.

The results still showed significant declines in holding out, $\chi^2(1, N= 1856) = 10.40$, $p = .001$, for boys and girls combined.

Because the results were apparently not affected by the loss of prekindergarten classes in some schools, we consider data from all 30 schools in subsequent analyses.

Sex Differences in Holding Out

The differences between boys and girls in hold-out rates were significant in both 1988 and 1991, with boys being held out more often in 1988, $\chi^2(1, N= 1704)=35.86$, $p<.0001$, and in 1991, $\chi^2(1, N=1869)=33.58$, $p<.0001$. Girls were held out 53% less often than boys in 1988, and 69% less often than boys in 1991.

SES Differences in Holding Out

Correlations between school-level SES ratings and percent held out at each school were computed separately for boys and girls in 1988 and 1991. Results revealed that schools with higher SES ratings held out a greater percentage of boys in both 1988, $r(29)= .63$, $p= .0002$, and 1991, $r(29)= .36$, $p= .05$, though the effect was obviously larger in 1988. For girls, however, there was no relationship between SES and percent held out in either 1988, $r(29) = .13$, $p=.49$, or 1991, $r(29)= -.18$, $p=.43$.

Changes in Holding Out Patterns at Individual Schools

Between-school differences in changes in holding out patterns between 1988 and 1991 were examined. Results revealed that of 30 schools, only 8 showed statistically significant declines, largely accounting for the overall decline reported above. Of the 8 schools with significant declines in holding out, 5 had lost access to prekindergarten classes. Nine of 22 schools without significant declines also had lost access to prekindergarten classes. Table 3 shows the 8 schools with significant declines, the percentage of held out students in 1988 and 1991, and the accompanying chi-square statistics. The raw numbers from which percentages were computed are also shown.³ Three schools evidenced slight *increases* in holding out, but these increases did not approach statistical significance.

Examination of boys and girls separately lessened the power of our test for change, yielding lower chi-square values, but did not otherwise affect the results.

³ Our sample did not include students retained. However we did examine retention rates at the 30 schools in the study. Kindergarten retention rates decreased overall from 4% in 1988 to 2% in 1991. Only 1 of the 30 schools showed an increase in retention (from 5-9 children) in 1991. By 1992 retention rates at that school dropped to one child. Kindergarten retention rates for the 30 schools have held at 2% since 1991.

Table 3. 1988 and 1991 Holding Out Rates at Eight Schools with Significant Declines in Holding Out

School	% Held Out 1988	% Held Out 1991	χ^2 Statistic
Brook	18.2% (12/66)	5.5% (4/73)	5.5, $p = .02$
Woodside	21.7% (13/60)	8.1% (5/62)	4.5, $p = .03$
Maple	18.5% (15/66)	9.0% (7/78)	5.2, $p = .02$
Elm	12.5% (10/80)	0.9% (1/108)	11.3, $p = .0008$
Miller	20.9% (9/47)	2.1% (1/47)	7.2, $p = .007$
Oak	19.0% (8/42)	2.9% (2/68)	8.2, $p = .004$
Redwood	38.8% (33/85)	12.5% (12/96)	16.7, $p < .0001$

Table 4. Teacher Responses to Seven School Readiness Items in 1988 and 1991

A child should be held out if he or she:	1988 (n = 74)		1991 (n = 76)	
	M	SD	M	SD
cannot recognize colors and shapes	4.70	.36	4.69	.40
cannot recognize letters	4.86	.26	4.85	.27
is physically small for age	4.57	.67	4.75	.36
cannot sit quietly	4.27	.74	4.43	.49
cannot express needs verbally	3.83	.97	4.21	.79
cannot follow directions	4.04	.87	4.37	.71
is new to this country	4.56	.70	4.51	.77

Note. † = *definitely*, 5 = *definitely not*.

Examination of School Readiness, Teacher Expectations, Practices, and Policy Means

Teacher responses to the school readiness, teacher expectation and school ideology and policy questions are presented in this section. In the next section, we examine the relationship between teacher responses to these items and to actual holding out patterns. Mean and standard deviation scores for each of the 7 school readiness questions are presented in Table 4. As can be seen, both 1988 and 1991 mean scores are consistently high (**generally above 4 on a 5-Point** scale). Change between 1988 and 1991 did not approach statistical significance on any of these measures.

Table 5. Teacher Perceptions of Change in Kindergarten Expectations and Practices

Question	<i>M</i>	<i>SD</i>
We have changed our academic expectations regarding student performance in reading and math	2.07	.87
Kindergarten children spend less time "sitting still and listening" and more time engaged in hands-on activities	1.47	.56
We have changed our kindergarten classrooms to provide more developmentally appropriate activities	1.56	.62
We have changed our kindergarten reading program to emphasize a whole/language literature-based approach	1.40	.54
Our first-grade teachers have become less concerned about children being able to read when they enter first grade	1.75	.80
We are putting more emphasis on social skills than we did in the past	2.19	.91
We rely less on flashcards, workbooks, or ditto/worksheets than we did in the past	1.43	.52

Note. 1 = strongly agree; 2 = agree; 3 = somewhat agree; 4 = disagree; 5 = strongly disagree.

Teacher responses to the expectations and practices questions are shown in Table 5, and responses to the policy questions are shown in Table 6. Teacher responses to the 7 teacher expectations and practices questions and to the 7 policy questions also tended toward the extremes (**1** = *always*; 5 = *never*), with 11 of 14 means being either below 2 or above 4.

Relationship Between Changes in Holding Out Patterns and Changes in Teachers' Assessments of Readiness, Expectations, Practices, and School Policy

For each school, the value of the chi-square statistic was used as an index of the magnitude of change in holding out between 1988 and 1991. For those few schools at which the change was toward more holding out ($n=3$), a negative value was assigned to the chi-square statistic. Correlations were computed between this change index and changes, using school averages, in response to each of the seven questions designed to measure teacher assess-

Table 6. Teacher Perceptions of School Policy on Kindergarten Enrollment

Question	<i>M</i>	<i>SD</i>
At parent conferences and registration meetings we assure parents that all age-eligible children can meet our expectations for kindergarten ^a	1.33	.48
Our <i>principal encourages</i> parents to enroll young fives in kindergarten when age-eligible ^a	1.37	.73
* Our <i>kindergarten teachers</i> encourage parents to enroll young fives in kindergarten when age-eligible ^a	1.37	.68
<i>Preschool teachers</i> in our area encourage parents to enroll young fives in kindergarten when age-eligible ^a	1.40	.54
How often do you retain children at the end of kindergarten ⁴	3.93	.98
Is kindergarten readiness testing <i>encouraged</i> at your school? ^b	4.36	1.09
Is kindergarten readiness testing <i>required</i> at your school? ^b	4.81	.51

^a1 = always; 2 = usually; 3 = sometimes; 4 = rarely; 5 = never.

^b1 = all students; 2 = most students; 3 = some students; 4 = a few students; 5 = no students.

ments of student readiness.⁴ Recall that these readiness items were administered in 1988 and 1991; 1988 scores were subtracted from 1991 scores to yield change scores for teacher expectations of student readiness. None of the correlations proved significant. That is, changes in teachers' assessments of what constitutes student readiness did not predict which schools decreased, between 1988 and 1991, in their tendency to hold students out. We also computed correlations between the holding-out change index and the school average for each of the seven questions designed to measure changes in academic expectations and classroom practices (assessed in 1991 only). Again, none of these correlations was significant. That is,

⁴The above correlations were also computed using Spearman's rho, to control for the possibility of undue contributions to the correlation by one or more large schools. Spearman's rho rank orders the variables in question, lessening the effect of outliers. Again, the correlations between changes in holding out and changes in teachers' attitudes, expectations, and school policy proved nonsignificant.

Table 7. Proportion (%) of Parents Concerned About Kindergarten Issues by Age of Child in 1988 and 1991

Question	Year	N	Young Average		Old	χ^2
			(not held out)	(held out)		
Concerned about classroom expectations?	1988	40	75%	15%	73%	12.2*
	1991	34	15%	18%	0%	1.9
Concerned about kindergarten teacher?	1988	32	8%	33%	55%	5.7**
	1991	34	23%	27%	0%	3.1
Concerned about social skill of child?	1988	40	17%	46%	60%	5.3**
	1991	34	38%	27%	20%	1.0
Concerned about academic skills?	1988	40	33%	15%	67%	7.9'
	1991	34	23%	0%	40%	5.2**
Concerned about prereading/reading?	1988	40	0%	8%	47%	10.9'
	1991	34	0%	0%	10%	2.5
View kindergarten as a confrontation between your child and the school?	1988	40	92%	46%	73%	6.3'
	1991	34	0%	0%	10%	2.5
Thought child could meet the challenge?	1988	40	83%	77%	33%	8.8*
	1991	34	69%	73%	10%	10.5*

• p < .05 • * p = .08.

changes in expectations and practices, as measured by teachers' responses on questionnaire items, did not predict which schools decreased, between 1988 and 1991, in their tendency to, hold students out. Finally, 1991 school policy responses also failed to correlate significantly with changes in holding-out.

Relationship Between Changes in Holding Out Patterns and Parental Attitudes and Expectations

The parents we interviewed were placed in one of three groups based upon their child's age: old, average, or young. Parental responses were coded as either "yes" or "no" to each of nine questions. Thus, for each question, we were able to construct a chi-square table representing yes/no responses by old, average, or young age. Separate chi-square tables were constructed for 1988 and 1991.

In these analyses, old children had been held out, while middle and especially young children might have been held out but were not. Thus, if parental attitudes and expectations are related to child age and to their decision regarding holding-out, we would expect significant chi-squares, with old (held out) children accounting for part of the statistical significance. In each case, we were also interested in the responses of parents of young children whom might have held their children out but decided not to. Table 7 presents the findings for each of seven questions concerning parental attitudes and expectations, in both 1988 and 1991.

For the 1988 data, there were significant relationships between the child's age and parental attitudes and concerns for 5 of 7 questions. The relationships for the other 2 approached significance ($p = .08$). In 1991, however, there was a significant relationship between child's age and parental concerns for only 1 question: "Did you think your child could meet the challenge?" There was also a marginally significant relationship for a second question. "Were you concerned about academic skills?"

In 1988, a higher percentage of parents of both young and old (held out) children than parents of average age children were concerned about classroom expectations, academic skills, and the possibility that kindergarten might be a confrontation between the child and the school. Relative to the other two groups, a higher percentage of parents of old children were especially concerned about the kindergarten teacher, the child's social skills, and prereading/reading. Parents of *old* children were the *least* likely to think that their children could meet the challenge of kindergarten. This relationship held in both 1988 and 1991.

Chi-square analyses were also used to examine differences, between 1988 and 1991, in the percentage of parents expressing concern about each of the above seven items. Results revealed significant differences for classroom expectations, $\chi^2(1, N=74) = 4.90, p = .02$, and for viewing kindergarten as a confrontation between the child and the school, $\chi^2(1, N=74) = 34.68, p = .0001$. The difference between 1988 and 1991 parental concern about academic skills also approached significance, $\chi^2(1, N=74) = 3.23, p = .07$. It appears that a smaller percentage of parents in 1991 were concerned about these factors compared to parents in 1988. This was especially the case for parents of young or old children.

DISCUSSION

Changes in Holding Out

Between the 1988 and 1991 school years, holding out of age-eligible children declined significantly in the county we studied. This was the case for both boys and girls, although holding out was less common for girls than boys in both years. The former finding is in direct contrast with what might have been expected if kindergarten's "escalating academic demand" (Shepard & Smith, 1988) was continuing. The sex difference confirms the findings of previous research (Shepard, Graue, & Catto, 1989; McCaig, 1990; Mergendoller et al., 1990) demonstrating a higher holding out rate for boys. SES of parents correlated significantly with holding out of boys in both 1988 and 1991, though the relationship was stronger in 1988. For girls, there was no such relationship in either 1988 or 1991. Thus, in the current study, Shepard's (1989) finding that holding out correlates with SES was confirmed for boys only.

Teacher Expectations, School Practices and Kindergarten Entry

Surprisingly, there were no relationships between declines in holding out and in any of the items on the teacher questionnaires. However, it is important to consider the possibility that social desirability affected teacher responses, and that our questionnaires did not adequately measure teachers' assessments of what is happening in their schools. The predictive power of school readiness, teacher expectation, school practice and school policy variables probably were undermined by the extremity and the lack of variability of teacher responses to the questionnaire items. There were many questions to which almost all teachers responded *strongly agree, strongly disagree, or definitely not* (see Tables 4, 5 and 6 for means).

Parent Perceptions and Kindergarten Entry

Although teacher perceptions did not relate to changes in holding out, parent perceptions did appear to relate to holding out. Parent responses to closed-ended interview items seem to suggest that parents were less concerned about the academic rigor of kindergarten in 1991 than parents had been in 1988. Further, parents in 1991 seemed to perceive kindergarten as a more nurturing place than parents in 1988. In 1988 especially, parents who were the most concerned about the challenge of kindergarten were also the most likely to hold their children out.

In general, responses to open-ended questions seemed to confirm that there had been changes in parents' beliefs about school expectations and their child's ability to meet the demands of kindergarten. In the 1988 interviews, parents appeared to be more concerned about high academic expectations compounded by what they perceived as a negative social climate at school, characterized by strictness and structure. Answers to the open-ended questions in 1988 were much longer and more descriptive of what parents saw as a hostile kindergarten environment. For example, a parent of a 5-year-old in 1988 said,

Preschool was fun and relaxed, while kindergarten at this school is very tough, very strict. The emphasis is on formal learning and academics and this is a stressful environment. I just wanted her to be a child a little longer.

A parent of a child held out at the same school in 1988 said, "There is no way my child would survive in that place."

In contrast, parents in 1991 appeared to be less concerned about classroom expectations, academic skills, and the possibility that kindergarten might be a confrontation between the child and the school. In 1991 a parent whose child was attending the same school as the one referred to above said, "They really work to make this a wonderful place for a child to be." Another, referring to a teacher she had observed while trying to decide whether to send her daughter for kindergarten, said,

... she was warm and nurturing and very organized. I wrote a letter to the principal describing my daughter, her needs, and the kind of teacher I thought would be best for her. I requested that specific teacher, and we got her.

FURTHER STUDY

The current findings point to several issues which warrant further study. Among them is the question of whether parents' perceptions of classrooms as more nurturing and less confrontational in 1991, relative to 1988, were accurate or whether they reflected changes in the "marketing" of schools by teachers and administrators. There is also the possibility that changes in parent perceptions can be accounted for by other unknown factors.

Although this study showed significant declines in holding out, we can not state with confidence what contributed to this decline. Three possible explanations are as follows: (1) Teacher assessments of readiness changed (although they were not captured by our questionnaire), as did their expectations and practices. Parents correctly perceived this change, and felt more comfortable sending their young children to kindergarten; (2) Teacher assessments of readiness, expectations and practices did not change but teacher affect (e.g., warm and nurturing behavior) changed. Parents correctly perceived *this* change and felt more comfortable sending their young children to kindergarten; (3) Kindergartens did *not* change, but parents' *perceptions* changed, causing a decline in holding out. Clearly, further research needs to employ both observational and questionnaire or interview methods. The effect of preschool teachers on parental decision-making about the timing of their child's school entry also needs to be explored.

CONCLUSION

In conclusion, we found a significant decline, between 1988 and 1991, in the frequency of holding out for both boys and girls in a single northern California county. Further, this study supported previous research suggesting that boys are held out more often than girls. We also replicated earlier findings suggesting that holding out is positively associated with SES, though in this study, this was the case for boys only.

The pattern of declines in holding out of kindergarten-eligible children uncovered in this study occurred in the context of growing interest in developmentally appropriate practices in educational programs for young children. Disappointingly, we failed to find significant relationships between holding out patterns and school change, as assessed by teacher surveys.

However, especially in 1988 when holding out was more prevalent, parents of children who were held out were more concerned with classroom expectations, academic skills, and the possibility that kindergarten might be a confrontational experience for their child. Thus, parental perceptions appear to play a role in holding out decisions, regardless of whether these perceptions accurately reflect what is occurring at the schools their children will attend.

REFERENCES

- Bredenkamp, S. (Ed.). (1989). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8*. Washington, DC: National Association for the Education of Young Children.
- California State Department of Education. (1988). *Here they come: Ready or not. Report of the School Readiness Task Force*. Sacramento, CA: California State Department of Education.
- Graue, M.E. (1992). Social interpretations of readiness for kindergarten. *Early Childhood Research Quarterly*, 7, 225-243.
- McCaig, R. (1990). The practice of holding back children from entry to kindergarten: How widespread is it? (Research Report No. 10). Grosse Pointe, MI: The Grosse Pointe Public School System.
- Meisels, S. (1990, May 31). Holding children out of kindergarten poses problems. *Ann Arbor News*, p. A1.
- Mergendoller, J., Bellisimo, Y., & Horan, C. (1990, April). *Kindergarten holding out: the role of school characteristics, family background, and parental perceptions*. Paper presented at the Annual Meeting of the American Educational Research Association, Boston, MA.
- Shepard, L.A. (1989). A review of research on kindergarten retention. In L.A. Shepard & M.L. Smith (Eds.), *Flunking grades: Research and policies on retention* (pp. 64-78). London: The Palmer Press.
- Shepard, L.A., Smith, M. L., Graue, M.E., & Catto, S.F. (1989, April). *Delayed entry into kindergarten and escalation of academic demands*. Paper presented at the 1989 Annual Meeting of the American Educational Research Association, Boston, MA.
- Shepard, L.A., & Smith, M.L. (1987). Synthesis of research on school readiness and kindergarten retention. *Educational Leadership*, 44, 78-86.
- Shepard, L.A., & Smith, M.L. (1988). Escalating academic demand in kindergarten: Counter-productive policies. *Elementary School Journal*, 89(2), 135-145.
- Smith, M.L., & Shepard, L.A. (1988). Kindergarten readiness and retention: A qualitative study of teachers' beliefs and practices. *American Educational Research Journal*, 25(3), 307-333.
- Walsh, D.J. (1989). Changes in kindergarten: Why here? Why now? *Early Childhood Research Quarterly*, 4, 377-391.
- Walsh, D.J. (1990, August 5). How to get ahead in school by starting out behind. *San Francisco Examiner*.
- Zimmer, J. (1990, May 24). When is a child ready for kindergarten? *Ann Arbor News*, p. A1.