

Predictors of Parent Involvement across Contexts in Asian American and European American Families

Susan R. Sy *

Stephanie J. Rowley**

John E. Schulenberg***

Why do some parents become involved in their children's education more than others? Over the past two decades, there has been extensive discussion of the important role of parent involvement in children's educational success. Parent involvement has been linked to children's academic achievement (Christenson, 1999; Desimone, 1999; Martini, 1995; Reynolds, 1992), social and behavioral adjustment in schools (Ladd, 1996; Reynolds et al., 1992), and lower high school dropout rates (National Center for Education Statistics, 1992). Despite the abundance of literature on the relationship between parent involvement and children's achievement, there is relatively little research focusing on the predictors of parent involvement and the interrelationships among multiple types of parent involvement (Grolnick et al., 1997). Furthermore, even fewer studies have focused on within and between ethnic group variation in these relationships, although several researchers have examined ethnicity as a predictor of the quality and level of parent involvement (Griffith, 1998; Hill, 2001; Mau, 1997; Peng and Wright, 1994).

The aim of this paper is to examine the predictors of and relations among multiple aspects of parent involvement in Asian American and European American families. Because prior research has indicated that these two groups of parents may become involved in their children's education in different ways (Kerbow and Bernhardt, 1993; Mau, 1997), examining the predictors of Asian American and European American parents' involvement may broaden the existing perspective on components of, and variations in, parent involvement.

Defining Parent Involvement

Because parent involvement is a broad term that can refer to a wide variety of behaviors, it is important to identify how the existing literature typically defines parent involvement and

*Please address correspondence concerning this article to Susan R. Sy, Department of Psychology, California State University, Fullerton, 800 N. State College Blvd., Fullerton, CA 92834-6846. E-mail: susansy@fullerton.edu.

**Department of Psychology, University of Michigan

***Institute for Social Research, Department of Psychology, and Center for Human Growth and Development, University of Michigan.

There are several people we wish to recognize for their contributions and support. In particular, we want to thank Jerry West and Elvira Germino-Hausken at the National Center of Education Statistics for their assistance with the Early Childhood Longitudinal Study – Kindergarten Cohort data set. We also would like to thank Tanya Hart for her helpful comments and editorial assistance with this manuscript.

how it is defined in the current study. Researchers and practitioners have defined parent involvement primarily as parents' participation in school activities (volunteering in the classroom, and attending school events, open houses, and back-to-school nights), possibly because high expectations for this type of involvement tend to be the norm within the American school system (Morrow, 1989). However, an ecological perspective on parent involvement suggests that there are many ways parents may become involved in their child's early education without participating directly in school activities. For example, parents may become involved at home by engaging with their child in activities that develop general cognitive skills such as problem-solving (Baker et al., 1999; Hoover-Dempsey et al., 1992), by providing direct and indirect instruction of academic skills (Baker et al. 1999; Hoover-Dempsey et al. 1992), or by structuring the child's environment so that it is conducive to learning (Chao, 2000a; Chao, 2000b; Choi, Bempechat, and Ginsburg, 1994; García Coll et al., 2002; Kim, 2002; Mau, 1997). Parents may become involved in learning activities outside of the home and school by utilizing community resources such as libraries, museums, concerts, and plays to enhance their child's educational experience (Grolnick and Slowiack, 1994; Gutman and McLoyd, 2000; Sun, 1998).

In addition to categorizing parent involvement by the context in which it occurs, others have used direct versus indirect activities to describe parent involvement (Chao, 2000a; Chao, 2000b; Huntsinger et al., 1997). For example, Chao (2000a; 2000b) suggested two general categories of involvement: managerial and structural. Managerial involvement includes direct hands-on practices (e.g., reading with children, participating in school activities and events), while structural involvement includes indirect practices, such as exerting control over the child's home environment (e.g., maintaining rules about after-school time use) (see also García Coll et al., 2002). Although managerial involvement may occur in the home, school, or other settings, structural involvement typically occurs within the home.

The current study draws from these conceptualizations and broadly defines parent involvement as parent behaviors aimed at promoting or enhancing children's educational development. Parent involvement may occur directly or indirectly (i.e., managerial vs. structural) and across multiple contexts (school, home, community). Despite the studies described above, there is still a notable gap in the research concerning the predictors of and the relationships among these multiple aspects of parent involvement.

Conceptual Framework

The conceptual framework guiding the current study is that of developmental niche theory (Super and Harkness, 1986), which combines ecological and life span developmental perspectives in order to better understand the role of culture in parenting practices. Developmental niche theory suggests that parents' cultural beliefs about parenting goals and children's development shape parenting behaviors. Several other scholars have proposed similar theories (Gallimore et al., 1993; Goodnow and Collins, 1990), with Chao's (2000a) adaptation particularly relevant to the current study. Based on developmental niche theory, Chao (2000a) proposed a more specific educational niche theory, which suggests that parents' beliefs about education are related to parents' involvement in children's education. In the current study, we will examine parents' beliefs about the importance of certain academic

skills and educational expectations as indicators of Asian American and European American parents' educational beliefs. These beliefs and expectations are reflections of the larger cultural value of socializing children for academic success, which is considered a primary goal among Asian parents (Bhattacharya, 2000; Hwa-Froelich and Westby, 2003) and not as strongly emphasized among European American parents (Chao, 1995; Chao, 2000a; Parmar et al., 2004; Wu and Tseng, 1985). Parents' education-related beliefs and expectations should, in turn, shape the ways in which parents become involved in their child's education. Educational niche theory assumes that parents' academic beliefs stem from one's cultural background and thus, although beliefs reflecting larger cultural values may differ across ethnic groups, the relationship between parents' academic beliefs and parents' involvement practices should not.

Ethnicity may predict structural differences, however, in the relationship between multiple types of parent involvement across contexts; such differences would likely be due to differing beliefs about the role of parent involvement across contexts. Research has shown that Asian cultural values tend to distinguish between the parents' role at home and the teachers' role in school, and parents from these cultures often express reservations about becoming involved in the school environment (Chan, 2004; Collignon, et al., 2001; García Coll et al., 2002; Hwa-Froelich and Westby, 2003; Morrow, 1989). In European American culture, however, parents' participation in school activities and school governance is not only typically accepted, but often promoted by teachers and schools. It may be that there is a general construct of parent involvement that operates across contexts for European American parents, but a more context-specific notion of parent involvement in Asian American populations. If this is the case, European American parents who become involved at home should be more likely to participate in school, a relationship that has been demonstrated in research with European American parents (Grolnick et al., 1997; Hill, 2001; Kohl et al., 2000). If parent involvement is context-specific, as may be the case with Asian American parents, parent involvement at home would not necessarily be related to parent involvement at school or in other contexts.

The current study addresses the two hypotheses outlined above by examining both within- and between-group variation (Asian American and European American) in (1) parents' beliefs about the importance of early academic skills and expectations about their child's educational attainment as predictors of parents' involvement practices and (2) multiple aspects of parents' home involvement as predictors of multiple aspects of parents' non-home involvement.

Predictors of Parent Involvement

Of primary concern to researchers and practitioners are the characteristics that influence parent involvement (Grolnick et al., 1997; Kim, 2002; Kohl et al., 2000; Smith et al., 1997). Several studies have examined this issue, although most have focused on the traditionally defined version of parent involvement: school participation. Furthermore, most research on predictors of parent involvement has included demographic characteristics as predictors, without much attention to the psychological characteristics that may have important influences on parent involvement (see Grolnick et al., 1997 for an exception).

Demographic Characteristics. Although a number of demographic characteristics are related to parent involvement, including family income and education (Hoover-Dempsey et al., 1992; Lareau, 1987), parents' marital status (Epstein, 1990; Ho and Willms, 1996), and number of children (Ho and Willms, 1996), the current study focuses on the role of parent education in predicting parent involvement. Parents' educational attainment has been linked to school participation (Beyer, 1995; Desimone, 1999; Smith et al., 1997) but also may influence a wider variety of parent involvement practices.

Also, as previously discussed, ethnicity has been considered as a predictor of the quality and level of parent involvement, but it appears that no research to date has examined ethnicity as a predictor of the *structural relationships* among parent beliefs, expectations, education, and multiple aspects of parent involvement.

Psychological Characteristics. In addition to demographic characteristics, the current study examines parent psychological characteristics as predictors of parent involvement. In particular, parents' beliefs about children's early education and expectations for their children's educational attainment will likely influence their involvement practices (Kim and Rohner, 2002; Martini, 1995). Research suggests that Asian and Asian American parents tend to strongly value parents' roles in building a firm foundation for children's educational attainment and to have higher expectations for their children's educational attainment than do European Americans (Chao, 1996; Ho, Peng, and Lai, 2001; Okagaki and Frensch, 1998). European American parents, on the other hand, tend to espouse beliefs in early academic preparation to a lesser extent and tend to expect their children to attain fewer years of education. These beliefs about children's education may explain findings that Asian American parents become more involved in home activities that are intended to increase children's early academic and cognitive skills during the pre- and early school years (Huntsinger et al., 1997; Schneider and Lee, 1990). However, few studies on Asian American and European American parents' involvement in their children's early education have directly assessed the relationships between parents' beliefs about the importance of early academic skills and educational attainment and parent involvement, a limitation which is addressed in the current study.

Multiple Aspects of Parent Involvement Across Contexts

Especially from an ecological perspective, an important question is the extent to which parents' home involvement is a predictor of parents' non-home involvement. Although there do not appear to be any existing studies that consider the relationship between home and non-home involvement in both Asian American and European American families, several studies have addressed overall levels of home and non-home involvement in these two groups. In general, this research suggests that Asian American parents' home involvement often is higher than that of European American parents, yet European American parents show higher levels of participation in school activities (Kerbow and Bernhardt, 1993; Mau, 1997; Yao, 1985).

As previously mentioned, examining the predictive relationship between home and non-home involvement should illustrate whether there is one overarching "parent involvement"

construct, which may be the case for European Americans, or several distinct parent involvement constructs that are context dependent, which may be the case for Asian Americans. Several studies have demonstrated a relationship between home and non-home involvement in European American samples (Grolnick et al., 1997; Hill and Craft, 2003; Kohl et al., 2000; Smith et al., 1997). However, these relationships have not been investigated in Asian American families, nor have they been extensively studied in families of younger children. Thus, the second goal of the current study is to examine, both within and between groups, home involvement as a predictor of non-home involvement in Asian American and European American samples of parents with kindergarten children.

Study Hypotheses

The current study addresses the limitations of prior parent involvement literature by examining the influence of parents' beliefs, expectations, and educational attainment on multiple aspects of parent involvement and the relationship among parent involvement across contexts in Asian American and European American families of kindergarten children. More specifically, we examine two hypotheses, guided by educational niche theory: (1) the effects of parent education, beliefs, and expectations on parent involvement will be significant and positive for both groups, and will not differ between groups, and (2) the effects of home parent involvement on non-home parent involvement will be positive and significant in the European American group, nonsignificant in the Asian American group, and significantly different between groups, with stronger effects in the European American group. Focusing on both within- and between-group variation in the structure of parent involvement in Asian American and European American families should provide a broader perspective on the ways in which families support their children's early education.

METHOD

Sample

The data for the current study were drawn from the nationally representative Early Childhood Longitudinal Study – Kindergarten Cohort (ECLS-K), an ongoing study of kindergarten children as they make the transition into and through formal schooling. The ECLS-K was developed under the sponsorship of the U.S. Department of Education, National Center for Education Statistics (NCES), and includes approximately 23,000 kindergarten children and their parents who are followed through the fifth grade. Data were first collected in the fall of 1998 when children were beginning their kindergarten year. Included in the current study are two waves of data collected during the base year, which included fall and spring of kindergarten.

The target sample for this study included all parents who provided responses for at least two variables in the analysis, yielding a total sample of 957 Asian American and 10,804 European American parents. Because Asian Americans were over sampled in the data collection, weighted sample sizes were used for all analyses to better approximate the population (Asian American = 537; European American = 12,630). Most parent respondents were female (79% of Asian Americans, 94% of European Americans) and were the target child's birth parent

(96% in both groups), with the remaining 4% being step, adoptive, or foster parents, or a non-parent guardian (e.g., grandparent, sibling). The gender distribution of the target child did not differ across ethnic groups (51% male in both groups). Examining parents' highest education level (ranging from 1 = "less than a high school degree" to 6 = "Ph.D., M.D., or other advanced degree") as an indicator of socioeconomic status, Asian American parents ($M = 5.45$; $SD = 2.08$) were significantly higher than European American parents ($M = 5.07$; $SD = 1.85$), $t(13165) = 4.66$, $p < .001$. Average age of Asian American parents ($M = 35.13$ years; $SD = 6.09$) also was significantly higher than the average age of European American parents ($M = 33.82$ years; $SD = 6.43$), $t(13148) = 4.62$, $p < .001$. The average age and parent education between-group differences were not expected to confound the results, and indeed this was supported by preliminary analyses, discussed later.

Finally, because parents' ethnic subgroups are not available in the data set, the following breakdown of the Asian American parent sample examined in the study is based on their children's ethnicity: Asian Indian American (13%), Filipino American (21%), Chinese American (21%), Korean American (10%), Japanese American (8%), Vietnamese American (7%), and Hmong American (6%), with the remaining 14% classified as "other Asian American group." Information on ethnic subgroups of European-American children was not available.

Measures

Interviews with parents were conducted using a computer-assisted telephone interview or computer-assisted personal interview for families without a telephone (3% of Asian American parents and 2% of European American parents). Interviews lasted approximately 1 hour; the respondent had to be knowledgeable about the child's care and education, at least 18 years old, and living in the household with the child. The interview was conducted primarily in English, but provisions were made to interview parents who spoke Spanish, Lakota, Chinese, and Hmong languages. Nearly 100% of interviews with European American parents and 92% of interviews with Asian American parents were conducted in English. Table 1 provides means and standard deviations for all items included in the analyses, the wave in which items were asked, and reliability estimates for items included in multiple indicator latent factors.

Parent Beliefs and Expectations. Parent beliefs about early education were assessed in the first wave of data collection, fall of kindergarten. Specifically, parents were asked to assess how important it is for children to have certain academic-related skills when entering kindergarten, including counting to 20, knowing the letters of the alphabet, and using pencils or paint brushes. Responses for these items ranged from essential (1) to not important (5). For ease of interpretation, these items were reverse coded (i.e., not important = 1; essential = 5) such that higher scores represented higher value. Also in the fall of kindergarten, parents' expectation for their children's academic future was measured as a single item, how far they expect their child to go in school. Responses for this question ranged from "receive less than high school diploma" (1) to "finish a Ph.D., M.D., or other advanced degree" (6).

Parent Education. Parents' highest level of education was measured as a single item, with responses ranging from "less than a high school diploma" (1) to "received a Ph.D., M.D., or other advanced degree" (6).

Table 1. Constructs and Items: Item Means, Standard Deviations, and Factor Loadings for Each Ethnic Group

Construct/Items	When Asked	Mean (SD)		Standardized Factor Loadings ^a		Scale Alphas ^f	
		Asian American	European American	Asian American	European American	Asian American	European American
<i>Parent Beliefs^g</i>							
Before entering kindergarten, how important do you think it is that a child ...can count to 20? ^{a,g}	Fall	11.45(1.84)	11.25(2.11)			.65	.74
...is able to use pencils and paint brushes? ^{a,g}		3.90(.54)	3.75(.86)	.60	.75		
...knows most of the letters of the alphabet? ^{a,g}		3.91(.49)	3.98(.80)	.51	.57		
<i>Parent Expectations (single item)</i>							
How far in school do you expect [child] to go? ^{b,g}	Fall	3.96(.49)	3.85(.82)	.76	.78		
<i>Home Literacy Involvement</i>							
How often in a typical week do you or another adult member of your household ...read to your child? ^{c,g}	Fall	4.59(.75)	3.94(1.12)	.95	.95	.68	.47
...tell stories to your child? ^c		5.99(1.52)	6.12(1.32)				
<i>Home Activity Involvement^s</i>							
How often in a typical week do you or another adult member of your household... build things with your child? ^c	Fall	7.01(1.92)	7.49(1.81)			.56	.52
...talk about nature or do science projects with your child? ^{c,g}		2.32(.69)	2.38(.97)	.50	.52		
...play games with your child? ^{c,g}		1.98(.63)	2.29(.92)	.60	.49		
		2.71(.65)	2.82(.85)	.52	.54		

Table 1, contd.

Factors/Items	When Asked	Mean (SD)		Standardized Factor Loadings ^c				Scale Alphas ^f	
		Asian American	European American	Asian American	European American	Asian American	European American	Asian American	European American
<i>Parent-Teacher Conference (single item)</i>									
In the past year, how often did you or another adult member of your household attend a parent-teacher conference with your child's teacher? ^{d,s}	Spring	.82 (.30)	.88 (.35)	.95	.95	.52	.46		
<i>School Participation^s</i>									
In the past year, did you or another adult member of your household... ...volunteer in your child's classroom? ^{d,s}	Spring	.39 (.37)	.56 (.54)	.56	.58	.47	.41		
...attend a back-to-school night? ^{d,s}		.66 (.36)	.79 (.44)						
...attend a school event in which your child did not participate? ^{d,s}		.51 (.38)	.73 (.48)	.53	.39				
<i>Non-Home Educational Activities^s</i>									
In the past month, did you or another adult member of your household... ...take child to the zoo, aquarium, or petting farm? ^d	Spring	1.44(1.01)	1.27(.97)			.45	.38		
...take child to the library? ^{d,s}		.45 (.38)	.39 (.53)	.35	.30				
...take child to a museum, art gallery, or historical site? ^d		.63 (.37)	.56 (.54)	.51	.45				
		.35 (.37)	.33 (.51)	.51	.44				

Table 1, contd.

Factors/Items	When Asked	Mean (SD)				Standardized Factor Loadings ^e				Scale Alphas ^f	
		Asian American		European American		Asian American		European American		Asian American	European American
<i>Family Rules for Watching Television</i>											
(3 Item Additive Scale) ^g											
	Spring	2.41 (.67)	2.19 (.95)			.95	.95			.54	.54

Note. All scales averages presented are from additive scales. ^a Possible responses were 1 = not important, 2 = not very important, 3 = somewhat important, 4 = very important, 5 = essential. ^b Possible responses were 1 = Less than a high school diploma, 2 = Graduate from high school, 3 = Attend two or more years of college, 4 = Finish a 4- or 5-year college degree, 5 = Earn a master's degree or equivalent, 6 = Finish a Ph.D., M.D. or other advanced degree. ^c Possible responses were 1 = not at all, 2 = once or twice, 3 = 3 to 6 times, 4 = every day. ^d Possible responses were 0 = no, 1 = yes. ^e From accepted measurement model. ^f Cronbach's alpha for factor items. ^g Item means differ by ethnic group at p < .05.

Parent Involvement at Home. A series of questions examining specific home activities shared by parent and child assessed home involvement in the fall and spring of kindergarten. In the fall, two items assessed home literacy involvement, including how often in a typical week the respondent or another adult member of the household read to their child and told stories to their child. Also in the fall, three items assessed other cognitively stimulating activities that were more hands-on (subsequently referred to as “home activity involvement”), including how often in a typical week respondents or other adult members of the household built things with their child, talked about nature or did science projects with their child, and played games or did puzzles with their child. Responses were coded on a 4-point scale (1 = not at all; 2 = once or twice; 3 = 3 to 6 times; 4 = every day).

Family restrictions on watching television represent an important aspect of parents’ indirect involvement at home (e.g., Desimone, 1999; Schneider and Lee, 1990). Thus, to assess the degree of structure parents provide for their children at home, in the spring of their child’s kindergarten year, parents responded to three questions about family rules for watching television: Are there rules for (1) how many hours per day the child may watch TV? (2) how early or late the child may watch TV? and (3) which TV programs the child may watch? Responses were recorded as yes (1) or no (0). These three items were summed to create a single scale item representing TV rules.

Parent Involvement Outside of the Home. Four items were used to assess parents’ school participation in the spring of their child’s kindergarten year. Parents were asked if, in the previous year, they or another adult member of the household volunteered in the child’s classroom, attended an open house/back-to-school night, attended a school event in which the child did *not* participate, and attended parent-teacher conferences. Responses were coded “yes” (1) or “no” (0). Three questions were included to examine parents’ non-home and non-school educational activities with the child, including trips to the library, museums, and the zoo. The interviewer asked parents whether or not they or another adult member of the household had taken the target child to these places in the past month. Responses were coded “yes” (1) or “no” (0).

Plan of Analysis

The goals of this study are to examine and compare the multiple ways in which Asian American and European American parents are involved in their children’s early educational experiences, and to investigate the relationships among parent beliefs, expectations, education, and involvement in Asian American and European American populations.

Using LISREL 8.3 (Jöreskog and Sörbom, 1996), Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) analyses with latent variables were conducted to test the models. Four *a priori* models (discussed below) were examined. The models were first estimated for each ethnic group separately to ensure a theoretical model that independently fit each ethnic group well (especially important given the much larger size of the European American sample and the dependence on sample size for some fit indices). Then two-group SEM analysis using the final model was conducted to test for invariance across ethnic groups.

Conceptual Models

First, latent constructs were organized into three categories in order to examine the study's two main hypotheses that (1) parent beliefs and expectations will significantly predict parent involvement in both Asian American and European American samples and these effects will not differ in strength or direction between groups and (2) the effects of home parent involvement on non-home parent involvement will be positive and significant in the European American group, nonsignificant in the Asian American groups, and significantly different between groups. Parents' beliefs, expectations, and education were categorized together as predictors of all types of parent involvement (Predictors). Literacy involvement, activity involvement, and family rules for watching TV were categorized as home involvement factors (Home Involvement), and parents' school participation, parent-teacher conference attendance, and engagement in educational activities were categorized as non-home involvement factors (Non-Home Involvement). These categories are represented in Figure 1 as the measurement model.

Four alternative models were conceptualized (see Figure 2) to test the two main hypotheses. In addition to the four conceptual models presented in Figure 2, an alternative model including only direct effects of parent education on all other factors was tested. Because parent education is a strong influence on parenting in general, the purpose of including this model was to test the alternative hypothesis that all aspects of parent involvement may be explained by parent education.

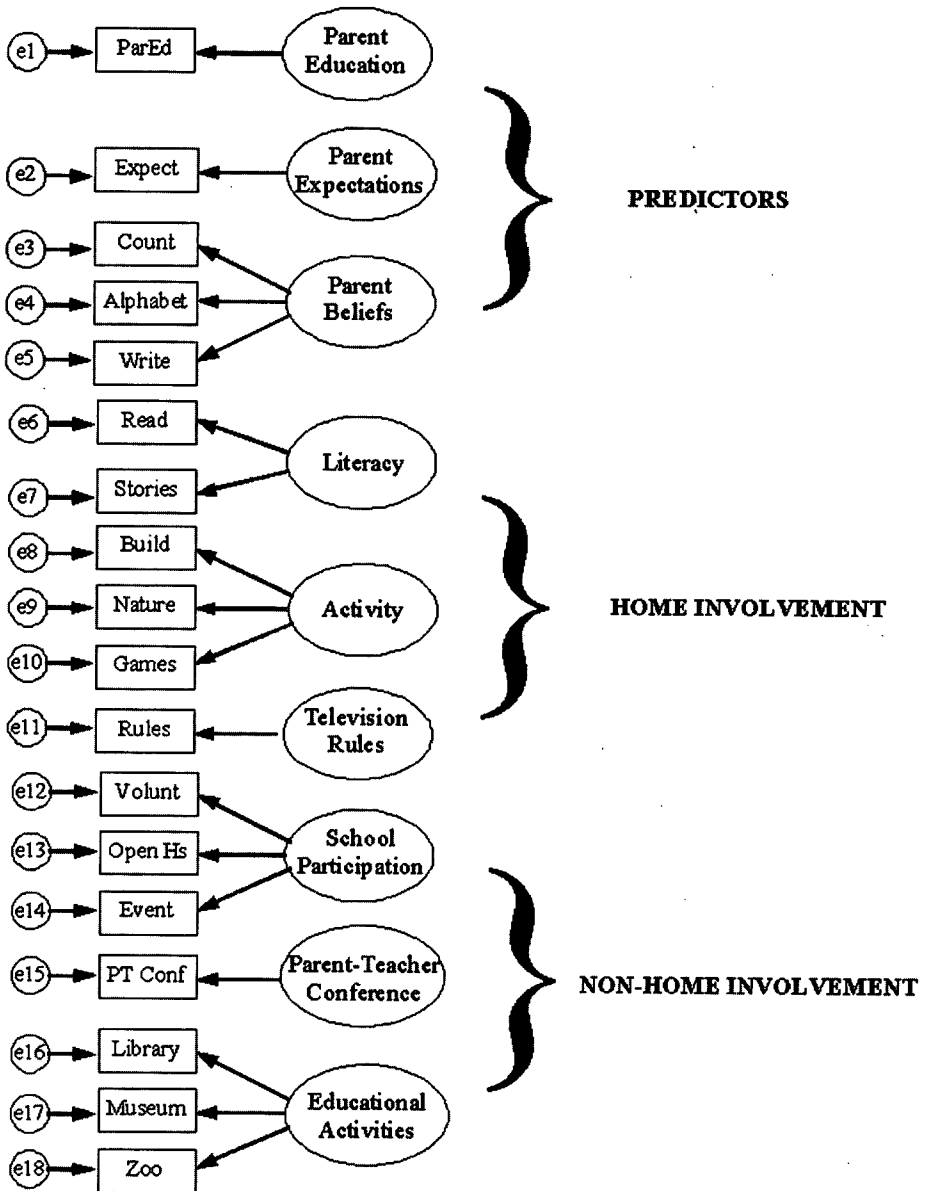
RESULTS

Preliminary Analysis

Preliminary analyses were conducted to examine item variation based on a number of demographic factors, including gender of the target child and parent ethnicity, educational attainment, and age. For all analyses, an adjusted alpha level of .01 was used as the criterion level to account for multiple comparisons.

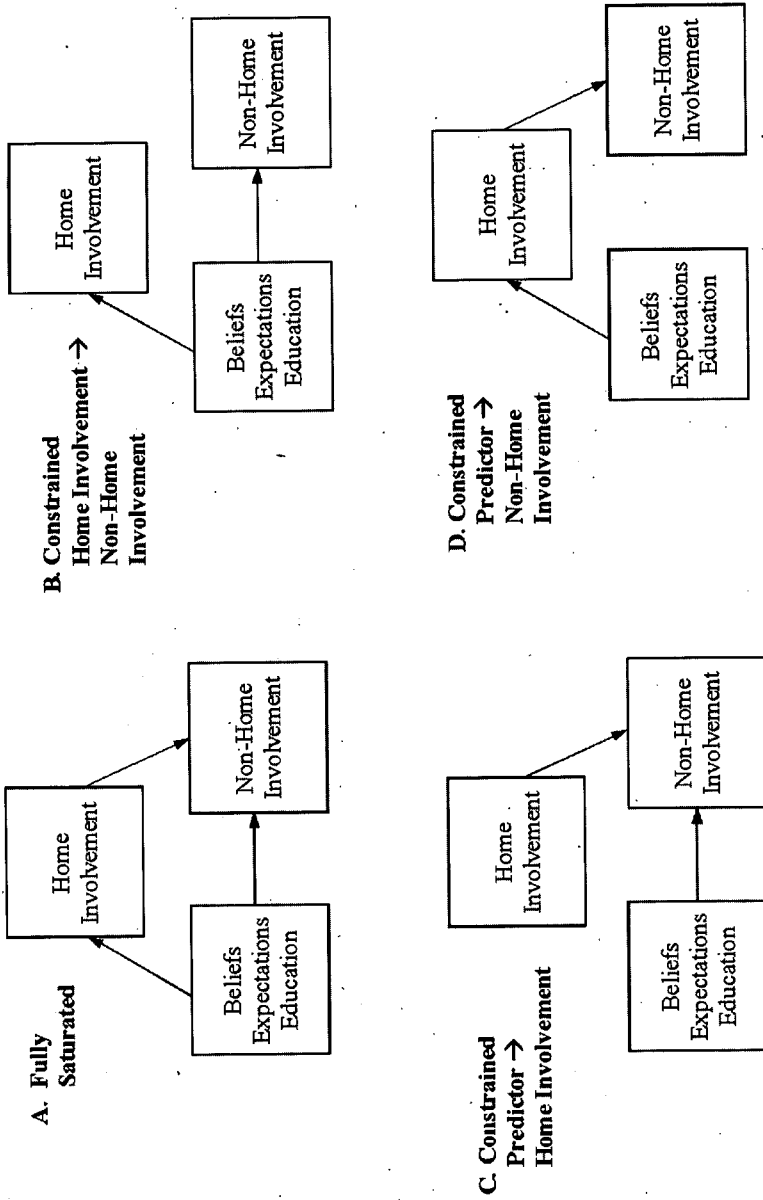
A 2 (child gender) x 2 (parent ethnicity) Multivariate Analysis of Variance (MANOVA) was conducted on all items included in the analysis. Results showed a main effect for parent ethnicity on all items (F s ranged from 7.20 to 164.03, all p s < .01) except telling stories to their child, building things with their child, taking their child to a zoo, and taking their child to a museum (see Table 1). Overall, in comparison with European American parents, Asian American parents placed greater importance on the early academic skills of counting to 20 and knowing the alphabet, had higher expectations for their child's educational attainment, had more restrictions on watching television, and were more likely to have taken their child to the library. On the other hand, in comparison with Asian American parents, European American parents more frequently read to their child, talked about nature or did science projects with their child, and played games with their child. European American parents also were more likely than Asian American parents to have volunteered in their child's classroom, and attended a parent-teacher conference, a school event, and an open house or back-to-school night.

Figure 1. Measurement Model.



Note. All latent factor covariances are unconstrained both within and across categories. All unique error variances of observed variables for single indicator factors are constrained to 10% of the variance of the observed variable.

Figure 2. Alternative Conceptual Models of Relations Among Parent Education, Beliefs, Expectations (Predictors), Home Involvement, and Non-Home Involvement.



A significant gender main effect for building things with their child, $F(1,12336) = 69.34, p < .001$, indicated that parents were more likely to engage in these activities with sons than with daughters. The main effect of gender on building things was qualified by a significant ethnicity x gender interaction, $F(1,12336) = 8.01, p < .01$, indicating that the gender difference is more pronounced with European American parents in comparison with Asian American parents. Because only 1 out of the 17 items was influenced by the child's gender, this demographic factor was not expected to confound the results.

Finally, controlling for parent age and education did not alter significant ethnic group differences in any of the main analysis variables; thus, parent age and education differences between Asian American and European American groups were not expected to confound the results.

Before conducting the full structural equation model tests, the measurement portion of the model was developed and tested to establish relations between the observed and latent constructs. Direct comparisons of the measurement model between groups illustrated that factor loadings of multiple-indicator latent factors did not significantly differ across groups, thus illustrating that the constructs were being measured in the same way.

Structural Models

Four conceptual models, as previously described, were tested (see Figure 2). Table 2 presents the fit indices for the four structural models (models A2-A5 and E2-E5). *A priori* models were examined separately for each ethnic group. According to the change in chi-square tests for nested models, the fully saturated model was selected as the best-fitting *a priori* model for both groups. With regard to hypothesis 1, rejecting Models C and D indicated that there are significant effects of parents' beliefs, expectation, and education on *both* home and non-home parent involvement. Rejecting Model B provided support for the second hypothesis, that there are significant effects of parents' home involvement on parents' non-home involvement. Modifications to the final *a priori* model by ethnic group, described below, further examined the study hypotheses.

Final models were developed separately for each ethnic group from the fully saturated model. According to the *t*-values for individual structural parameters provided in the LISREL output, 15 nonsignificant parameters were fixed to zero for the Asian American final model and 5 nonsignificant parameters were fixed to zero for the European American final model. Figures 3 and 4 represent the Asian American and European American final models, respectively. The numerical values next to the paths in Figures 3 and 4 are standardized parameter estimates of direct effects.

Asian American Final Model. The first hypothesis focused on the influence of Predictor factors on both Home and Non-Home Involvement factors. Parent education had a positive total effect on all home involvement factors (family rules for watching TV, .09; home activity involvement, .33; and home literacy involvement, .38) and all non-home involvement factors (school participation, .47; educational activities, .41; and parent-teacher conference attendance, .10). Table 3 shows all direct and indirect effects that contribute to the total effects.

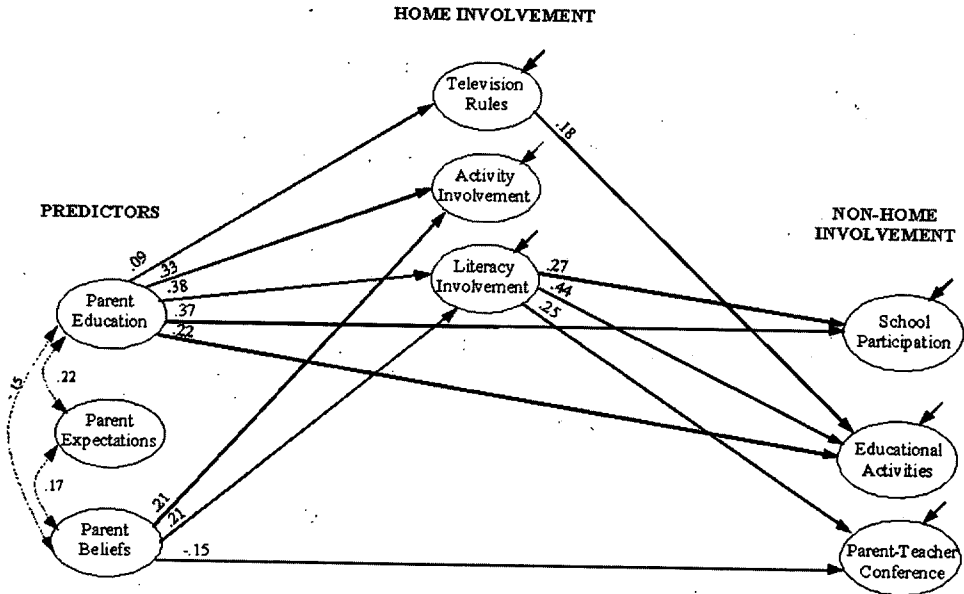
Table 2.

Summary of Model Fit Indices for Each Ethnic Group

Model	χ^2 test			Change in χ^2 test*		
	χ^2	df	p<	χ^2	df	p<
<i>Asian American sample</i>						
A1. Measurement model	147.55	103	.001			
A2. Fully Saturated Structural Model (A)	147.55	103	.001			
A3. Constrained Home to Non-Home Inv. (B)	203.11	112	.001	55.56	9	.001
A4. Constrained Predictor to Non-Home Inv. (C)	191.93	112	.001	44.38	9	.001
A5. Constrained Predictor to Home Inv. (D)	218.94	112	.001	71.39	9	.001
A6. Fully Saturated with 15 Parameters Fixed to Zero	161.59	118	.001	14.04	15	ns
<i>European American sample</i>						
E1. Measurement model	1163.10	103	.001			
E2. Fully Saturated Structural Model (A)	1163.10	103	.001			
E3. Constrained Home to Non-Home Inv. (B)	2120.57	112	.001	957.47	9	.001
E4. Constrained Predictor to Non-Home Inv. (C)	1290.87	112	.001	127.77	9	.001
E5. Constrained Predictor to Home Inv. (D)	2010.04	112	.001	846.94	9	.001
E6. Fully Saturated with 5 Parameters Fixed to Zero	1173.58	108	.001	10.48	5	ns

Note: GFI = Goodness of Fit Index; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; see text for description of models and fit indices. Letters next to model descriptions refer to Figure 2. *All model comparisons are with the fully saturated structural for the respective ethnic group.

Figure 3. Final Asian American Model.



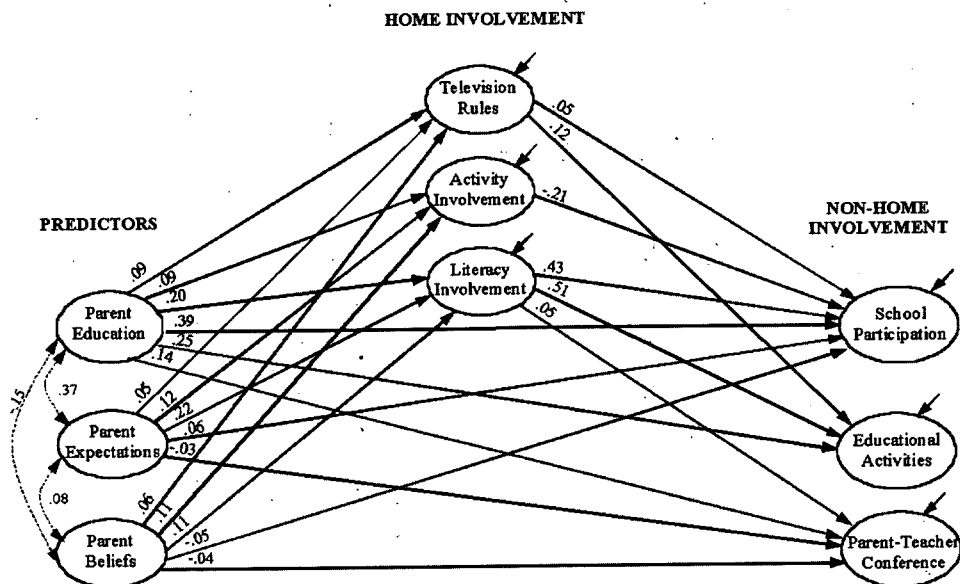
Note. Standardized parameter estimates are presented. All Home and Non-Home Involvement factor unique variances and covariances are free.

There were no significant effects of parent expectations on any home or non-home involvement factors. This finding may be due, in part, to the relatively low variability (perhaps a function of a ceiling effect) in expectations for the Asian sample. However, parent beliefs had a positive total effect on two home involvement factors (activity involvement, .21; literacy involvement, .21), and two non-home involvement factors (school participation, .06; educational activities, .09). Parent beliefs also had a negative total effect on parent-teacher conference attendance (-.10). In sum, parent education is the strongest predictor of involvement, with parent beliefs having notable influence on home involvement, but much smaller influence on non-home involvement. These results provide partial support for hypothesis 1.

With regard to hypothesis 2, which stated that home involvement should *not* be related to non-home involvement for Asian American parents, half of the relationships examined were not significant. In particular, parents' activity involvement was not significantly related to any of the non-home involvement factors. Furthermore, television rules significantly predicted only one of the non-home involvement factors (educational activities, .18). Although these results provide support for hypothesis 2, parents' home literacy involvement had a positive total effect on all three non-home involvement factors (school participation, .27; educational activities, .44; and parent-teacher conference attendance, .25), and was the strongest predictor of parents' non-home involvement. Possible reasons for this finding are examined in the discussion section.

European American Final Model. With respect to the first hypothesis, parent education had a positive total effect on all home involvement factors (literacy involvement, .20; activity

Figure 4. European American Final Model.



Note. Standardized parameter estimates are presented. All Home and Non-Home Involvement factor unique variances and covariances are free.

involvement, .09; television rules, .09), as well as all non-home involvement factors. There was a total positive effect of parent education on school participation (.46), educational activities (.37), and parent-teacher conference attendance (.15).

Parent expectations had a total positive effect on all three home involvement factors (literacy involvement, .22; activity involvement, .13; and television rules, .05) and two non-home involvement factors (school participation, .13; educational activities, .12). Parent beliefs had a significant total effect on all three home involvement factors (television rules, -.06; activity involvement, .11; literacy involvement, .11) and two non-home involvement factors (school participation, -.09; educational activities, .07). Providing support for hypothesis 1, parent beliefs and expectations had significant total effects on a number of both home and non-home involvement factors. It also is important to note that the total effects of parent expectations and beliefs on parents' engagement in educational activities were entirely indirect, and primarily operated through home literacy involvement.

Examination of hypothesis 2, which stated that home involvement factors should significantly predict non-home involvement factors for European American parents, illustrated that there were several significant effects of home involvement on non-home involvement, although not all of these were positive. Home literacy involvement strongly predicted school participation (.43) and engagement in educational activities (.51), with a much weaker, although still significant, effect on parent-teacher conference attendance (.05). Family rules for watching television positively predicted parents' school participation (.05) and engagement in educational activities (.12) during the school year, although the former relationship was notably weak. Finally, contrary to predictions, parents' home activity involvement had a

Table 3. Standardized Direct, Indirect, and Total Effects of Predictor Factors on Non-Home Involvement Factors for Final Models

Indicator	School Participation		Educational Activities		Parent-Teacher Conference		Total
	Direct	Indirect	Direct	Indirect	Direct	Indirect	
<i>Separate Final Models^a</i>							
<i>Asian American</i>							
Education	.37	.10	.23	.18	.00	.10	.10
Expectations	.00	.00	.00	.00	.00	.00	.00
Beliefs	.00	.06	.00	.09	-.15	.05	-.09
<i>European American</i>							
Education	.39	.07	.25	.11	.14	.01	.15
Expectations	.06	.07	.00	.12	-.03	.01	-.02 ^b
Beliefs	-.05	.03	.00	.06	-.04	.01	-.03
<i>Two-group final model^c</i>							
Education	.39/.33	.07/.10**	.26/.21	.11/.18**	.13	.01/.05***	.14/.18**
Expectations	.06/-.09*	.07/.06	.00	.12/.10	-.02	.01/.03***	-.01/.01
Beliefs	-.05/-.03	.03/.02	.00	.06/.04	-.04/-.03	.01/.01***	-.04/-.02

Note: All indirect effects are via Home Involvement mediators. Effects of Predictor factors on Home Involvement factors and effects of Home Involvement factors on Non-Home Involvement factors were direct only; estimates are presented in Fig. 3 (separate final models) and Fig. 4 (two-group final model).

^a LISREL within group standardized estimates are presented.

^b Coefficient is not significant within ethnic group at $p < .05$.

^c LISREL within group standardized estimates are presented. Estimates that significantly differ by ethnic group are indicated by * $p < .05$; ** $p < .01$; and *** $p < .001$.

significantly negative effect on parents' school participation (-.21). Thus, providing partial support for hypothesis 2, two aspects of parents' home involvement had a significant effect on all types of non-home involvement in the predicted direction. One effect, however, was in the opposite direction of predictions, and this unexpected finding is further discussed later in the paper.

Two-Group Comparisons

Two-group comparisons were tested to examine the second part of the hypotheses that focused on between-group variation in predictive relationships among the latent constructs. As a reminder, hypothesis 1 indicated there should be no between-group differences in the predictive relationship of Predictor factors on Home and Non-Home Involvement factors. Hypothesis 2, on the other hand, indicated there *should* be significant between-group differences in the predictive relations of Home Involvement factors on Non-Home Involvement factors.

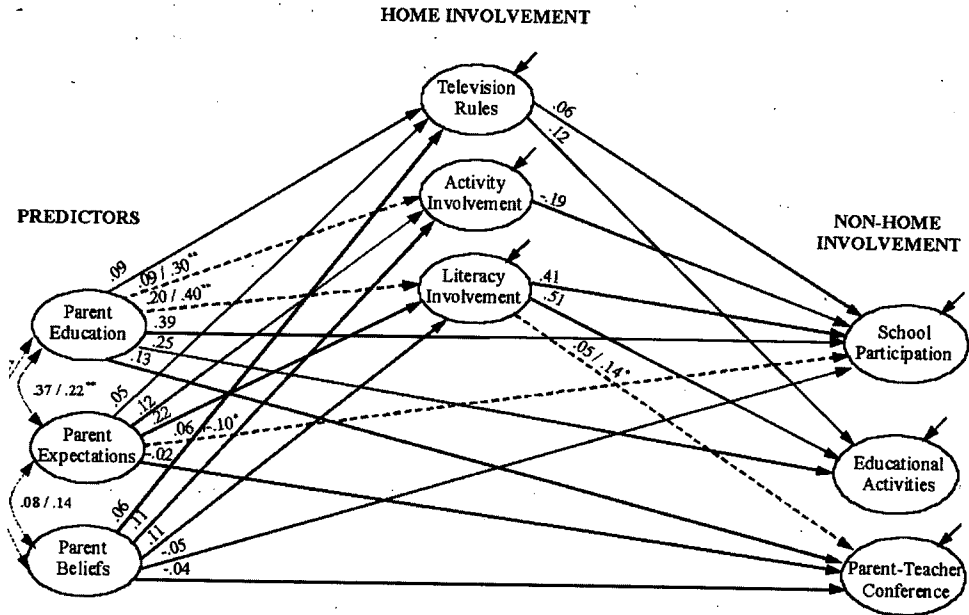
To do this, the European American final model was run with the Asian American sample, and vice versa. Based on these analyses, the European American final model was adopted for two-group comparison analyses. The final accepted two-group model provided a good fit to the data ($\chi^2 = 1368.14$, $df = 243$; $GFI = .99$; $CFI = .96$; $RMSEA = .02$).

With respect to hypothesis 1, which stated that the relationships between Predictor and Involvement factors should *not* differ between groups, the free structural parameters (see Figure 5) indicated that only one direct effect of parent expectations and beliefs on parent involvement significantly differed between groups. European American parents showed a small but significant positive direct effect of parent expectations on school participation (.06), while this effect in the Asian American sample was small but significant and negative (-.09). Thus, support is provided for hypothesis 1.

With respect to hypothesis 2, which stated that the relationships between Home and Non-Home Involvement factors *should* differ between groups, only the direct effect of home literacy involvement on parent-teacher conference attendance significantly differed between groups. Asian American parents demonstrated a stronger positive relationship between these two involvement constructs than did European American parents (.18 and .05, respectively). Thus, although within-group models provided support for hypothesis 2, between-group comparisons do not fully support this hypothesis.

Figure 5 shows that the majority of direct effects examining both hypotheses remained constrained across groups (18 out of 22) without decrement in model fit. Results therefore indicate that there are very few differences between Asian American and European American samples in predictors of parent involvement, as well as in the structural relationships between different types of parent involvement across multiple contexts. In fact, it appears that most between-group distinctions are due to the significantly different relationships between parent education and home literacy and activity involvement, both in the direct effects as well as their indirect contributions to the relationship between parent education and non-home involvement. Thus, between-group comparisons support hypothesis 1, but not hypothesis 2.

Figure 5. Final Two-Group Model.



Note. Dashed arrows represent parameters that are free between groups (* $p < .05$; ** $p < .01$). Common metric completely standardized parameter estimates are presented. For parameters that are free across ethnic groups, the European American estimate is presented first and the Asian American estimate, second. All Home and Non-Home Involvement factor unique variances and covariances are free between groups.

DISCUSSION

Parent involvement includes a broad range of parent behaviors, such as engaging children in cognitively-stimulating activities at home, structuring the home environment so that it is conducive to children's learning, participating in school activities, and exposing children to community resources that enhance their educational experience. Because involvement practices are important for many aspects of the optimal development of children, families, schools, and communities, researchers and practitioners have a strong interest in understanding the predictors of parent involvement. The purpose of this study is to examine both within- and between-group variation in Asian American and European American parents on (1) parent demographic factors (education) and parent psychological factors (beliefs and expectations) as predictors of parent involvement, and (2) the predictive relationships among different types of parent involvement between home and non-home contexts. Examining these two goals with large and nationally representative samples of Asian American and European American parents allowed for further examination of the role of parents' academic beliefs in shaping their involvement practices.

Before discussing within- and between-group structural relationships, however, it is important first to note the consistency of our results with the existing literature regarding ethnic group differences in mean levels for the parent factors. Asian American parents more strongly

endorse the importance of learning early academic skills and hold higher expectations for their children than do European American parents (Goyette and Xie, 1999). Asian American parents set more rules for watching television at home, indicating a higher level of indirect involvement at home (Schneider and Lee, 1990), and become more involved in non-home and non-school based educational activities than do European American parents (Peng and Wright, 1994). European American parents, however, are more involved in school events than are Asian American parents (Mau, 1997) and are more involved in home activities that may be deemed more indirectly related to children's cognitive development. The relevance of these findings is discussed later with respect to potential direct vs. indirect cognitive benefits for children of different types of parent involvement.

Predictors of Parent Involvement

The purpose of hypothesis 1 was to examine parents' beliefs about education and their own educational attainment as contributors to their involvement practices. Hypothesis 1 specifically stated that the effects of parent education, beliefs, and expectations on parent involvement will be significant and positive for both groups, and will not differ between groups. Within-group results are first discussed in relation to predictions, followed by between-group results.

Within-group results illustrated that, in support of hypothesis 1 and consistent with previous research (Hoover-Dempsey et al., 1992; Lareau, 1987; Smith et al., 1997), parent education has a strong influence on most aspects of parent involvement for both groups. However, parent beliefs about early academic skills and expectations for their child have fewer and weaker effects, overall.

Within the Asian American group, parents who more highly value children's early academic skill development are more likely to participate in home activities that may help their children develop those skills. Thus, parents' involvement practices reflect one aspect of their belief systems about education (in this case, the value of early academic skills). Interestingly, however, parent beliefs have a negative effect on parent-teacher conference attendance. Clearly, the model represents a complex set of relations among beliefs and involvement practices. As previously mentioned, parents' beliefs about the importance of children learning specific academic skills before entering kindergarten is one reflection of the larger Asian cultural value of preparing or socializing children for academic success (Bhattacharya, 2000; Chao, 2000a; Hwa-Froelich and Westby, 2003). It therefore follows that Asian American parents who more strongly endorse these beliefs compared with other Asian American parents may hold stronger core Asian values, academic socialization in particular. Thus, Asian American parents who more strongly support Asian cultural values also may be more likely to participate in home learning activities (Huntsinger et al., 1997; Schneider and Lee, 1990) and less likely to seek communication with their child's teacher. Several researchers have demonstrated Asian parents' deference to school authority and reluctance to seek communication with their child's teachers as core Asian values (Lee and Manning, 2001; Yao, 1985). This explanation, however, points to a third variable, level of acculturation or assimilation of parents, which was not measured in the current study. Presumably, more acculturated and/or assimilated Asian American parents would place relatively less emphasis

on the core Asian value of academic socialization and deference to school authority than would parents who are less acculturated.

Within-group examination of European American parents provided support for hypothesis 1. Parent education predicted all types of parent involvement, although the effects on TV rules and activity involvement were notably lower than most other effects. Parent beliefs and expectations predicted all types of parent involvement except for educational activities outside of the home, although there were significant indirect effects on educational activities via home literacy involvement and TV rules. Although between-group comparisons indicated that parents' beliefs and expectations significantly differed between Asian American and European American parents, that these factors positively predicted parents' involvement in both groups illustrates that parents' academic beliefs are important contributors to parents' involvement.

As predicted, there were very few significant differences in predictive relationships of parent beliefs, education, and expectations on parent involvement between ethnic groups. Perhaps most interesting is that the relationship between parent beliefs and home involvement did not significantly differ across groups. This is consistent with educational niche theory, which indicates that parents' beliefs about education (in this case, the importance of early academic skills) will influence their parenting practices. The value that both groups of parents place on early academic skills was similarly associated with their involvement in home activities that should promote development of those skills.

Parent Involvement Across Contexts

The purpose of the second hypothesis was to examine parents' home involvement as a predictor of parents' non-home involvement during the school year. As previously discussed, parent academic beliefs may include either an overarching concept of involvement that operates across contexts (as predicted for European Americans) or a context-specific concept of involvement (as predicted for Asian Americans). Thus, the second hypothesis stated that the effects of home parent involvement on non-home parent involvement will be positive and significant in the European American group, nonsignificant in the Asian American group, and significantly different between groups, with stronger effects in the European American group.

Within-group results provided partial support for this hypothesis. Within the Asian American group, half of the predictive relationships were not significant. It appears that one particular aspect of home involvement, literacy involvement, is related to all types of parent involvement in non-home contexts, but the remaining two aspects of home involvement showed little relation with parent involvement in non-home settings. It may be that Asian American parents' beliefs about their role in their child's education, in general, influence the relationship between these variables across contexts. Because home literacy involvement is most directly related to children's early formal schooling, given the strong emphasis on reading skills in early education (Bursuck et al., 2002), it seems reasonable that this factor is related to parents' school participation. However, parents' activity involvement and indirect structuring of their child's time may not be considered as directly related to children's early academic skill development. Asian American parents who believe that they should be directly involved in

their child's academic development may be more likely to become involved in both home literacy and academic-related activities outside of the home.

Once again, parents' level of assimilation or acculturation to the values of the American school system may play a role. That is, Asian American parents who are involved at home and who are familiar and comfortable with the notion of participating in their child's school may show a stronger relationship between home and non-home involvement than parents who also are involved at home but who more strongly endorse traditional Asian cultural beliefs that parents should not become involved at their child's school. The ECLS-K did not have available information on the length of time parents had lived in the United States, which may be an important factor to consider in future studies on Asian American parent involvement.

Within the European American sample, all three types of home involvement predicted school participation, although parents who engaged in higher levels of home activity involvement were *less* likely to participate at school. It may be that, as explained above, activity involvement is indirectly related to children's early academic skills development, and some of these activities may be considered "fun" rather than "educational." Therefore, parents who are more involved in these "fun" activities might be less inclined to become involved in school-based activities.

Although the between-group results did not support the hypothesis, within-group analyses suggest that there is a notable relationship among parent involvement across contexts in the European American sample. While recognizing that three of the nine possible predictive relationships were not significant, the two-thirds that were significant provide partial support for the existence of a general construct of "involvement" in European American culture that is not context-specific.

Strengths, Limitations, and Future Directions

Given the wide ethnic variability within the groups examined in this study, interpretation of comparative analyses based on broad group definitions should be tentative. In particular, scholars have theorized that results from grouped analyses of people from all Asian backgrounds (i.e., "Asian Americans") may not accurately reflect within-group variation in cultural values (Blair and Qian, 1998). On the other hand, while recognizing within-group variability, researchers also have suggested that there are commonalities across subgroups of Asian Americans, primarily due to Chinese culture, specifically Buddhism and Confucianism, as a historically prominent influence on many Asian cultures (Dana, 1993; Foster et al., 1996; Li, 2004; Ng, 1999; Uba, 1994). Recent research has provided empirical evidence that different Asian American ethnic groups recognize common core cultural values (Kim et al., 2001) and that educational aspirations of Asian American students from various ethnic backgrounds are more similar than different (Kim et al., 1998). Unfortunately, data on parents' specific ethnic groups were not available in the ECLS-K to conduct comparative analyses, and future studies should examine the parent involvement practices of subgroups that fall within larger racial and ethnic categorizations. Still, this analysis represents an important step in the direction of ethnic comparisons, and the structural equation modeling framework allowed us to test similarities and differences across groups.

The use of longitudinal data from large, nationally representative samples provided a key strength of this study, allowing us to consider temporal, if not causal, relations among the constructs at the population level. The capacity to follow families as their children make the transition to formal schooling allows for important advances in our understanding of ways in which this major life transition can influence developmental pathways; such major life transitions can provide important vantage points for examining contextual mediators and person-context interactions (Schulenberg and Maggs, 2002; Sy and Schulenberg, 2003).

There are some noteworthy limitations of this data set, particularly regarding the measures. We were limited to measures available in the data set, a common and perhaps forgivable limitation of valuable national longitudinal studies (Brooks-Gunn et al., 1991). Some of the reliability coefficients were relatively low, suggesting some lack of precision in the measures – still, our primary emphasis on factor analysis in creating and using the scales allowed us to separate measurement error from the structural components of the models.

Conclusions based on these findings also must be tempered by limitations associated with the specified causal sequence. Placing parent education, expectations, and beliefs causally prior to parent involvement represented the most reasonable recursive model to test; nevertheless, some of the effects probably reflect multidirectional effects. It is likely that parents' expectations about their child's educational attainment are shaped by their academic interactions with their child and their child's teacher. Additionally, despite categorizing family rules for watching television based on the conceptualization of the home and non-home contexts of parent involvement, it is possible that placing items collected at wave 2 causally prior to items collected at the same wave (e.g., effects of TV rules on non-home involvement) may be inappropriate. Nonetheless, the categorization of television rules as a home involvement factor was based on the conceptualization that this factor most accurately represented indirect involvement at home.

Finally, a major strength of the current study is the focus on predictors of parent involvement, which has received very little attention in the literature (Grolnick et al., 1997). The purpose was not to examine the predictive relationship between parent involvement and children's achievement, yet the study was informed by research that implicates parent involvement as an important factor in children's educational success (Christenson, 1999). Further understanding on how parent characteristics shape their involvement behaviors potentially could be used to help educators become more sensitive to individual variation in these practices.

CONCLUSIONS AND IMPLICATIONS

Findings from the current study suggest that parents' beliefs about early education, stemming from their larger cultural values, influence the ways in which parents become involved in their child's early education. In particular, investigation of within-group variation points to the importance of considering parents' ethnic background, not only in terms of overall levels of involvement, but perhaps even more importantly when examining predictors of and relations among multiple aspects of parent involvement. It also is clear that the traditional definition of parent involvement as participation in school activities may not provide an accurate

assessment of the multiple ways that parents may enhance and promote their child's early education.

Cultural values can shape parents' education-related behaviors in ways that may not be obvious. If teachers are aware of the way in which these values influence parents' decisions to become involved at home and/or school, they can more effectively support and encourage involvement practices that are appropriate in the cultural context (Lee and Manning, 2001). This is especially important in light of the No Child Left Behind Act, which requires schools to increase parental involvement in children's education (U.S. Department of Education, 2005). In order to accomplish this goal, researchers and practitioners must consider the variety of ways in which parents may become involved in their children's early education, as well as the role of ethnicity in parent involvement. Policies and programs that examine how to get parents involved in children's schooling may need to move beyond the traditional definition of parent involvement and further examine within-group variation in predictors of parent involvement if they are to develop culturally sensitive practices for promoting and enhancing family support for children's early education.

REFERENCES

- Baker, Amy J. L., Susan Kessler-Sklar, Chaya S. Piotrkowski, and Faith Lamb Parker.
1999 "Kindergarten and first-grade teachers' reported knowledge of parents' involvement in their children's education." *Elementary School Journal* 99: 367-380.
- Beyer, Sylvia.
1995 "Maternal employment and children's academic achievement: Parenting styles as mediating variable." *Developmental Review* 15: 212-253.
- Bhattacharya, Gauri.
2000 "The school adjustment of South Asian immigrant children in the United States." *Adolescence* 35 : 77-85.
- Brooks-Gunn, Jeanne, Erin Phelps, and Glen H. Elder.
1991 "Studying lives through time: Secondary data analyses in developmental psychology." *Developmental Psychology* 27: 899-910.
- Bursuck, William D., Dennis D. Munk, Cynthia Nelson, and Margaret Curran.
2002 "Research on the prevention of reading problems: Are kindergarten and first grade teachers listening?" *Preventing School Failure* 47: 4-9.
- Chan, Sam.
2004 "Families with Asian roots," Pp. 219-298 in E. W. Lynch and M. J. Hanson (ed.), *Developing cross-cultural competence: A guide for working with children and their families*. Baltimore, MD: Brookes Publishing.
- Chao, Ruth K.
1995 "Chinese and European American cultural models of the self reflected in mothers' childrearing beliefs." *Ethos* 23: 328-354.
1996 "Chinese and European American mothers' beliefs about the role of parenting in children's school success." *Journal of Cross-Cultural Psychology* 27: 403-423.
2000a "Cultural explanations for the role of parenting in the school success of Asian-American children," Pp. 333-363 in R. Taylor (Ed.), *Resilience across contexts: Family, work, culture, and community*. Mahwah: Lawrence Erlbaum.

- 2000b "The parenting of immigrant Chinese and European American mothers: Relations between parenting styles, socialization goals, and parental practices." *Journal of Applied Developmental Psychology* 21: 233-248.
- Choi, Y. Elsie, Janine Bempechat, and Herbert P. Ginsburg.
1994 "Educational socialization in Korean American children: A longitudinal study." *Journal of Applied Developmental Psychology: Special Issue: Diversity and development of Asian Americans* 15: 313-318.
- Christenson, Sandra L.
1999 "Families and schools: Rights, responsibilities, resources, and relationships," Pp. 143-177 in R. C. Pianta and M. J. Cox (ed.), *The Transition to Kindergarten*. Baltimore: Brookes Publishing.
- Collignon, Francine F., Makna Men, and Serei Tan.
2001 "Finding ways in: Community-based perspectives on Southeast Asian family involvement with schools in a New England state." *Journal of Education for Students Placed at Risk* 6: 27-44.
- Dana, Richard H.
1993 *Multicultural assessment perspectives for professional psychology*. Needham Heights, MA: Allyn & Bacon.
- Desimone, Laura.
1999 "Linking parent involvement with student achievement: Do race and income matter?" *Journal of Educational Research* 93: 11-30.
- Epstein, Joyce L.
1990 "Single parents and the schools: Effects of marital status on parent and teacher interactions," Pp. 91-121 in M. Hallinan, D. Klein, and J. Glass (ed.), *Changes in Societal Institutions*. New York: Plenum.
- Foster, S. L., C. R. Martinez Jr., and A. M. Kulberg.
1996 "Race, ethnicity, and children's peer relations," Pp. 133-172 in T. H. Ollendick and R. J. Pring (ed.), *Advances in Clinical Child Psychology*, vol. 18. New York: Plenum Press.
- Gallimore, Ronald, Claude Goldenberg, and Thomas Weisner.
1993 "The social construction and subjective reality of activity settings: Implications for community psychology." *American Journal of Community Psychology* 21: 537-559.
- García Coll, Cynthia, Daisuke Akiba, Natalia Palacios, Benjamin Bailey, Rebecca Silver, Lisa DiMartino, and Cindy Chin.
2002 "Parental involvement in children's education: Lessons from three immigrant groups." *Parenting: Science & Practice* 2: 303-324.
- Goodnow, Jacqueline J. and Andrew C. Collins.
1990 *Development according to parents: The nature, sources, and consequences of parents' ideas*. Hove, UK: Lawrence Erlbaum Associates.
- Goyette, Kimberly and Yu Xie.
1999 "Educational expectations of Asian-American youth: Determinants and ethnic differences." *Sociology of Education* 71: 24-38.
- Griffith, James.
1998 "The relation of school structure and social environment to parent involvement in elementary schools." *Elementary School Journal* 99: 53-80.

- Grolnick, Wendy S., Corina Benjet, Carolyn O. Kurowski, and Nicholas H. Apostoleris.
1997 "Predictors of parent involvement in children's schooling." *Journal of Educational Psychology* 89: 538-548.
- Grolnick, Wendy S. and Maria L. Slowiaczek.
1994 "Parents' involvement in children's schooling: A multidimensional conceptualization and motivational model." *Child Development* 65: 237-252.
- Gutman, Leslie Morrison and Vonnie C. McLoyd.
2000 "Parents' management of their children's education within the home, at school, and in the community: An examination of African-American families living in poverty." *Urban Review* 32: 1-24.
- Hill, Nancy E.
2001 "Parenting and academic socialization as they relate to school readiness: The roles of ethnicity and family income." *Journal of Educational Psychology* 93: 686-697.
- Hill, Nancy E. and Stracie A. Craft.
2003 "Parent-school involvement and school performance: Mediated pathways among socioeconomically comparable African American and Euro-American families." *Journal of Educational Psychology* 95: 74-83.
- Ho, David Y. F., Si-qing Peng, and Alice Cheng Lai.
2001 "Parenting in mainland China: Culture, ideology, and policy." *International Society for the Study of Behavioral Development Newsletter* 38: 7-9.
- Ho, Esther Sui-chu and J. D. Willms.
1996 "Effects of parent involvement on eighth-grade achievement." *Sociology of Education* 69: 126-141.
- Hoover-Dempsey, Kathleen V., Otto C. Bassler, and Jane S. Brissie.
1992 "Explorations in parent-school relations." *Journal of Educational Research* 85: 287-294.
- Huntsinger, Carol S., Paul E. Jose, Fong-Ruey Liaw, and Wei-Di Ching.
1997 "Cultural differences in early mathematics learning: A comparison of Euro-American, Chinese-American, and Taiwan-Chinese families." *International Journal of Behavioral Development* 21: 371-388.
- Hwa-Froelich, Deborah A. and Carol E. Westby.
2003 "Frameworks of Education: Perspectives of Southeast Asian Parents and Head Start Staff." *Language, Speech, & Hearing Services in Schools* 34: 299-319.
- Jöreskog, Karl G. and Dag Sörbom.
1996 *LISREL User's Guide (Version 8)*. Mooresville, IN: Scientific Software.
- Kerbow, David and Annette Bernhardt.
1993 "Parent intervention in the school: The context of minority involvement," Pp. 115-146 in B. Schneider and J. Coleman (ed.), *Parents, their children, and schools*. San Francisco: Westview Press.
- Kim, Bryan S. K., Peggy H. Yang, Donald R. Atkinson, Maren M. Wolfe, and Sehee Hong.
2001 "Cultural value similarities and differences among Asian American ethnic groups." *Cultural Diversity and Ethnic Minority Psychology* 7: 343-361.
- Kim, Eunjung.
2002 "The relationship between parental involvement and children's educational achievement in the Korean immigrant family." *Journal of Comparative Family Studies* 33: 529-563.

- Kim, Heather, Laura Rendon, and James Valdez.
1998 "Student characteristics, school characteristics, and educational aspirations of six Asian-American ethnic groups." *Journal of Multicultural Counseling and Development* 26: 166-176.
- Kim, Kyoungho and Ronald P. Rohner.
2002 "Parental warmth, control, and involvement in schooling: Predicting academic achievement among Korean American adolescents." *Journal of Cross-Cultural Psychology* 33: 127-140.
- Kohl, Gwynne O., Liliana J. Lengua, and Robert J. McMahon.
2000 "Parent involvement in school: Conceptualizing multiple dimensions and their relations with family and demographic risk factors." *Journal of School Psychology* 38: 501-523.
- Ladd, Gary W.
1996 "Shifting ecologies during the 5 to 7 year period: Predicting children's adjustment during the transition to grade school." In A. Sameroff and M. M. Haith (ed.), *The Five to Seven Year Shift: The Age of Reason and Responsibility*. Chicago: The University of Chicago Press.
- Lareau, Annette.
1987 "Social class differences in family-school relationships: The importance of cultural capital." *Sociology of Education* 60: 73-85.
- Lee, Guang L. and Lee Manning.
2001 "Working with Asian parents and families." *Multicultural Education* 9: 23-25.
- Li, Jin.
2004 "I learn and I grow big': Chinese preschoolers' purposes for learning." *International Journal of Behavioral Development* 28: 116-128.
- Martini, Mary.
1995 "Features of home environments associated with children's school success." *Early Child Development and Care* 111: 49-68.
- Mau, Wei-Cheng.
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.
- Morrow, Robert D.
1989 "Southeast-Asian parental involvement: Can it be a reality?" *Elementary School Guidance & Counseling: Special Issue: Cross-Cultural Counseling* 23: 289-297.
- National Center for Education Statistics.
1992 *A profile of American eighth-grade mathematics and science instruction (Technical Report No. NCES 92-486)*. Washington, DC: U.S. Government Printing Office.
- Ng, Kit S.
1999 *Counseling Asian families from a systems perspective*. Alexandria, VA: American Counseling Association.
- Okagaki, Lynn and Peter A. Frensch.
1998 "Parenting and children's school achievement: A multi-ethnic perspective." *American Educational Research Journal* 35: 123-144.
- Parmar, Parminder, Sara Harness, and Charles Super.
2004 "Asian and Euro-American parents' ethnotheories of play and learning: Effects on pre-school children's home routines and school behavior." *International Journal of Behavioral Development* 28: 97-104.

- Peng, Samuel S. and DeeAnn Wright.
1994 "Explanation of academic achievement of Asian American students." *Journal of Educational Research* 87: 346-352.
- Reynolds, Arthur J.
1992 "Comparing measures of parental involvement and their effects on academic achievement." *Early Childhood Research Quarterly* 7: 441-462.
- Reynolds, Arthur J., Roger P. Weissberg, and Wesley Kasprow.
1992 "Prediction of early social and academic adjustment of children from the inner-city." *American Journal of Community Psychology* 20: 599-624.
- Schneider, Barbara and Yongsook Lee.
1990 "A model for academic success: The school and home environment of East Asian students." *Anthropology & Education Quarterly* 21: 358-377.
- Schulenberg, John and Jennifer L. Maggs.
2002 "A developmental perspective on alcohol use and heavy drinking during adolescence and the transition to young adulthood." *Journal of Studies on Alcohol, Supplement* 14: 54-70.
- Smith, Emilie Phillips, Christian M. Connell, Gary Wright, Monteic Sizer, and Jean M. Norman.
1997 "An ecological model of home, schools, and community partnerships: Implications for research and practice." *Journal of Educational and Psychological Consultation* 8: 339-360.
- Sun, Yongmin.
1998 "The academic success of East-Asian-American students: An investment model." *Social Science Research* 27: 432-456.
- Super, Charles M. and Sara Harkness.
1986 "The developmental niche: A conceptualization at the interface of child and culture." *International Journal of Behavioral Development* 9: 545-569.
- Sy, Susan R. and John E. Schulenberg.
2003 "Developmental transitions across the lifespan," Pp. 173-176 in J. R. Miller, L. B. Schiamberg, R. M. Lerner, and P. M. Anderson (ed.), *Encyclopedia of Human Ecology*. Santa Barbara: ABC-CLIO.
- Uba, Laura.
1994 *Asian-Americans: Personality Patterns, Identity and Mental Health*. New York: Guilford Press.
- U. S. Department of Education.
2005 Facts and terms every parent should know about NCLB. Retrieved December 1, 2005 (<http://www.ed.gov/nclb/overview/intro/parents/parentfacts.html>).
- Wu, David Y. H. and Wen-Shing Tseng.
1985 "Introduction: The characteristics of Chinese culture," Pp. 29-42 in W. S. Tseng and D. Y. H. Wu (ed.), *Chinese culture and mental health*. Orlando: Academic Press.
- Yao, Esther L.
1985 "A comparison of family characteristics of Asian American and Anglo-American high achievers." *International Journal of Comparative Sociology* 16: 198-208.



COPYRIGHT INFORMATION

TITLE: Predictors of Parent Involvement across Contexts in
Asian American and European American Families
SOURCE: J Comp Fam Stud 38 no1 Wint 2007

The magazine publisher is the copyright holder of this article and it is reproduced with permission. Further reproduction of this article in violation of the copyright is prohibited. To contact the publisher:
<http://www.acs.ucalgary.ca/~sociolog/5/jcfs.html>