



Parental involvement in children's schooling: Different meanings in different cultures

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ABSTRACT

Three types of parent involvement—communicating, volunteering at school, and learning at home—were explored in two cultures within the United States. Immigrant Chinese parents and European American parents of young children reflect their different traditions in the ways they involve themselves in their child's academic life. European American parents volunteered more in schools, while Chinese American parents focused more on systematic teaching of their children at home. Chinese American parents were more critical of typical primary school report cards without ABC grades. Parents' home teaching methods showed stability over time, demonstrating that parents who used formal, structured methods at Time 1 continued to do two and four years later.

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1. Introduction

During the last several decades in the United States, researchers have examined the impact of parental involvement on children's education (e.g., Berger, 1995; Comer, 1984; Englund, Luckner, Whaley, & Egeland, 2004; Fantuzzo, Davis, & Ginsberg, 1995). Greater parental involvement has been found to be related to higher child achievement (e.g., Fan & Chen, 2001; Hong & Ho, 2005; Izzo, Weissberg, Kasprow, & Fendrich, 1999; Stevenson & Baker, 1987). Because of this research evidence, it has become a priority for schools to reach out to parents and to involve them in their child's education. The idea of parent involvement has been embraced by legislators and educators as one way to improve student achievement. The No Child Left Behind Act of 2001 requires schools to demonstrate they are offering parent involvement options. Virtually all public and private early childhood programs and elementary schools have provided opportunities for parents to become involved in their child's education at school (NCES, 2006).

What constitutes parent involvement? Early research on parent involvement examined links between specific parent behaviors and child outcomes (Parker et al., 1997; Stevenson & Baker, 1987), reflecting a unidimensional view of parent involvement. Several recent investigators have recognized the multidimensional nature of parent involvement (e.g. Epstein, 1995; Fantuzzo, Tighe, & Childs, 2000; Grolnick & Slowiaczek, 1994). Because parent involvement can take many forms, it is important to examine the construct of parent involvement to see what forms of involvement actually influence children's academic achievement. Does the form and influence of parent involvement vary by ethnicity and/or immigrant status of the family?

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1.1. Definitions of parent involvement

Researchers have conceptualized parent involvement in a variety of ways. Epstein (1995) has developed an ecological framework of parent involvement consisting of six types of involvement, ranging from more proximal to more distal types. Described from the teacher's perspective, the six types are (1) Parenting—helping families establish home environments which support children's academic achievement; (2) Communicating—designing effective forms of school-to-home and home-to-school communication; (3) Volunteering—recruiting parents to help; (4) Learning at home—providing information and ideas to families regarding how to help children with homework; (5) Decision making—involving parents in school decisions; and (6) Collaborating with the community—integrate services and resources from the community to strengthen schools, families, and children's learning.

Most conceptions of parent involvement with young children (e.g., Epstein, 1995) have included the following types of involvement (with examples in parentheses): (1) Parenting (attending workshops on child development topics); (2) Communicating (attending parent–teacher conferences); (3) Volunteering (helping in the classroom or on field trips); and (4) Learning at Home (helping child with homework). Epstein (1995), in clarifying Learning at Home, stated “*Help at home means encouraging, listening, reacting, praising, guiding, monitoring, and discussing—not teaching school subjects*” (p. 705).

Chinese researchers (Fan & Chen, 2001; Hong & Ho, 2005; Mau, 1997), who have studied parent involvement, have emphasized dimensions of control, supervision, monitoring, and helping which reflect Chinese ideas of a parent's responsibilities regarding children's academic achievement. Chinese parents generally help their young children with homework, check their children's homework, and monitor activities that might interfere with achievement (Stevenson et al., 1990). Children's everyday lives are oriented toward academic activities. In Chinese families a child achieves for his/her family. Education is viewed as a collective, rather than an individual, responsibility. A child's performance reflects on the family; therefore, parents are very motivated to help their children learn academic subject matter.

Some researchers have included parents' expectations and aspirations for their children's achievement as part of parent involvement (Halle, Kurtz-Costes, & Mahoney, 1997). While expectations and aspirations may be important predictors of children's achievement, we are interested in looking at how parent behaviors differ across cultures and how stable those behaviors are across time.

Grolnick and Slowiaczek (1994) have defined parent involvement as “the dedication of resources by the parent to the child in a specific domain.” Their multidimensional model of parent involvement includes the following categories: parent behavior (participating in school activities), personal involvement (child's affective environment), and cognitive/intellectual involvement (exposing the child to cognitively stimulating activities). The authors stated that parental participation influences the child's achievement not through skill-building, but through its impact on school-related attitudes and motivation. In 1997, Grolnick, Benjet, Kurowski, & Apostoleris (1997) appear to have redefined the parent behavior category by including parent participation in activities both at school and at home. Because parents who have immigrated to the United States may not feel comfortable in the school for a multitude of reasons (language, low education levels, unfamiliarity with United States classroom practices, etc.), we are investigating three aspects of parent involvement—volunteering at school, communicating, and learning at home—in two cultural groups in the United States, immigrant Chinese American (CA) and European American (EA).

1.2. Schooling in Taiwan

The majority of the immigrant Chinese parents in this study grew up in Taiwan. The educational structure and philosophy in Taiwan differs from the United States model in several ways. Taiwan's schools for young children are called kindergartens and serve children from ages 4 to 6 years, which has traditionally been considered the age of innocence by Chinese people (Stevenson & Stigler, 1992). Over half of the kindergartens are private, while the rest are public. Elementary schools begin with first grade. Parents in Taiwan have been found to value cognitive development over social, physical, and mental (emotional) development (Roopnarine, Shin, Jung, & Hossain, 2003), and to highly value constructive play in young children, which often takes the form of arithmetic and alphabet play (Roopnarine et al., 2003). High educational achievement of their children has been the paramount goal of Chinese parents for 2000 years (Wu, 1996). Asian teachers seek to minimize individual differences, believing that every child has the potential to learn the contents of the curriculum (Stevenson & Stigler, 1992). Traditionally, teachers in Taiwan emphasized children's memorization of knowledge and practice of skills, an approach termed *cognitive conservatism* by Ho (1994). In Confucian-heritage societies, there has been a culturally defined body of knowledge and skills that teachers teach and children accept (Ho, 1994). Because of the great cultural emphasis on respect for elders (in this case, teachers), teachers often manage classrooms containing 40 children.

1.3. Cultural differences in parent involvement

Several researchers have found cultural differences in parent involvement in schools in the United States. Immigrant status appears to influence the nature and levels of parent involvement in schools. White, American, middle-class parents report volunteering in schools to a greater extent than do Asian American parents (Mau, 1997). In an analysis of ECLS-K data, Sy and Schulenberg (2005) found that Asian American parents of kindergartners more strongly endorsed the importance of learning early academic skills and regulated their children's learning environments at home to a greater degree than did

EA parents. On the other hand, EA parents were more likely to be involved in events at school than were Asian American parents.

Some researchers have suggested that parent involvement in the early childhood years may influence children's academic achievement to a greater extent than does parent involvement in elementary or high school (Chao, 2000; Rogala, 2001; Singh et al., 1995). Englund et al. (2004) found that the quality of mothers' instruction when children were 3.5 years old directly influenced children's IQ and indirectly influenced children's achievement in first and third grades. They suggested that parent provision of a firm academic foundation leads to higher achievement in the early grades, which may lead to greater support for academic achievement in the later grades.

Most models of parent involvement (e.g., Grolnick & Slowiaczek, 1994) have been derived from and tested with white middle-class families. Because the school population in the United States is culturally diverse, it is important to also explore the issue of parent involvement in minority groups. Some of the highest achievers in United States schools are CA children. Do CA parents manifest their involvement in their child's schooling in the same ways as do white parents? Teaching their children has traditionally been a very important role for Chinese parents (Chao, 2000; Ho, 1994), but a historically new role for United States parents (Lareau, 1987). Stevenson and Stigler (1992) pointed out the far more active involvement of Asian mothers in their children's education. Chinese parents do not typically seek frequent personal interaction with the teacher (Stevenson et al., 1990), while parents in the United States often do. In fact, in Asian cultures there is a clear separation between parents and teachers (Sui-Chu, 2000; Tobin, Wu, & Davidson, 1989). In Hong Kong, their overlapping area was described as "nearly zero." Parents are very involved with children's learning at home, but not at school. Sui-Chu (2000) described teachers in Hong Kong as unwilling to share their power as decision makers. There is a different perception of a parent's sense of place in schools and in their children's educational lives. Immigrant parents hold assumptions and expectations based on their own experiences in their homelands. Parents' perspectives may not be understood by teachers and may actually conflict with what teachers believe to be good parenting.

Our longitudinal study involved well-educated Chinese immigrant parents and their children and EA parents and their children. Previous publications have detailed a number of interesting findings regarding the realities of these children and families. CA parents have been found to use more systematic teaching of their children, especially in mathematics, and to schedule their children's time more closely (Huntsinger, Jose, Larson, Krieg, & Shaligram, 2000). CA children performed higher on mathematics tests from preschool to 4th grade. While initially behind in receptive English vocabulary, CA children had caught up to their EA peers by Time 3. CA children also spent much more time in focused practice on a task at all three time points than did EA children. The psychosocial adjustment of EA and CA children appeared to be similar (Huntsinger, Jose, & Larson, 1998). EA parents gave more praise to their children in interactions around mathematics tasks (Huntsinger, Jose, Rudden, Luo, & Krieg, 2002). The current article explores the parents' involvement in their children's schooling during their early childhood years and the linkages among home teaching methods from Time 1 to Time 3. This paper is based on data collected at three time points, two years apart: Time 1, when children were in preschool and kindergarten; Time 2, when children were in first and second grades; and Time 3, when children were in 3rd and 4th grades. We predicted that: (1) the immigrant CA parents would be more highly involved with their children around academics at home (learning at home); (2) EA parents would participate to a greater extent in activities at school (volunteering); (3) EA parents would be more satisfied with primary school report card formats (communicating); and (4) parents' teaching methods would show stability over the four year time span.

2. Method

2.1. Participants

At Time 1, our participants comprised 40 second-generation CA children (20 boys, 20 girls) (mean age = 5.67 years; $SD = .618$; range = 2.17 years) and 40 EA children (20 boys, 20 girls) (mean age = 5.60 years, $SD = .619$; range = 2.08 years) from well-educated, middle class, two-parent, suburban families. Children were recruited from preschools, kindergartens, and weekend Chinese schools in the suburban area of a large midwestern city. We distributed announcements of the study to all parents of children enrolled in pre-kindergarten and kindergarten classes in five elementary schools, four preschools, and four weekend Chinese schools. We specified that we needed children from two-parent families. Because we knew that the Chinese parents in the suburban area were well-educated, we limited participation to families in which at least one parent held a graduate degree or both parents held bachelor's degrees. We took the 10 boys and 10 girls from each age group and each ethnic group whose parents responded first. We were not able to use nine children whose parents volunteered because they were too young, had special needs, or were of mixed ethnicity. Each of the ethnic groups was composed of 10 preschool girls, 10 preschool boys, 10 kindergarten girls, and 10 kindergarten boys.

Important characteristics of the Time 1 sample are shown in Table 1. There were no statistically significant differences on any of the demographic characteristics reported in Table 1. All CA children had immigrant parents; their mothers and fathers had been in the U.S., on average, for 11 and 12.3 years, respectively. Their countries of origin included Taiwan (31 families), mainland China (4 families), Hong Kong (4 families), and the Philippines (1 family). Thirty-nine of the families spoke a Chinese dialect (Mandarin, Cantonese, or Taiwanese) in their homes. Forty percent were Buddhist, 40% were Christian, and 20% were nonreligious. Two families had Chinese nannies and eight families had grandmothers living in their homes.

Table 1
Sample demographics at Time 1.

Characteristic	Chinese American		European American	
	Mean	SD	Mean	SD
Age of child	5.67	.34	5.60	.32
Number of children in family	2.21	.55	2.41	.71
Mother's age	37.38	2.88	36.88	4.40
Father's age	39.77	3.09	39.62	4.84
Mother's educational attainment	16.73	1.94	17.18	1.32
Father's educational attainment	18.23	2.21	17.68	1.81
Hollingshead four-factor status scores	59.33	6.81	60.78	4.63
Months in preschool program	22.15	13.67	23.75	13.05
	Frequency		Frequency	
Number who attended day care full time	10		6	
Families reporting incomes over \$60,000	28		34	
Firstborn child	11		18	
Middle child	7		7	
Lastborn child	19		12	
Only child	3		3	

Notes: There were no significant between-group differences on the above characteristics.

All parents in the EA sample were born in the United States except for two fathers, one of whom was born in Canada and one in Austria. English was spoken in their homes; 90% described themselves as Christian; and none had grandparents living with them.

Two years later (Time 2), when children were in 1st and 2nd grades, we retained 95% ($N=76$) of the original sample. Three CA families had moved back to Taiwan or Hong Kong and one family decided to withdraw from the study. At Time 3, when children were in 3rd and 4th grades, we retained 91% ($N=73$) of the original participants. One additional CA family had moved back to Hong Kong and two EA families decided to withdraw (see Table 2 for sample characteristics at Time 3).

2.2. Procedure

At Time 1 (1993), children and their parents were recruited for this 4-year longitudinal study from private and public preschools and kindergartens as well as weekend Chinese schools in the suburbs of a large midwestern city. To be eligible for the study, at least one parent had to hold a graduate degree. This condition was set because we knew that the CA parents, who had immigrated to the United States in the first wave of Chinese after 1965, were given preference to enter the country if they were planning to earn graduate degrees. We knew that the Chinese population in the Chicago suburban area was highly educated and we needed to make sure that our EA participants did not differ from the Chinese participants in education level. Time 2 (1995) data collection took place two years later when children were in 1st and 2nd grades. When children were in 3rd and 4th grades, parents were informed about the Time 3 (1997) data collection by letter and follow-up telephone calls. At all three time points, after parents had returned the consent forms signed by parents and children, they were contacted by telephone to schedule appointments for joint in-home interviews with mothers and fathers. We contacted school principals to schedule appointments for data collection from the children. The first author assessed children individually in quiet rooms at their schools. A few children were assessed at home because school principals denied permission to do the testing at school. When that happened, no family member was present in the testing room at home. Questionnaires to be completed independently were mailed to the mothers and fathers of the children. Completed questionnaires were picked up at the time of the parent interview. Questionnaires assessing the child's behavior in school were given to teachers to complete and return by mail. Children were paid \$5 at Time 1, \$10 at Time 2, and \$25 at Time 3 for their participation.

Table 2
Sample demographics at Time 3.

	Chinese American			European American		
	N	Mean	SD	N	Mean	SD
Age of child		9.75	.34		9.70	.32
Boys in sample	17			18		
Girls in sample	18			20		
Number of children in family		2.21	.55		2.41	.71
Mother's age		41.38	2.88		40.88	4.40
Father's age		43.77	3.09		43.62	4.84
Mother's educational attainment		16.73	1.94		17.18	1.32
Father's educational attainment		18.23	2.21		17.68	1.81
Hollingshead (1975) status score		59.83	6.81		60.77	4.63

Note: There are no significant differences on any of the sample characteristics.

Table 3

Cultural differences in the formality of parents' home teaching methods.

	Chinese Americans		European Americans		F
	M	SD	M	SD	
Time 1 mathematics methods	2.19	(.72)	1.68	(.47)	15.07 [*]
Time 2 mathematics methods	2.37	(.57)	2.43	(.46)	27.73 [*]
Time 3 mathematics methods	2.43	(.34)	1.96	(.43)	27.67 [*]
Time 1 reading methods	2.01	(.23)	1.72	(.31)	18.68 [*]
Time 2 reading methods	1.95	(.29)	1.78	(.31)	5.91 [*]
Time 3 reading methods	1.86	(.41)	1.77	(.28)	1.69

Notes: The formality of the methods was rated on a 3-pt. Likert scale that ranged from 1 (informal, play-oriented) to 3 (formal, systematic). Time 1, $N = 40$ EA and 40 CA.

Time 2, $N = 40$ EA and 36 CA. Time 3, $N = 38$ EA and 35 CA.

^{*} $p < .05$.

2.3. Measures

2.3.1. Parents' teaching methods at Times 1–3

2.3.1.1. Parents' reading and mathematics teaching methods. In a home-based interview involving both father and mother, parents responded to questions regarding their facilitation of reading and mathematics development in their child and time allocation in their child's typical weekday. At Time 1, 13 of the couples chose to be interviewed in Chinese (12 in Mandarin and 1 in Cantonese) by two research assistants who had immigrated from Taiwan and Hong Kong. By Time 3, only four couples chose to be interviewed in Chinese. The parental mathematics and reading teaching methods variables were derived from responses to the following questions: "How do you attempt to facilitate your child's development in mathematics? How do you facilitate your child's development in reading?" Two master lists (one for mathematics; one for reading) of all the unique responses to the questions were compiled. The lists were ordered randomly. Each mathematics method was rated on the basis of formality or directness by an early childhood education professor, using a 3-point Likert scale. Each reading method was similarly rated by an early childhood education professor. A rating of 1 represented informal, indirect, spontaneous, play-oriented methods (e.g., "We count the stairs as we go up them," and "We have magnetic letters on the refrigerator"). A rating of 3 represented more systematic, direct, formal, work-oriented methods (e.g., "He spends one hour per day doing math workbooks," and "We teach her phonics every day because the school program is holistic"). High inter-rater reliability was achieved ($\kappa = .84$ for mathematics methods; $\kappa = .81$ for reading methods) with the first author. A mean formality–informality index was derived for each family by coding each method the parents had named with a 1, 2, or 3, summing the ratings within family, and computing the arithmetic average of the sum. The resulting variables were named *parents' mathematics teaching methods* and *parents' reading teaching methods*.

2.3.2. Time 2 variables

2.3.2.1. Parent satisfaction with the school marking and reporting system. In the home interview, parents were asked the following questions: "What kind of marking and reporting system does your child's school have? Does it communicate enough information to you? Do you like it? If you don't like it, what would you prefer?"

2.3.3. Time 3 variables

2.3.3.1. Parent involvement in school activities at Time 3. Fathers and mothers completed an 8-item scale regarding their involvement in school activities (see Table 3 for specific items). Summary scores of paternal and maternal involvement in school activities were obtained by adding all eight ratings for each father and mother.

2.3.3.2. Parent satisfaction with the school marking and reporting system. Questions identical to the questions at Time 2 were asked in the Time 3 parent home interview. The parents' responses were evaluated qualitatively for emerging themes.

2.3.3.3. Child's school performance. Because many of the children had not yet received traditional ABC grades on their report cards, we asked teachers, "How well does this child do in the following subject areas? (reading, science, mathematics, spelling, writing, social studies, art, and gym)." Ratings were given on a 4-point scale (1 = not so well, 2 = somewhat well, 3 = moderately well, 4 = very well). We averaged the ratings from the 8 school subject areas for the child's overall school performance rating.

2.3.3.4. Child's liking of school. Two measures used by Stevenson et al. (1990) assessed the child's liking of school. First, parents were asked, "How characteristic of your child is each of the following descriptors? [likes school; talks positively about her/his teacher; comes home from school happy; cannot wait for vacations to end; and eager to go to school in the morning]." Ratings were made on a 5-point Likert scale where 1 represented "not characteristic" and 5 represented "very characteristic."

Second, children were asked how much they liked the following school subjects: reading, science, math, spelling, writing, social studies, art, and gym. Responses were made using a 4-point scale (1 = do not like; 2 = like a little, 3 = like moderately, 4 = like a lot).

3. Results

3.1.1. Times 1–3 parents' mathematics and reading teaching methods

CA parents' mathematics teaching methods were rated as more formal than those of EA parents at Times 1–3. CA parents' reading teaching methods were rated as more formal at Times 1 and 2, but not at Time 3. ANOVA results, means, and standard deviations, reported previously in Huntsinger et al. (2000) are shown in Table 3. The quantitative results are provided to give the reader a more complete picture when combined with the qualitative data reported later.

3.2. Time 3 analysis of variance results

3.2.1. Parent involvement in school activities

A 2 (ethnic group) \times 2 (gender of child) \times 2 (gender of parent) repeated measures multivariate analysis of variance (MANOVA) was performed on the eight aspects of parent involvement in school activities scale. A multivariate main effect for ethnic group indicated that EA mothers participated to a greater extent than did CA mothers, $F(8, 60) = 5.61, p < .001$. A multivariate main effect for gender of parent was also obtained, and it indicated that mothers participated to a greater extent than did fathers, $F(8, 60) = 5.32, p < .001$. A multivariate interaction was obtained for gender of parent by ethnic group, $F(8, 60) = 4.32, p < .001$, and it was probed. Three specific univariate results were found to be significant: contributes school materials, $F(1, 60) = 3.66, p < .01$; chaperones, $F(1, 60) = 7.40, p < .001$; and school committees, $F(1, 60) = 7.62, p < .001$ (see Table 4). In each case, EA mothers were found to participate to the greatest extent of the four groups. In addition, Table 4 reveals that summed scores across these eight aspects of involvement yielded a significant interaction, $F(1, 60) = 6.08, p < .001$, namely EA mothers reported the highest involvement, followed by EA fathers and CA mothers, who reported about the same amount, and the lowest involvement was reported by CA fathers.

3.2.2. Child's school performance

A 2 \times 2 MANOVA performed on teacher ratings of children's school performance showed that teachers rated CA children as doing better than EA children overall, $F(8, 60) = 2.64, p < .05$. Univariate results showed CA children were rated better in reading ($M_s = 3.78, 3.49$), mathematics ($M_s = 3.78, 3.57$), spelling ($M_s = 3.78, 3.43$), writing ($M_s = 3.77, 3.21$), and social studies ($M_s = 3.84, 3.48$), whereas, EA children ($M = 3.61$) were rated as more skilled than their CA counterparts ($M = 3.29$) in gym, $F_s(1, 67) = 3.93$ to $9.58, p_s < .05$ to $< .01$. Children from both groups were rated as similar in science and art.

Three gender differences emerged. Girls ($M_s = 3.78, 3.70, 3.70$) were rated as performing better than boys ($M_s = 3.47, 3.28, 3.34$) in reading, $F(1, 67) = 6.93, p < .01$; writing, $F(1, 67) = 6.92, p < .01$; and art, $F(1, 67) = 6.13, p < .05$, respectively.

3.2.3. Child's liking of school

A 2 \times 2 MANOVA performed on the 5 items in the parent's report of their child's liking of school showed that CA children had a greater liking for school, $F(5, 65) = 2.36, p < .05$ (see Table 5 for univariate differences). Separate 2 \times 2 ANOVAs were performed on the eight school subjects included in the liking of school subjects question. Only one cultural difference emerged for the liking of school subjects; CA children liked reading significantly better than did EA children. The liking of school subjects results, previously reported in Huntsinger et al. (2000), are reported here to give a complete picture, with both parent and child reports.

Table 4

Cultural differences in parents' participation in school activities.

Parent involvement	Mothers		Fathers		Significant interaction
	CA mean	EA mean	CA mean	EA mean	
Contributes materials to classroom	1.79	2.16	1.68	1.43	*
Helps teacher prepare materials for class	1.18	1.24	1.11	1.11	
Volunteers in the classroom	1.53	2.00	1.12	1.36	
Chaperones on field trips	1.41	1.73	1.29	1.16	*
Serves on school committees	1.24	1.92	1.12	1.29	*
Attends open houses regularly	2.60	2.81	2.29	2.95	
Attends parent–teacher conferences	2.89	3.00	2.53	2.89	
Talks informally with the teacher	2.11	2.68	1.76	2.16	
Summary score	14.75	17.54	12.90	14.35	*

Notes: Items were rated on a 3-point scale where 1 represents “don't do,” 2 represents “sometimes do,” and 3 represents “regularly do.”

* $p < .05$.

Table 5

Ethnic group and gender differences in children's liking of school.

Parent report of child's liking of school [‡]	Chinese Americans		European Americans		Gender	Ethnic Group
	Girls	Boys	Girls	Boys	F	F
Likes school	4.78	4.29	4.65	4.18	8.29*	N.S.
Talks positively about the teacher	4.39	4.12	4.35	4.35	N.S.	N.S.
Comes home from school happy	4.67	4.47	4.35	4.18	N.S.	4.17*
Cannot wait for vacations to end	3.11	2.82	2.30	2.24	N.S.	6.67*
Eager to go to school	4.17	3.82	3.95	3.65	N.S.	N.S.
Child's report of liking of school subjects [‡]						
Reading	3.72	3.24	2.95	2.61	4.23*	12.39*
Science	3.11	3.29	3.05	2.72	N.S.	N.S.
Mathematics	3.00	3.53	3.20	3.56	4.92 [†]	N.S.
Spelling	3.17	2.94	3.10	3.00	N.S.	N.S.
Writing	3.28	2.76	2.90	2.56	3.50 [†]	N.S.
Social studies	2.89	2.88	2.90	2.72	N.S.	N.S.
Art	3.89	3.47	3.75	3.33	3.18*	N.S.
Gym	3.44	3.94	3.25	3.89	12.44*	N.S.

* $p < .05$.[†] $p < .10$.[‡] Items were rated on a 5-point scale where 1 represents "not characteristic" and 5 represents "very characteristic."[‡] Items were rated on a 4-point scale where 1 represents "do not like" and 4 represents "like a lot."

3.2.4. Parent satisfaction with the school marking and reporting system

At Time 2 (when children were in first and second grades) only three of the children's schools had traditional grade reporting systems (ABCDF), whereas 73 children's schools had 3- or 4-point systems, e.g., "1 = consistently demonstrating, 2 = progressing, and 3 = requires additional attention." CA parents, particularly fathers, had objections, such as the following: "I would like it if there was a rating like ABC. Then we know which subject he is doing well and which ones need more work." Another father said, "There is no comparison with others. I wish I had a comparison of her performance relative to others. In Chinese school, they do get rankings." The father in another family said, "In the Taiwanese-style system, students' grades were publicly posted. It's terrible for the students. All scoring was based on test results." His wife said, "I don't like the school's grading system. There's not enough information. We'd like some comparison with other students." Another father said, "I don't really like it. It doesn't tell you much. Parents like to know their child's rank, but maybe that's not good for children."

Several EA fathers expressed strong dislike for the marking system. The father of a first grader said, "The report card doesn't communicate any information. It's very frustrating. What we're told is that her performance is age-appropriate. There is no mention of special strengths." Another father said, "It's an absolute copout—a way to avoid confronting parents when a child is doing poorly. It's so nebulous." Still another father said, "It's stupid. I hate it."

Several EA mothers mentioned that volunteering in the classroom allowed them to see how their child was doing relative to other children. "I help one morning each week in her classroom. I can tell how she's doing." "I volunteer in the classroom, so I get more information that way." "I volunteer two times per week in the classroom and I talk to the teachers a lot."

At Time 3 (when children were in third and fourth grades), 37 of the couples reported that their children now had ABC grades, while 36 couples reported their children did not. A CA father remarked, "I hope the marking will be more precise (next year). The teacher always gives good remarks. If you don't watch your kids and check their homework, it's hard to know their ability only from the report cards. There's not enough information." Another father said, "In 4th grade they will start formal grades. I don't like the 'satisfactory,' etc. Teachers praise too much. We need to know what needs to be improved." A father, whose child who transferred from a church-related school to a public school in Grade 3, said, "In the church-related school, they had end-of-semester ABCD grades in kindergarten. At the end of kindergarten, my son was salutatorian. Now in third grade, he has 'satisfactory/unsatisfactory.' I don't like it because there's not really enough information."

Grades appear to be more important to CA parents. Overall 46% (16 of 35) of the CA couples expressed dissatisfaction with the non-ABC grading system in the primary grades, while only 18% (7 of 38) of the EA couples did. The parents of 69% (9 of 13) of the fourth-grade children who were getting ABCD grades at Time 3 spontaneously told the interviewer their child's grades, for example, "Last report card she got all As. C is not acceptable." The parents of only 26% (4 of 15) of the EA fourth grade children who were getting ABCD grades at Time 3 spontaneously told the interviewer their child's grades. One mother said, "She gets percentages on most homework and tests. Her low is 97% where A = 93–100."

3.2.5. Stability of parents' teaching methods over time

To examine whether parents' teaching methods were stable over time, we computed Pearson correlations among Times 1–3 mathematics and reading teaching methods across ethnic groups and within ethnic groups. Across groups, there was greater stability for mathematics teaching methods, than for reading teaching methods, particularly in the Time 1–3 comparisons (see Table 6). Overall, parents in both groups, who used more formal mathematics and reading methods at Time 1, continued to do so at Times 2 and 3. For ethnic groups separately, statistically significant links were obtained between Time 1 and Time 2 and between Time 1 and Time 3 mathematics teaching methods, but not between Time 2 and Time 3. For EA

Table 6

Stability of parents' teaching methods over time across and within groups.

Correlations across groups	Time 2 math methods (N = 76)		Time 3 math methods (N = 73)	
Time 1 math methods ^a	.524 [*]		.451 [*]	
Time 2 Math Methods			.411 [*]	
	Time 2 reading methods		Time 3 reading methods	
Time 1 reading methods	.367 [*]		-.001	
Time 2 reading methods			.345 [*]	
Correlations within groups	Time 2 math methods		Time 3 math methods	
	CA (N = 36)	EA (N = 40)	CA (N = 35)	EA (N = 38)
Time 1 math methods	.431 [*]	.383 [*]	.328 [±]	.339 [*]
Time 2 math methods			.093	.283
Correlations within groups	Time 2 reading methods		Time 3 reading methods	
	CA (N = 36)	EA (N = 40)	CA (N = 35)	EA (N = 38)
Time 1 reading methods	.118	.387 [*]	-.246	.073
Time 2 reading methods			.299 [±]	.365 [*]

^a Parents' math and reading methods were rated on a scale from 1 (informal) to 3 (formal).^{*} $p < .05$.[±] $p < .10$.

parents only, reading methods were correlated between Time 1 and Time 2 and between Time 2 and Time 3. For CA parents, the correlation between Time 2 and Time 3 reading teaching methods tended toward significance, $r(35) = .299, p = .08$.

3.3. Qualitative examples of parents' mathematics and reading teaching methods

Eight participant couples' responses are given to illustrate parents' teaching methods from Time 1 to Time 3. We randomly chose one couple from each ecological niche: parents of a preschool girl, parents of a preschool boy, parents of a kindergarten girl, and parents of a kindergarten boy from each cultural group. Mathematics facilitation responses will be reported first, followed by reading facilitation methods. Responses by EA parents will be reported first, followed by reports from CA parents.

3.4. Responses of EA parents to the mathematics facilitation question

At Time 1 the EA parents of a preschool daughter (S) said, "She likes to count and do things with her hands. No math games and nothing written. She has a placemat with numbers and letters on it." At Time 2 (1st grade), her parents said, "S does subtraction problems on the way home in the car. The 'Home Links' are always math. She made a temperature graph, made pyramids with straws, and played Tic Tac Toe. Now she's getting more rote math. We try to speed her up a little." At Time 3 (3rd grade) her mother said, "Dad is the math person. We will use flashcards this summer. She has had a struggle with multiplication. We help her with homework."

At Time 1, EA parents of a preschooler (A) responded by saying, "He plays board games—Mickey Mouse Yahtzee. He counts things. He builds with blocks." At Time 2 (1st grade), they said, "Not really very much. We use flash cards. He has no homework in math. When we take a vacation, I get math and logic workbooks to occupy A in the car and to review before the beginning of school." And at Time 3 (3rd grade) A's parents said, "If it's sport stats, he relates to it. He's pretty good with numbers and he likes math. Mom is good at math. There is a correlation between checking his homework and grades. When parents are firm, he does well. A structured setting might benefit him."

At Time 1, EA parents of K, a kindergartner, said, "We are precise, for example, we say, 'You are 5 11/12 years old now.' We use addition flashcards, but they are too easy now. We ask her challenging questions. Her Grandma teaches her math on Wednesdays. On our last trip to Florida, K called out the mile markers all the way through Georgia and back. We also play Crazy 8s." At Time 2, her parents said, "Her grandmother picks her up at 3:30 on Wednesdays and does math. Her grandma has taught her multiplication tables to 10. Dad gives her challenging math problems. We find workbooks for math drills. K knows fractions 1/4, 1/8, 1/16, 1/32." At Time 3 K's parents said, "Grandma tutors her several days a week. K records her income and expenditures in a ledger. Dad gives her number games in the car. She travels with her family; we are very mathematical. [Her grandma is a retired math teacher.] K does her overnight homework by herself at Grandma's."

At Time 1, EA parents of a kindergartner (B) said, "I read *Richard Scarry's 1 to 10* many times when he was two years old. We did counting and numeral recognition. We sang number songs. We have a computer and he has a calculator quiz thing. He does math workbooks." At Time 2 B's parents said, "He uses the computer, workbooks, and plays with his calculator. He does multiplication. Money—he has known how to make change for a couple of years. He loves the book *Arthur's Funny Money*. We check his homework. He gets math gifts from his grandparents." At Time 3, they said, "We discuss money. B plays math computer games—he masters them in a short time. I [Mom] helped him learn the proper form for long division."

3.4.1. Responses of CA parents to the mathematics facilitation question

Parents of a preschool CA girl (N) said at Time 1, “I try to help her. I bought one math workbook and got a math book at the library. At Time 2 (1st grade), mother said, “We started at the beginning when she was 5. First we did plus, then minus, then 2-digit adding, and . . . She had a lot of practice. Even though she knows it, I still gave her practice so she can do it unconsciously. Now she can multiply up to the sixes. Sometimes she’s careless.” At Time 3 (3rd grade), mother said, “I go to a teacher’s store to get books and N does 2 pages a day. I ask her to self check. I teach a little if it’s new topic. I try to give her something that’s ahead of school schedule. I’ll give fractions and geometry later. No calculators allowed. You don’t have to understand multiplication before you do it. You can understand after.”

Parents of a CA preschooler (J) responded at Time 1 by saying, “We have started teaching J math from 6:30–7:00 PM four to five times a week. We also teach the Chinese alphabet.” At Time 2 (1st grade) they said, “We give him worksheets with 12 subtraction problems on a page—4-digit with borrowing. I (mother) watch him do the first three. Then I let him do the rest on his own. I bought four books; he has division and double-digit multiplication left.” At Time 3 (3rd grade) the parents said, “We give him six multiplication and six division problems a day. We bought a used math book from school to prepare for next year. We rented three videos on fractions, because J didn’t know how to do them on the last test [when the first author had tested him a couple of weeks earlier]. He watched the videos for 1.5 to 2 hours.”

At Time 1, the CA parents of a kindergartner (E) responded, “Her babysitter, who had been an elementary school teacher, taught her math. We give her two pages of work each day to practice. She is doing double digits and take-away already.” At Time 2, they said, “We teach her at home. We copy worksheets. She has Mental Math once a week. She asks her dad when she has trouble.” At Time 3 they said, “We buy a lot of math supplements. We have a textbook from Taiwan, which is 1.5 years ahead of her 4th grade math here. We teach from the book—give her 10–15 problems every other day.” Mom said, “I required her to do all 20 problems from her school math book, when her teacher only assigned 10.”

At Time 1, CA parents of a kindergartner (R) said, “We taught him quarter, dime, and penny. We say, ‘Give me a combination that totals_____’ He is good at using his fingers to add. I am trying to make it purely a mental process. We taught him to tell time. We taught him multiplication— 5×5 , 5×3 . Then he figured it out by himself. He has finished the first grade workbook. Every 2 days, I [Mom] give him 3–4 pages of problems to do. Then I correct them. He can do the calculations, so I give him word problems now. We will continue over the summer.” At Time 2 R’s parents reported, “He takes Mental Mathematics in Chinese school (ages 6–8). We teach him to concentrate. He keeps track of his money on the computer. Mom usually checks his work. We bought books for higher grade math. Mom will teach a certain topic—decimal points after the last test [referring to the test administered to R as part of this study].” Dad said, “I make it fun and relaxing.” At Time 3 (4th grade), R’s parents said, “We picked up 5th and 6th grade workbooks. We give him tests and teach him what he doesn’t know. The first quarter this year he didn’t want us to check his school homework. We talked to the teacher and now he lets us help him review.”

The CA parents tended to pre-teach math to their children, while most EA parents let the school take the lead. CA parents believe that practice is very important. They also related that children in Taiwan are two years ahead of primary grade children in the United States. In the event that they would move back to Taiwan, they wanted their children to be up to the Taiwan standard.

EA parents tend to use more play-based methods with their younger children, whereas CA parents use more structured, systematic methods. Most Chinese parents knew precisely what their children knew in math. The parents provided the resources their children needed for the next step. The mathematics tests administered to the children in this study were open-ended, which allowed a child to go beyond his/her grade level. Parents did not receive feedback on their child’s mathematics performance until several months after the interview. J (above) must have told his mother that he did not know how to do fractions. We would not expect that 3rd graders would know how to do fractions.

Two girls benefited from one-on-one tutoring in mathematics from a grandmother in the first case and from a babysitter and mother in the second case. Parents in both cases made sure their children got additional mathematics instruction and practice. E’s parents’ mathematics methods were typical of CA parents, whereas, the methods mentioned by K’s parents were not typical of EA parents.

3.4.2. Responses of the EA parents to the reading facilitation question

At Time 1, the EA parent of a preschooler said, “We read to S. She’s not pushed! We help her to write when she shows interest. She’s not pushed to write. We buy books. The sitter took her to library story hour.” At Time 2 (1st grade), Mother said, “I read a chapter to her every night. In the car, she reads road signs. She reads to us. If she reads us one book per day this summer, she will get a toy at the end of the summer. She has lots of books—from school sales, stores, and book club at the library.” At Time 3, parents said, “If she reads a novel at school, we will buy it. She went to a reading program at NLU in August. She kept a journal on our family trip to Florida. We buy her any books she wants and go to the library. We read to her some; she reads to us.”

At Time 1, the EA parents of A (a preschooler) said, “We read to him. His sister reads to him. He ‘pretend’ reads. He goes to the library once a month. At Time 2 (1st grade), his mom said, “He uses programmed instruction in reading (color-coded). Every day he has to read to his dad or me. He checks out a book each library visit, but he can’t check out a new one until he reads the first one. If he stumbles while reading, I will say the word.” At Time 3 his parents said, “He orders books through the school. He has a subscription to *Sports Illustrated*. He reads to us out of the magazine. He has a box of books that his dad read when he was that age. We have started to make a concerted effort to help him with reading.”

At Time 1 K's parents said, "Grandma lets K read to her. K writes thank-you notes. We spell words for her. She goes to the library, but less often now, with the baby." At Time 2, her parents said, "We read to her; she reads to us. We go to all the libraries around—she got a library card. She found a series that captured her interest. She goes to Junior Great Books every two weeks. She reads to herself. She uses her chore money to buy Scholastic Books." At Time 3, K's parents said, "The school is encouraging children to read biographies. Dad helps her organize her biography reports. She buys books through the school. K goes to the library every two weeks with dad. She is now reading the *Sweet Valley High* series—trying to read 120 books in order. She reads most every day."

At Time 1 (kindergarten) the EA parents of B said, "We read to him. He reads at the second grade level. I read, then he reads. He checks out books from the library at school and C. Library—attends story hour at the library. At Time 2 B's parents said, "We read to him and he reads to us—family reading. We get him challenging books. We go to the bookstore—not that often to the library now. He pays for his own books. He also uses computer software." At Time 3 they said, "He reads instruction books for video games. He had to read 50 books before he could buy Nintendo with his own money. He had a chart on his door where he would color in a book after he had read it. We still read to him. He reads to his younger brother. He likes to listen to me [mom] reading to his younger brother. He goes to the bookstore to look at all the books. He goes to C. Library sometimes and he buys Scholastic books."

At Time 1 several of the EA parents mentioned that they "don't push reading" or "don't believe in pushing." Others said, "No structured teaching" or "Nothing formal—he's not interested" or "We don't sit and drill" or "We don't force her to read." EA parents were more likely to mention that father or mother was an avid reader, thus serving as a model for their child. In addition, EA parents also more often mentioned giving extrinsic rewards for reading.

3.4.3. Responses of the CA parents to the reading facilitation question

At Time 1 the CA parent of a preschooler (N) said, "I'm afraid my accent isn't right. N wants to be read to or to "read" when she hears her older sister reading. We listen to her "pretend" reading. She learned the alphabet from Sunday School and preschool." At Time 2 (1st grade), Mom said, "I didn't teach N to read. I have the wrong accent. She and her sister go to the public library very often on her days off and summer vacation. I work nearby. Her kindergarten teacher helped her a lot. Her sister reads to me and N listens." At Time 3 (3rd grade) mother said, "I choose books that N is not likely to choose. We go every two weeks to the library. I don't want to teach her because I'm not a native speaker. In the summer, she has 4–5 weeks of summer school in the morning and stays in the library in the afternoon."

The self-awareness that this CA mother speaks English with an accent is a deterrent to her teaching her daughter to read. She mentioned it at all three interviews over a span of four years. She ensures that N spends lots of time in the library, hearing native English speakers read.

At Time 1 (preschool), the CA parents of J said, "We read to him. We take him to the library. We buy books for him and I [Mom] have started to teach him simple three-letter words." At Time 2 (1st grade), they said, "In the next three weeks, we are concentrating on his Chinese because he didn't do well on his test. He needs more adult guidance with Chinese. He started *Hooked on Phonics*," but he didn't finish because he didn't like it. He does phonics workbooks and is in the 4th of 5 books. He likes to read to us and his brother." At Time 3 (3rd grade), J's parents said, "J checks out books from the school library. He finished *Hooked on Phonics*." He goes to the public library two times a month. We suggest that he choose 3rd grade reading materials."

At Time 1 (kindergarten) E's parents responded, "We read to her. She reads herself. We buy 4–5 books every month. She uses the SRA Education Program audio books. The school requires that she hear or read 20 books a month." At Time 2, they said, "We buy books for her from the book fair and book stores—Classic books like *Little Women*, *Boxcar Children*, and *Childcraft*. She gets magazines like *Ranger Rick*." At Time 3, they said, "She goes to the library every two weeks. Mom picks out 5 classic books and E picks out five. She gets 10–15 books each visit. She borrows books from the school library. She reads *American Girl Magazine*. She speaks Chinese to us."

At Time 1 (kindergarten) CA parents of R said, "R tries to read the computer game menu and to look up topics in the encyclopedia. He asks us to teach him phonics. He asks us to show him words and to tell him some rules. He borrows books from the city library and the school. He reads by himself." At Time 2 they said, "His babysitter focused on reading in 1st grade. We borrow lots of books from the public library. If he is interested in something, he reads about it. He likes to finish all in a series before going on to another." At Time 3, "He joined the book club at school. We buy books. I want him to look in the dictionary for words he doesn't know. He does research on the Internet."

All the responses except for K's parents' responses regarding mathematics facilitation were typical of the two groups. K had a grandmother who was a retired mathematics teacher. There was some within-group variation, but generally speaking, the CA parents were much more systematic in their teaching of mathematics to their children than were the EA parents.

4. Discussion

Parent involvement of the cognitive-intellectual type appears to be an important influence on the academic success of young CA children. Consistent with previous research, we found CA parents to be less involved than EA parents in activities at school, and more involved in explicitly teaching their children at home. Their methods appear to conflict with some of the wisdom generated through research in educational psychology in the United States. Although Epstein (1995) clearly excluded parental teaching of school subjects from her "Help at Home" category, it appears that CA parents are doing just

that. Grolnick and Slowiaczek (1994) concluded that the influence of parental participation on children's achievement is not due to skill-building, but rather to its impact on attitudes and motivation. It is very possible that the story is different with children of Chinese immigrants. CA parents used teaching methods that were more drill and practice-oriented than did EA parents. Contrary to conventional wisdom, the CA children liked school better and liked the school subject of reading significantly better than did EA children.

The publication, *Homework Tips for Parents* from the U.S. Department of Education (2003) suggests the following tip pertaining to mathematics: "Try to be aware of how your child is being taught math, and don't teach strategies and shortcuts that conflict with the approach the teacher is using (p. 8)." Chinese parents, however, used workbooks and books from Taiwan and China (one called *How to Teach Your Child to Learn Math Faster*) to help in teaching their children. They believe that learning multiple ways of solving problems leads to deeper understanding. Chinese parents focus on making math a mental process. One mother of a kindergartner said, "We let him practice addition and subtraction. We want him to mentally calculate quickly." One mother of a third-grader commented, "He took mental math for three months." Teachers in the primary grades in the United States often require first and second-grade children to make tally marks, which slows down the calculation process for CA children.

EA parents liked the primary school report card without traditional ABC grades better than did the CA parents. CA parents want to know exactly what their children need help with. Traditionally, their belief has that everyone can master the contents of the curriculum, and it is the parents' responsibility to help the child learn (Stevenson & Stigler, 1992). Several CA parents thought teachers used too much praise. Chinese parents themselves have been observed to give fewer encouraging comments to their children in problem solving situations (Huntsinger & Jose, 1995; Huntsinger et al., 2002). Chinese parents and teachers believe in monitoring and correcting children's behavior continuously before it becomes a larger problem (Tobin et al., 1989). They believe that children's errors need to be corrected quickly and that children benefit from criticism. One mother said, "When I made a careless mistake, I always got a spank from my teacher [in Taiwan]. I learned very fast to double check my answers. I don't do that to my daughter, but I do point out her errors and have her correct them." The CA parents grew up in a school system that ranked children and publicly posted the rankings.

Parents' teaching methods showed some stability across the four years. Parents who began teaching in a structured, formal way continued to do so up to 3rd and 4th grades. Parents who used more informal play-oriented methods at Time 1 continued to use an approach that focused on experiences embedded in context at Time 2. Some of them decided at Time 3 to help their child in a more systematic way because their child was struggling. CA parents seemed to teach ahead of the grade level in mathematics, whereas EA parents, in general, let the school take the lead.

The CA mother who expressed the belief that her accent was wrong for reading to her child in English was one of several parents who mentioned that. We found the same parental concerns in a study of 5th and 6th grade CA girls and their parents (Huntsinger & Jose, 1995). In that group, one mother had hired an EA neighbor girl to come and read to her daughter for an hour every day. Another mother mentioned she had taken her daughter to the library story hours as often as possible and checked out books on tape so that her daughter would hear English spoken by a native speaker. With the parents' help, the CA children learned enough English vocabulary to equal or surpass the EA children by Time 3 (3rd and 4th grades) (Huntsinger et al., 2000).

Many parents in the United States and Canada believe their children are getting too much homework (Bennett & Kalish, 2006; Oleck, 2008), while our interviews with immigrant CA parents indicated they didn't think children have enough homework. One mother said, "When we are at P.T.O. meetings, parents complain about too much homework. We don't think there's enough, but we don't speak up." Another parent said, "Many parents complained to the school that the teacher was too tough. We don't think so." Most regularly assigned their children extra homework, made up tests for them to take, and pre-taught their children math for the next grade level during the summer. Several of the parents mentioned that their 3rd and 4th grade children were very interested in doing fractions, decimals, and pre-algebra. These practices reflect the Chinese beliefs regarding the role of hard work in academic achievement and the importance of parental teaching in a child's early years (Chao, 2000; Goyette & Xie, 1999; Sy & Schulenberg, 2005). It also may reflect the fact that, as relatively new residents in the United States, they have not yet been influenced by the American ideas about what is considered developmentally appropriate practice (New, 1994).

At the same time, it is worthy of note that the CA children reported greater liking of school than EA children. A common American belief is that extra-curricular academic work at home is demotivating for children, but within CA families, it seems not to have that effect. In fact, one Chinese parent said, "We give her drill sheets three times per week. She likes it. She likes to work with us. She likes to watch us correct the problems." More research needs to be directed at answering the question of why. It is very likely that CA children have absorbed the high value their parents attach to doing well in school. A Chinese child's achievement is viewed as a result of family or community efforts, rather than of the child's independent efforts (Chin, 1988). In the collective sense, they achieve for their families, not for themselves. Would CA methods be effective in EA families, who hold an individualistic orientation?

4.1. Strengths and limitations

We believe this study has many strengths. First, our focus was more fine-grained than that of many previous studies. We studied immigrant CA parents, not broader groups of Asian American parents or United States parents. Second, we have

longitudinal data. Third, we used multiple sources of data: fathers, mothers, children, and teachers. Fourth, information from both questionnaires and face-to-face home interviews gave us culturally rich data.

On the other hand, the nature of our sample limits our confidence that we can generalize strongly to all CA and EA families. First, our sample size was small. Consequently we were limited in the statistical analyses we could perform. Second, our sample was constituted by well-educated parents, and this characteristic may limit our ability to generalize to parents in other ecological niches. However, the results may still be applicable to less privileged CA families. Huntsinger, Ching, & Huntsinger, (1994) reported similar parental practices and similar child achievement in 18 lower-income Chinatown families. The current study would have been improved had we had equivalent measures of parents' involvement at school at Time 1, when children were in preschool and kindergarten, and at Time 2, when children were in first and second grades.

Future research should investigate the same phenomena in larger, more economically diverse populations of CA and EA families. It would also be instructive to conduct intervention studies wherein parents are trained to help their children at home with mathematics and reading in the ways CA parents did, even though the more systematic methods are not currently considered developmentally appropriate. The results might challenge the early childhood community to broaden the definition of developmentally appropriate.

In conclusion, all four of our predictions were supported by our data. We found that immigrant CA parents were more highly involved with their children around academics at home and that EA parents participated to a greater extent in activities at school. EA parents were more satisfied with the primary school report cards without ABCs than were CA parents. Fourth, the teaching methods of both groups showed stability over time. We believe that the academic teaching that CA parents did at the preschool and kindergarten level provided a strong foundation for their children's academic performance in third and fourth grades and the children liked school. The results of this study challenge the ideas of Americans who believe that children are too stressed, have no childhood, and are too hurried (Elkind, 2001). We believe it is wise for teachers of young children to appreciate the efforts that CA parents make to teach their children at home. Parents are not likely to quickly abandon a cultural tradition that has worked so well for several thousand years.

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References

- Bennett, S., & Kalish, N. (2006). *The case against homework: How homework is hurting our children and what we can do about it*. New York: Crown Publishing.
- Berger, E. H. (1995). *Parents as partners in education: Families and schools working together* (4th ed.). Englewood Cliffs, NJ: Merrill Prentice-Hall.
- Chao, R. K. (2000). Cultural explanations for the role of parenting in the school success of Asian American children. In R. D. Taylor, & M. C. Wang (Eds.), *Resilience across contexts: Family, work, culture, and community* (pp. 333–363). Mahwah, NJ: Erlbaum.
- Chin, A. P. (1988). *Children of China*. New York: Alfred A. Knopf.
- Comer, J. (1984). Home-school relationships as they affect the academic success of children. *Urban Society*, 16, 323–337.
- Elkind, D. (2001). *The hurried child: Growing up too fast too soon* (3rd ed.). Cambridge, MA: Perseus Publishing.
- Englund, M. M., Luckner, A. E., Whaley, G. J. L., & Egeland, B. (2004). Children's achievement in early elementary school: Longitudinal effects of parental involvement, expectations, and quality of assistance. *Journal of Educational Psychology*, 96, 723–730.
- Epstein, J. (1995). School/family/community partnerships: Caring for the children we share. *Phi Delta Kappan*, 76, 701–711.
- Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, 13, 1–22.
- Fantuzzo, J. W., Davis, G. Y., & Ginsberg, M. D. (1995). Effects of parent involvement in isolation and in combination with peer tutoring on student self-concept and mathematics achievement. *Journal of Educational Psychology*, 87, 272–281.
- Fantuzzo, J., Tighe, E., & Childs, S. (2000). Family involvement questionnaire: A multivariate assessment of family participation in early childhood education. *Journal of Educational Psychology*, 92, 367–376.
- Goyette, K., & Xie, Y. (1999). Educational expectations of Asian American youths: Determinants and ethnic differences. *Sociology of Education*, 72, 22–36.
- Grolnick, W. S., Benjet, C., Kurowski, C. O., & Apostoleris, N. H. (1997). Predictors of parent involvement in children's schooling. *Journal of Educational Psychology*, 89, 538–548.
- Grolnick, W. S., & Slowiaczek, M. L. (1994). Parents' involvement in children's schooling: A multidimensional conceptualization and organizational model. *Child Development*, 65, 237–252.
- Halle, T. G., Kurtz-Costes, B., & Mahoney, J. L. (1997). Family influences on school achievement in low-income African American children. *Journal of Educational Psychology*, 89, 527–537.
- Ho, D. Y. F. (1994). Cognitive socialization in Confucian heritage cultures. In P. Greenfield, & R. Cocking (Eds.), *Cross-cultural roots of minority child development* (pp. 285–313). Hillsdale, NJ: Erlbaum.
- Hollingshead, A. F. (1975). *Four-factor index of social status*. Unpublished manuscript. New Haven: Yale University Department of Sociology.
- Hong, S., & Ho, H.-Z. (2005). Direct and indirect longitudinal effects of parental involvement on student achievement: Second-order growth modeling across ethnic groups. *Journal of Educational Psychology*, 97, 32–42.
- Huntsinger, C. S., Ching, W.-D., & Huntsinger, P. R. (1994, December). *The socialization of numeracy in young children: Chinese, Chinese American, and Caucasian American contrasts*. Paper presented at the annual conference of the National Association for the Education of Young Children, Atlanta, GA.
- Huntsinger, C. S., & Jose, P. E. (1995). Chinese American and Caucasian American family interaction patterns in spatial rotation puzzle solutions. *Merrill-Palmer Quarterly*, 41, 471–496.
- Huntsinger, C. S., Jose, P. E., & Larson, S. L. (1998). Do parent practices to encourage academic competence influence the social adjustment of young European American and Chinese American children? *Developmental Psychology*, 34, 747–756.

- Huntsinger, C. S., Jose, P. E., Larson, S. L., Krieg, D. B., & Shaligram, C. (2000). Mathematics, vocabulary, and reading development in Chinese American and European American children over the primary school years. *Journal of Educational Psychology*, 92, 745–760.
- Huntsinger, C. S., Jose, P. E., Rudden, D., Luo, Z., & Krieg, D. B. (2002). Cultural differences in interactions around mathematics tasks in Chinese American and European American families. In C. C. Park, A. L. Goodwin, & S. J. Lee (Eds.), *Research on the education of Asian Pacific Americans* (pp. 75–103). Greenwich, CT: Information Age Publishing.
- Izzo, C. V., Weissberg, R. P., Kasprow, W. J., & Fendrich, M. (1999). A longitudinal assessment of teacher perceptions and parent involvement in children's education and school performance. *American Journal of Community Psychology*, 27, 817–839.
- Lareau, A. (1987). Social class differences in family–school relationships: The importance of cultural capital. *Sociology of Education*, 60, 73–85.
- Mau, W.-C. (1997). Parental influences on the high school students' academic achievement: A comparison of Asian immigrants, Asian-Americans, and White Americans. *Psychology in the Schools*, 34, 267–277.
- National Center for Education Statistics. (2006). Statistics in Brief: Parents' reports of school practices to provide information to families: 1996 and 2003. Retrieved February 24, 2008 from <http://nces.ed.gov/pubs2006/2006041.pdf>.
- New, R. S. (1994). Culture, child development, and developmentally appropriate practice: Teachers as collaborative researchers. In B. L. Mallory, & R. S. New (Eds.), *Diversity and developmentally appropriate practices: Challenges for early childhood education* (pp. 65–83). New York: Teachers College Press.
- Oleck, J. (2008). Canadians dislike homework, too. *School Library Journal*. Retrieved March 10, 2008 from <http://www.schoollibraryjournal.com>.
- Parker, F., Piotrowski, C., Kessler-Sklar, S., Baker, A., Peay, L., & Clark, B. (1997). *Final report: Parent involvement in Head Start*. New York: National Council of Jewish Women.
- Rogala, S. (2001, April). *Parental involvement and academic achievement in the early years*. Poster presented at the biennial meeting of the Society for Research in Child Development, Minneapolis, MN.
- Roopnarine, J. L., Shin, M., Jung, K., & Hossain, Z. (2003). Play and early development and education: The instantiation of parental belief systems. In O. N. Saracho, & B. Spodek (Eds.), *Contemporary perspectives on play in ECE* (pp. 115–132). Greenwich, CT: Information Age Publishing.
- Singh, K., Bickley, P. G., Trivette, P., Keith, T. Z., Keith, P. B., & Anderson, E. (1995). The effects of four components of parent involvement on eighth grade student achievement: Structural analysis of NELS-88 data. *School Psychology Review*, 24, 299–317.
- Stevenson, D., & Baker, D. (1987). The family–school relation and the child's school performance. *Child Development*, 58, 1348–1357.
- Stevenson, H. W., Lee, S., Chen, C., Stigler, J. W., Hsu, C., & Kitamura, S. (1990). Contexts of achievement. *Monographs of the Society for Research in Child Development*, 55(1–2 (Serial No. 221)).
- Stevenson, H. W., & Stigler, J. (1992). *The learning gap*. New York: Summit.
- Sui-Chu, E. H. (2000). Decentralization and parent involvement in an Asian educational system. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Sy, S. R., & Schulenberg, J. E. (2005). Parent beliefs and children's achievement trajectories during the transition to school in Asian American and European American families. *International Journal of Behavioral Development*, 29, 505–515.
- Tobin, J. J., Wu, D. Y. H., & Davidson, D. H. (1989). *Preschool in three cultures: Japan, China, and the United States*. New Haven, CT: Yale University Press.
- United States Department of Education. (2003). Homework tips for parents. Retrieved March 10, 2008 from <http://www.ed.gov/print/parents/academic/involve/homework/part.html>.
- Wu, D. Y. H. (1996). Chinese childhood socialization. In M. H. Bond (Ed.), *The handbook of Chinese psychology* (pp. 143–154). Hong Kong: Oxford University Press.