

Parental Engagement in Children's Education: Motivating Factors in Japan and the U.S.

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Abstract

In spite of evidence indicating the benefits of parental engagement for children's achievement, little is known about the factors that contribute to parental engagement in countries outside the United States. In this study, we addressed this gap in the literature by examining teachers' outreach in addition to maternal psychological elements (maternal role construction and parenting self-efficacy) in predicting Japanese and American mothers' home- and school-based engagement at the second grade level. We found that these factors uniquely and significantly contributed to home-based engagement (homework supervision and engagement in cognitive activities) and school-based engagement in both countries. Furthermore, these factors accounted for between-country differences in the extent of home-based engagement. Between-country differences in school-based engagement remained significant even after the three factors were entered, suggesting a need for additional theorizing in contexts outside the U.S. Findings of this study also highlight the importance of teacher invitations in stimulating parents' engagement.

Key Words: engagement, home, school, parenting self-efficacy, parental role construction, teachers, parents' involvement, Japanese mothers, American

Introduction

Promoting parental engagement in children's education has become a major goal for both policymakers and educators in the U.S. Ample evidence has

demonstrated that parental engagement benefits children's development and academic progress (Fan & Chen, 2001; Grolnick & Slowiaczek, 1994; Pomerantz, Moorman, & Litwack, 2007). Accordingly, researchers have endeavored to identify factors that facilitate parents' willingness and ability to become engaged (Anderson & Minke, 2007; Hoover-Dempsey & Sandler, 1997; Sheldon, 2002). Much of this work has been guided by a theoretical model developed by Hoover-Dempsey and her associates which identifies the following determinants of parental engagement in children's schooling: (a) parents' sense of responsibility for supporting their child's learning; (b) parenting self-efficacy in helping their children; (c) invitations from teachers; (d) invitations from children; and (e) family resources such as time, knowledge, and skills (Hoover-Dempsey et al., 2005; Walker, Wilkins, Dallaire, Sandler, & Hoover-Dempsey, 2005). Empirical studies have generally supported the Hoover-Dempsey framework for middle class families in the U.S. (Anderson & Minke, 2007; Green, Walker, Hoover-Dempsey, & Sandler, 2007; Park & Holloway, 2013; Sheldon, 2002; Walker, Ice, Hoover-Dempsey, & Sandler, 2011).

In spite of increasing evidence indicating the benefits of parental engagement in international contexts (e.g., Buchmann, 2002; Gao, 2012; Yamamoto & Brinton, 2010), little effort has been made to examine the factors that contribute to it in countries outside the U.S., and little is known about whether the model can be generalized to other countries. Indeed, it is likely that cultural factors affect parents' decisions regarding engagement above and beyond the factors identified by Hoover-Dempsey and colleagues, as has been found in studies of immigrants and members of nondominant ethnic groups within the U.S. (García Coll & Marks, 2009; Greenfield, Quiroz, & Raeff, 2000; Park & Holloway, 2013; Sy & Schulenberg, 2005; Trumbull, Rothstein-Fisch, Greenfield, & Quiroz, 2001; Trumbull, Rothstein-Fisch, & Hernandez, 2003; Walker et al., 2011). By identifying the factors that promote parental engagement in various cultural contexts, researchers can assist in the development of effective policies and practices in other nations as well as for American families from diverse cultural and social backgrounds. In addition, insights based on values and practices in other cultural contexts can shed light on those of the dominant culture reflected in U.S. schooling.

In this study, we focused on three determinants of parental engagement from the broader range identified in the Hoover-Dempsey model: parental role construction, parenting self-efficacy, and parents' perception of teacher invitations. Due to our focus on parents' psychological beliefs and school contexts across the two nations, we used family resources as controls and decided not to examine individual children's attributes. Because of the heightened maternal role in socializing and educating their children in Japan, we focused

on mothers in our examination of parental engagement. Of particular interest was the extent to which these three motivational factors were associated with Japanese and American mothers' home- and school-based engagement at the second grade level. While these two countries are comparable in terms of economic development, government structure, and educational system, the expectations of school staff regarding parental engagement differ in key respects, as we detail below.

Parental Engagement in Japan and the U.S.

The term *parental engagement*, also referred to as *parental involvement*, encompasses behaviors that directly or indirectly support a child's school experiences at home or school (Pomerantz et al., 2007). Home-based engagement includes parental assistance with homework and engagement in intellectually stimulating activities such as reading aloud or visiting a museum (Epstein, 1987; Pomerantz et al., 2007). Our review of the literature suggests that cultural expectations for home-based parental engagement are similar in Japan and the United States. In both countries, parents are often asked by the schools to monitor and support their children's completion of homework assignments. Japanese schools tend to be particularly explicit about what parents, especially mothers, should do with respect to helping with homework, and this practice seems to be clearly understood and reliably carried out by most mothers of elementary school children (Lewis, 1995; Yamamoto, 2015). Similarly, activities related to literacy such as visiting the library and reading aloud are commonly practiced (Pomerantz et al., 2007; Yamamoto & Brinton, 2010), even though social class differences in parental engagement in these activities appear in both countries (Dumais, 2002; Kariya, 2004; Lareau, 2003; Matsuoka, Nakamuro, & Inui, 2015).

School-based engagement includes such practices as communicating with teachers, helping in the classroom, attending school events, participating in parent-teacher conferences, and being involved in a parent-teacher organization (Epstein & Sanders, 2002). It is with respect to this type of engagement that we can identify more pronounced national differences. In the U.S., many parents exert considerable pressure to influence teachers' decisions and instructions regarding issues such as student testing, placement in special services, and retention decisions (Lareau, 2000). In Japan, parents are expected to attend parent-teacher conferences and school events but are discouraged from making special requests for their children or questioning teachers' decisions and practices (Okano & Tsuchiya, 1999; Onoda, 2013). Moreover, the nationally controlled school curriculum and the absence of academic tracks or ability

grouping in Japanese primary schools constrains parents' ability to customize or influence their children's school experience (Yamamoto, 2015). Because of these national differences, we expected that country differences would be more apparent with respect to the predictors of school-based than home-based engagement in our data.

What Factors Motivate Parental Engagement in Education?

Parental Role Construction

Parental role beliefs determine the range of parents' activities considered to be important and critical on behalf of the child (Eccles & Harold, 1996; Greenfield et al., 2000; Hoover-Dempsey et al., 2005; Hoover-Dempsey & Sandler, 1997). Parents construct their roles by considering their own expectations and those of people around them (e.g., teachers, friends). Within the U.S., many parents believe that supporting their children's cognitive, verbal, and educational development is a critical aspect of their role in addition to supporting their physical and social competence (Lareau, 2000; Okagaki & Sternberg, 1993; Valdés, 1996). Despite considerable within-country variation concerning parents' endorsement of particular behaviors, parental role construction has been established as a critical element predicting their engagement (Hoover-Dempsey & Sandler, 1997; Walker et al., 2011).

In Japan, many parents believe that supporting children's education, in addition to physical care and socialization experiences, is a mother's responsibility (Allison, 1996; Hirao, 2001; Holloway, 2000, 2010). However, not all Japanese mothers are as heavily involved in their children's schooling as has been commonly supposed by American researchers. First of all, many Japanese parents send their children to private enrichment programs, thus shifting responsibility to these institutions for their children's education (Kariya, 2004; Roesgaard, 2006). Additionally, as in the U.S., social class may play a role in shaping Japanese mothers' construction of their role vis-à-vis their children's schooling, and lower socioeconomic status (SES) Japanese mothers tend to leave the task of educating their children to teachers (Kondo, 1990; Yamamoto, 2015). These cultural patterns make it important to explore whether or not parental role construction is related to parental engagement both in Japan and the U.S.

Parenting Self-Efficacy

The construct of self-efficacy refers to "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3). Individuals with high self-efficacy in a particular area (e.g., supporting their children's education) exert effort in that area, persevere

in the face of difficulty, and respond resiliently to adversity (Bandura, 1997). This theory suggests that even if parents value education and realize the importance of parental support, they may decide not to be involved in their children's education if they do not feel capable of teaching, disciplining, or interacting with their children.

Empirical evidence in the U.S. has identified a strong link between parents' self-efficacy and their childrearing activities. Parents with high levels of parenting self-efficacy tend to build warm and affectionate relationships with their children and to persevere in their parenting actions (Coleman & Karraker, 1997; Teti & Gelfand, 1991). Parents who feel competent regarding academic matters tend to be more involved in their children's education, suggesting the importance of domain-specific efficacy (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Eccles & Harold, 1996; Hoover-Dempsey, Bassler, & Brissie, 1992).

Cross-cultural evidence has demonstrated that Japanese mothers, on average, have lower parenting self-efficacy compared to mothers in other industrialized countries including the U.S. (Bornstein et al., 1998; Kazui, 1997). Some scholars have suggested that the Japanese cultural practice of engaging in critical self-reflection may result in a decrement to self-efficacy and can—in the absence of social support—undermine parenting effectiveness (Holloway, 2010). Previous studies found that parenting self-efficacy was associated with mothers' likelihood of engaging in individually chosen activities like reading to their preschoolers and their investment in extracurricular classes but not with their engagement in activities at the preschool site which are heavily scripted by the school (Holloway, Yamamoto, Suzuki, & Dalesandro, 2008; Yamamoto, Holloway, & Suzuki, 2006). The current study extends these works by examining the role of parenting self-efficacy in predicting maternal engagement when their children are in the second grade.

Perceptions of Teacher Invitations

In Hoover-Dempsey's model, parental engagement is seen not only as a matter of parental self-perception but also as a function of the school climate, including parents' perception about whether their engagement is welcomed by school staff. These perceptions are based on the nature and frequency of teachers' communications as well as whether they invite parents to visit the school site and provide suggestions about home-based engagement (Hoover-Dempsey et al., 2005; Walker et al., 2005). In the U.S., teachers' invitations and support have been shown to particularly facilitate low-SES and immigrant parents' engagement in children's schooling (Park & Holloway, 2013; Wang, 2008; Whitaker & Hoover-Dempsey, 2013; Trumbull et al., 2003). In

Japan, while school efforts to facilitate parent–teacher communications and community–school partnerships are found to be a characteristic of “effective” or “empowering” schools (Shimizu, 2008), school staff are often unwilling or unable to extend genuine invitations to parents (Onoda, 2013; Yamamoto, 2015). While many Japanese elementary school teachers encourage parents to attend meetings and school events and provide suggestions regarding home routines, most do not invite parents to volunteer in their children’s classroom or play a role in developing school policies or activities (Okano & Tsuchiya, 1999; Onoda, 2013; Yamamoto et al., 2006). In the present study, we examined mothers’ perceptions of teacher invitations for involvement and evaluated whether or not they were associated with home- and school-based engagement.

Overview of the Current Research

The goal of this study was to examine the determinants of home- and school-based maternal engagement in Japan and the U.S. at the second grade level. Our first objective was to obtain a sense of what types of engagement were present in each country. Because previous studies have demonstrated that education is valued by parents in both countries, we did not expect to find differences between Japanese and American mothers in the degree to which they engaged in home-based activities. However, we did expect that American mothers would be more involved than Japanese mothers in school-based activities, given the national differences in school climate and acceptance of parent presence at the school site. Our second goal was to determine whether three key elements of the Hoover-Dempsey model successfully explained any country-level differences we found in maternal engagement at home and school. We expected that, as theoretically robust psychological and contextual determinants of parental engagement, they would indeed account for such differences. Our third goal was to examine the relative contribution of each theoretical determinant to each form of maternal engagement. We hypothesized that mothers’ role construction and self-efficacy would be associated with home-based engagement in both countries. However, because mothers may feel that they have relatively little control over the school environment—particularly in Japan—we thought that role construction and self-efficacy were less likely to be associated with school-based engagement. We expected that teacher invitations would be related to school-based engagement in both nations but did not expect to find strong associations with home-based engagement.

Method

Data and Procedure

Data were derived from a longitudinal study that initially focused on Japanese and American families with a preschool-aged child and then followed the families through the child's second-grade year. At Time 1, mothers completed a survey about their parenting beliefs and styles and their relationships with families and friends. They completed a second survey on these topics when their children were in the first grade and a third survey near the end of second grade. Data used in the present study were derived from the third survey (Time 3), with the exception of the measure of parental role construction, which was drawn from the first survey, along with the measures of mothers' education and child's birth order.

Participants

In Japan, the Time 1 sample contained 116 Japanese women with a child attending one of nine preschools (*yōchien*) in an urban region. At each school, a member of the preschool staff solicited the participation of all mothers with a child in the final year of preschool. Over 95% of mothers participated in the survey. The average age of the mothers was 36 years ($SD = 3.93$), and the average age of the children was 68 months ($SD = 3.47$). Mothers' education level varied from junior high school diploma to master's degree with an average of 13 years ($SD = 1.50$). Forty percent indicated an annual household income of 5 to 7 million yen (approximately \$50,000 to \$70,000). Twenty-six percent earned less than 5 million yen, and 34% earned more than 7 million yen.

Of the Japanese participants, 98 (84% of the original sample) remained in the sample at the Time 3 project, when the children were in second grade and were 7 or 8 years old. At that time, more than half (55%) of the Japanese mothers were working for pay, with the majority of these employed part-time. All mothers were married at Time 1, but three mothers were divorced at Time 3. The average family size was 2.19 children ($SD = .68$). The target child was the first born in 44% of the families, second born in 40%, and third or later born in 16% of the families (see Table 1). Attrition analyses revealed that the Japanese women who responded to the third survey did not differ from the original group in terms of residential location, age, years of education, household income, number of children, or focal child's gender. Women who had older children were somewhat less likely to respond to the third survey, $t(114) = 2.05, p < .05$.

In the U.S., 121 mothers with a child attending one of 17 preschools in a single urban county participated in the Time 1 study. Preschool directors

distributed survey packets to all English-speaking mothers of children who were expected to attend kindergarten the following year; approximately 40% of those mothers responded to the survey. The average age of the mothers was 38 (SD = 4.24) and the average age of children was 55 months (SD = 4.02). The majority (89%) of mothers were non-Latina White, with an additional 4% Latina or Hispanic, 3% Asian American, and 3% other ethnicity. All foreign-born mothers ($n = 16$) came to the United States at age 3 or younger. Mothers' education level varied from high school diploma or GED to master's degree with an average of 15 years. In general, the sample was composed of relatively highly educated middle- and upper-middle-class families. Twenty three percent indicated an annual household income of \$60,000 to \$100,000. Twelve percent earned less than \$60,000, and 62% earned more than \$100,000.

Table 1. Demographic Information of Participants at Time 3

	Japan ($n = 98$)	U.S. ($n = 78$)
Mother education (years) ^a (Time 1)	13.37 years (1.48)	15.60 years (1.83)
GED/High school or less	38 (38.8%)	8 (10.3%)
Vocational/professional school	16 (16.3%)	3 (3.8%)
Associate's degree (AA)	30 (30.6%)	12 (15.4%)
Bachelor's degree (BA) and above	14 (14.3%)	55 (70.5%)
Mother's age ^b (Time 1)	35.59 years (4.02)	37.29 years (4.59)
29 or younger	5 (5.1%)	3 (3.8%)
30–34	35 (35.7%)	12 (15.4%)
35–39	39 (39.8%)	40 (51.3%)
40 and older	19 (19.4%)	22 (29.6%)
Mothers' work hours/week ^a (Time 3)	9.83 hours (12.94)	19.34 hours (15.80)
Full-time	8 (8.2%)	19 (22.4%)
Part-time	44 (44.9%)	37 (47.4%)
No work	43 (43.9%)	22 (28.2%)
Focal child's birth order (Time 1)	1.75 (.78)	1.73 (.78)
First born	43 (43.9%)	34 (43.6%)
Second born	39 (39.8%)	34 (43.6%)
Third born or later	16 (16.3%)	10 (12.8%)

Note. Numbers and parentheses indicate means and standard deviations, respectively. Indented numbers and parentheses indicate counts and percentages, respectively.

^aSignificantly different means between nations based on t -test results, $p < .001$.

^bSignificantly different means between nations based on t -test results, $p < .05$.

Of the American participants, 78 (64% of the original sample) remained in the sample at the Time 3 project, when the children were in second grade and were 7 or 8 years old. At that time, close to 90% of the mothers were working for pay, with the majority of these employed part-time. Nine mothers were divorced. The average family size was 1.73 children ($SD = .78$). The target child was the first born in 44% of the families, second born in 44%, and third or later born in 13% of the families (see Table 1). Attrition analyses revealed that the American women who responded to the third survey did not differ from the original group in terms of age, years of education, household income, number of children, age of child, focal child's gender, or focal child's birth order.

In order to compare the equivalence of the samples across the two countries ($N = 176$), we ran t -tests (two-tailed) and chi-squares on the demographic indicators. Gender of the target child did not differ significantly across the two countries nor was there a difference in number of first-born vs. later-born children. American mothers were significantly older, $t(174) = -2.58, p < .05$, more educated, $t(174) = -9.06, p < .001$, and worked longer hours, $t(171) = -4.27, p < .001$, than Japanese mothers.

Measures

Descriptive information for each scale in the survey can be found in Table 2.

Parenting Self-Efficacy

We developed this measure specifically for the study in accordance with Bandura's recommendation that self-efficacy be evaluated with respect to the specific activities under investigation (Bandura, 1997; Bandura et al., 1996). Mothers indicated on a scale from 1 (not at all confident) to 6 (very confident) how confident they were in teaching and disciplining their children with respect to 20 items related to child development and educational progress (see Appendix A). We selected these items by examining the content of scales derived in the United States, as well as parent surveys developed by Japanese government agencies and private educational organizations (e.g., Benesse Educational Research Institute, 2000; hereafter Benesse). We also consulted with advisory panels of Japanese and American child development experts (teachers, parent education specialists, university researchers) about child rearing issues of importance to Japanese and American parents. In recent years, several studies have shown the instrument to be associated with conceptually related measures in cross-cultural contexts (Azizi, Mahmoudi-Gharaei, Mirzaei, Tajeri, & Eshaghbeygi, 2008; Balat, Zembat, & Acar, 2010; Holloway, Suzuki, Yamamoto, & Behrens, 2005; Suzuki, Holloway, Yamamoto, & Mindnich, 2009). By calculating the mean score of the 20 items, we created a composite variable, *parenting self-efficacy*, $\alpha = .93$ for the full sample (U.S. and Japan combined).

Maternal Role Construction

The maternal role construction measure was developed by the authors as well. Using several items from the parenting self-efficacy measure, we asked mothers to indicate the relative percentage of responsibility that the family and the school, respectively, should be accorded in teaching a child six cognitive and academic-related skills (Appendix B). For each item, mothers allocated a total of 100 percentage points between the two possible sources of responsibility. The composite variable, *maternal role construction*, was the mean number of points designated as the maternal responsibility across the six items. A higher score on an item indicated greater emphasis on the mothers' views about their responsibility for helping the child learn that particular skill. The internal consistency of the six items was high; $\alpha = .83$.

Teacher Invitations

Mothers indicated on a three-point scale (1 = not at all, 2 = once or twice, 3 = more than twice) how much the teacher of their target child invited communication with parents. The three items, which we developed to reflect aspects of parent–teacher interaction identified in the parental involvement literature and in the subsample mothers' descriptions during interviews, included “invited to talk about child,” “invited to attend or help with school events,” and “provided suggestions.” Using the mean score of the three items, we created a composite variable, *teacher invitations*, $\alpha = .64$. Although this internal consistency coefficient is relatively low, it is important to remember that the composite consisted of only three items. We also note that the three items were all significantly correlated with each other at the .02 level or higher.

Homework Engagement

Mothers indicated how often they helped with their child's homework, checked their child's homework for completeness, checked for accuracy, and helped with their child's writing or math on a five-point scale, from 1 (less than once a month) to 5 (almost always; adapted from Benesse, 2000; Hoover-Dempsey & Sandler, 1997). Using the mean score of the 4 items, we created a composite variable, *homework engagement*, $\alpha = .81$.

Cognitive Engagement

Mothers also indicated how often they were engaged in cognitive and intellectual activities with their children on a five-point scale from 1 (less than once a month) to 5 (almost always). The six items included activities such as reading books to their children, playing on computers with their child, taking their child to a library, visiting a museum/zoo/aquarium with their child, engaging in an activity of their child's interest, and playing card games with their child

(adapted from Eccles & Harold, 1996; Kariya, Shimizu, Shimizu, & Morota, 2002). Using the mean score of the 6 items, we created a composite variable, *cognitive engagement*, $\alpha = .64$.

School-Based Engagement

Mothers reported how many times in a year they had done each of the following: spoken to the teacher at a conference, visited the classroom, contacted the teacher about homework, volunteered in the classroom, and exchanged notes with the teacher. The reported score for each item ranged from 0 to 10. We adapted these items from studies which assessed parents' involvement in school reported in Eccles and Harold (1996) and Hoover-Dempsey and Sandler (1997; see also Walker et al., 2005). Using the mean score of the 5 items, we created a composite variable, *school-based engagement*.

Demographic Variables

Control variables included mothers' education, mothers' work hours, and target child's birth order. Mothers' education was computed by assigning a numerical value corresponding to the number of years of education associated with their attained educational level completed (junior high school = 9, GED or high school = 12, professional/vocational training or AA/AS = 14, BA/BS = 16, post-graduate = 18). The item called "mothers' work hours" was based on self-reported average hours per week spent working outside the home. The target child's birth order was coded as first- or later-born.

Analytical Strategies

We conducted data analysis in three steps. First, to obtain a sense of what types of engagement were present in each country, we conducted descriptive analyses of the three parental engagement composites and examined them to see if there were any cross-national differences using independent samples *t*-tests (two-tailed). We also ran Pearson product moment correlation analyses with the three parental engagement composites and the three focal predictors. Then, to achieve the second and the third goals of this study, we conducted a hierarchical linear regression for each type of parental engagement. In the first step, we included the three control variables and a dummy code for country (0 = Japan, 1 = U.S.). In the second step, we added the three focal composites: maternal role construction, parenting self-efficacy, and teacher invitations. We also tested for interaction effects between country and the focal composites. The regression analyses enabled us to determine whether the focal composites accounted for any country-level effects, as well as to evaluate the contribution of each focal composite to parental engagement.

Table 2. Means and Standard Deviations of Parental Engagement Variables, Maternal Role Construction, Parenting Self-Efficacy, and Teacher Invitations by Country

Composites	Japan		U.S.		<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Parent engagement:					
Homework engagement	3.46	1.21	3.99	.87	-3.38 (173)*
Cognitive engagement	2.31	.66	2.87	.56	-5.96 (173)**
School-based engagement	2.48	1.25	4.20	1.81	-7.13 (173)**
Maternal role construction	.57	.13	.64	.14	-3.24 (173)*
Parenting self-efficacy	4.43	.68	5.18	.51	-8.35 (174)**
Teacher invitations	1.45	.55	2.16	.45	-9.12 (174)**

Note: Sample sizes vary from 97 to 98 in Japan and 77 to 78 in the U.S. depending on missing data.

Parentheses indicate degrees of freedom.

* $p < .01$. ** $p < .001$.

Results

Descriptive Analysis

On average, American mothers reported being significantly more involved in all three forms of parental engagement than Japanese mothers (see Table 2). Moreover, American mothers reported a stronger sense of responsibility in supporting their children's schooling, felt more efficacious in teaching their children school-related skills, and rated their child's teachers as significantly more inviting than mothers in Japan. Analysis of covariance revealed that these differences remained significant even after controlling for mothers' education.

Correlation Analysis

Homework engagement was positively correlated with parenting self-efficacy and teacher invitations but not maternal role construction. Cognitive engagement was significantly and positively correlated with maternal role construction, parenting self-efficacy, and teacher invitations. School-based engagement was significantly correlated with maternal role construction, parenting self-efficacy, and teacher invitations. Homework engagement, cognitive engagement, and school-based engagement were all significantly and positively correlated with each other (see Table 3).

Table 3. Correlations Among Major Variables

	1	2	3	4	5
1. Homework engagement					
2. Cognitive engagement	.46***				
3. School-based engagement	.23**	.34***			
4. Maternal role construction	.14	.32***	.24**		
5. Parenting self-efficacy	.28***	.40***	.26***	.31***	
6. Teacher invitations	.19*	.39***	.52***	.27***	.37***

* $p < .05$. ** $p < .01$. *** $p < .001$.

Regression Analysis

Homework Engagement

Because the distribution for homework engagement was not normal and demonstrated positive skewness, we computed a logarithmic (log 10) transformation of the original values (Howell, 2007; Tabachnick & Fidell, 2007). In the first step, the effect of country was significant, but it ceased to be significant in the second step when the three focal predictors were added to the model. In the full model, only parenting self-efficacy was a significant predictor of homework engagement (see Table 4). This result suggests that different degrees of homework engagement across the two countries may be attributable to different degrees of parenting self-efficacy. The final model was significant ($p < .01$), but explained only 7% of the variance. We conducted the same analysis using the untransformed homework engagement composite and obtained the same findings. There was no interaction effect between country and parenting self-efficacy on homework engagement.

Cognitive Engagement

The distribution of cognitive engagement was normal, so we used the original composite variable in the hierarchical multiple regression analyses. In the first step, the effect of country was again significant. In the second model, maternal role construction, parenting self-efficacy, and teacher invitations were all significant, and country ceased to be significant. The model was significant at the level of $p < .001$ and accounted for 25.6% of the variance. If mothers reported a stronger sense of responsibility in educating their children, higher parenting self-efficacy, and a perception of their child's teacher as more inviting, they were more likely to be involved in cognitive and intellectual activities with their children. There were no interaction effects between country and any of three predictors on the cognitive engagement variable.

Table 4. Summary of Hierarchical Regression Analyses for Homework, Cognitive, and School-Based Engagement ($N = 170$)

<i>Control Variables</i>	Homework Engagement			Cognitive Engagement			School-Based Engagement		
	<i>B</i>	SE	β	<i>B</i>	SE	β	<i>B</i>	SE	β
Country (Japan=0, U.S.=1)	.32	.25	.15	.15	.14	.11	.27**	.09	.27
Mother education (yrs)	-.04	.05	-.07	.04	.03	.11	.04*	.02	.18
Mother work hours	.00	.01	.02	.00	.00	.02	-.01*	.00	-.17
Child birth order	.19	.17	.09	.06	.09	.04	.03	.06	.03
Maternal role construction	.35	.65	.03	.89*	.36	.18	.33	.24	.09
Parenting self-efficacy	.32*	.14	.21	.19*	.08	.20	-.02	.05	-.04
Teacher invitations	.06	.16	.03	.19*	.09	.17	.24***	.06	.31
R^2	.07			.26			.36		

Note. Regression coefficients reported for final model.

* $p < .05$. ** $p < .01$. *** $p < .001$.

School-Based Engagement

Because the distribution for school-based engagement demonstrated negative skewness, we computed a square-root transformation (Howell, 2007; Tabachnick & Fidell, 2007). In the first step, mothers' education, work hours, and country were significantly associated with school-based engagement. In the second step, the teacher invitations composite was significant, along with mothers' education, work hours, and country. The model was significant at the level of $p < .001$ and explained 35.7% of the variance. If mothers lived in the U.S., were more educated, worked fewer hours, and reported teachers as being more inviting, they were more likely to be involved in school-based activities. We ran the same analysis using the untransformed school engagement variable and obtained similar results. We also tested the effect of interaction between country and each of the three key variables on school-based engagement, and the results were not significant.

Discussion

The goals of this study were to examine home-based and school-based parental engagement among mothers in Japan and the U.S. and to evaluate the effectiveness of three factors identified by Hoover-Dempsey and colleagues in predicting parental engagement in the two nations. One major finding was that country-level differences in maternal engagement could be largely explained by

the three psychological factors identified within the Hoover-Dempsey model. In particular, Japanese mothers' lesser involvement in their children's homework and cognitive activities compared to American mothers can be explained by their lower sense of responsibility, lower parenting self-efficacy, and perception of limited teacher invitations.

As we predicted, however, between-country differences in school-based engagement remained significant, even after the three psychological factors were included in the model. This country difference may be an artifact of a cultural response set and therefore should be interpreted with caution. Nevertheless, it is interesting to note that these findings run counter to the often-cited claims regarding the assiduousness of Japanese parents' engagement (e.g., Stevenson & Stigler, 1992) and suggest that other social and cultural factors—including, perhaps, other features of the educational system—play an important role in determining the levels of Japanese mothers' relatively lower engagement at the school site. For instance, it is important to note that Japanese mothers are more likely to use supplementary schooling to boost their children's achievement (Kariya, 2004; Roesgaard, 2006; Yamamoto, 2015). Mothers may view the management and expenditure of resources on such educational opportunities as a more effective way of being engaged than interacting extensively with their children's regular school. Our study did not capture this dimension of parent engagement. Additionally, surveys of maternal expectations regarding their children's education reveal that contemporary Japanese mothers are less optimistic than those of previous generations regarding the benefits of advanced education, particularly for females (Holloway, 2010). Such lowered expectations may have contributed to a diminished perception regarding maternal engagement in schooling. In the U.S., on the other hand, educational attainment continues to be seen as essential for economic security, and parents are adopting increasingly "intensive" strategies for supporting their children's academic progress (Ochs & Kremer-Sadlik, 2013).

The third goal of our study was to determine the independent contribution of maternal role construction, parenting self-efficacy, and perceived teacher invitations in these various forms of parental engagement in these two nations, as well as to examine whether one or more of these theoretical determinants was more important in one nation than another. We found that parenting self-efficacy was significantly associated with homework engagement and cognitive engagement in both countries. This finding supports previous analyses demonstrating the importance of parenting self-efficacy for mothers' home-based engagement in Japan during children's preschool and early school years (Holloway et al., 2008; Yamamoto et al., 2006). Because mothers' teaching and disciplining skills are critical when they supervise homework or when they are

engaged in various activities with their children, mothers who feel efficacious about their parenting may feel more motivated to interact with children and support their children's academics at home. However, as we predicted, parenting self-efficacy—as assessed in our study—was not associated with mothers' school-based engagement in either country.

We also found that mothers' role construction was positively associated with their engagement in cognitive activities. In both countries, mothers who perceived themselves as being responsible for their children's educational processes were likely to be more engaged in cognitive and intellectual activities with their children at home. On the other hand, maternal role construction was not critically associated with mothers' school-based engagement. This finding also coincides with previous findings from a qualitative analysis of interview data indicating that middle-class Japanese mothers who demonstrated a keen sense of responsibility in educating their children tended to provide educational support for their children's education outside of school rather than negotiating with teachers and making requests to teachers to enhance their children's academic progress (Yamamoto, 2015). However, our current finding also demonstrated that maternal role construction may not be critical for mothers' support for their children's homework. Since homework completion is a mandatory requirement articulated clearly by the school, mothers' individually varying convictions about their role may be less influential for this activity than for other types of engagement that are not required by school, such as enrollment in supplementary lessons.

Mothers' perception regarding invitations from the teacher was an important predictor of cognitive and school-based engagement but not homework engagement. Teachers' encouragement may help mothers realize the importance of cognitive activities in children's educational processes. When teachers provide advice about home-based practices, they are also likely to convey to the parents values regarding literacy and cognitive activities such as reading to their children (Eccles & Harold, 1986; Epstein & Sanders, 2002). Regardless of the structural differences in their educational systems, when mothers perceive their children's teachers as more inviting, they are more likely to volunteer in classrooms, initiate contacts with teachers, and communicate with teachers. In addition to the role of teacher invitations in stimulating maternal engagement, these actions by school personnel may also increase maternal role construction and parenting self-efficacy as suggested by the significant correlations displayed among these variables in our data (see also Whitaker & Hoover-Dempsey, 2013). In future work, these causal processes—which could not be assessed in our cross-sectional sample—deserve further study in the U.S. and Japan.

Limitations

Our study relied on a small, convenience sample, and thus our findings cannot be generalized to all parents in these highly diverse and complex nations. Additionally, it is important to note that we obtained self-reports from mothers, and it is possible that some mothers provided socially desirable responses, particularly with respect to their degree of engagement at home and in the school. While we believe that mothers are likely to be the best informants concerning their engagement, beliefs, and perception of teacher invitations, future studies should also incorporate other types of assessment including teacher ratings or independent observations of parent engagement. A third limitation of this study is that we did not examine children's responses to maternal engagement (Hoover-Dempsey et al., 2005). Future work should consider the inclusion of children's interpretation of the meaning and motivation of parental engagement, which is likely to affect their responses to it when it occurs.

Implications for the Schools

Our findings highlight the importance of teacher invitations on maternal engagement or, more broadly, parents' engagement in a cross-cultural context. Teachers' attitude toward parents and the amount of effort they put into developing clear and inviting communication with them have great potential to facilitate parents' school-based engagement and their engagement in cognitive activities with their children regardless of their cultural backgrounds (Park & Holloway, 2013). In the future, researchers can extend this work to better understand parents who are highly involved in the home but do not tend to participate at the school site (Holloway & Kunesh, 2015; Mau, 1997; Sy & Schulenberg, 2005). Few studies in the U.S., for example, have investigated why Asian immigrant parents actively support children's academic achievement at home and in their communities but not at the school site, although Li and her colleagues (2008) have suggested that immigrant Chinese parents do not recognize the value of school-family partnerships in U.S. schools because such forms of engagement are not expected in their country of origin.

Our study also holds clear implications for Japanese policymakers and educational practitioners. As Onoda (2013) has noted, Japanese parents who make requests of their children's school are often accused of challenging teacher authority and disrupting school routines. The question is whether Japanese teachers actually desire substantial parental involvement at the school site, or whether they prefer parents to play a minor supportive role. As Japan continues to experience increasing diversity in terms of ethnicity and social class, it is important to identify effective ways of supporting all students (Tsuneyoshi,

Okano, & Boocock, 2010; Yamamoto, 2014). Japanese policymakers are beginning to embrace the notion of school–family partnerships, but the extent to which these will be fully welcomed by the schools is not yet clear.

In summary, our results underscore the importance of teacher invitations in the U.S. and Japan. Teachers' effort and communications have great potential to facilitate parents' school-based engagement and their engagement in cognitive activities with their children outside of school. Reassuring teachers about the power of their encouragement and invitations may increase teachers' confidence in facilitating parent–teacher communications.

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Appendix A. Parenting Self-Efficacy Items

Q. "How confident do you feel in doing the following?"

1. Listen to your child
2. Understand your child's feelings
3. Control your emotions in front of your child
4. Avoid over-reacting when your child misbehaves
5. Create a peaceful, happy home
6. Set a good example by being polite and respectful to others
7. Explain things so that your child will understand
8. Praise your child when he/she does well
9. Discipline your child firmly when he/she misbehaves
10. Let your child know you love him/her
11. Teach to do things neatly and precisely
12. Teach to complete whatever she/he has been working on
13. Teach to have a strong will so that she/he is not easily swayed by friends
14. Teach to behave well without being told to do so by an adult
15. Teach not to be self-centered when it is obviously inappropriate
16. Teach to finish homework in a timely manner
17. Teach to go to bed on time/early
18. Teach to tell parents when something significant happened at school
19. Teach to be an open and honest person
20. Teach not to bully other students

Appendix B. Parent Role Construction

Q. What percentage of the responsibility should preschool and family members have for teaching your child to.... (The total should be 100%).

	<u>Preschool</u>	<u>Family</u>
Express his/her thoughts and ideas clearly	_____ %	_____ %
Continue trying even when something is difficult	_____ %	_____ %
Tell time	_____ %	_____ %
Do things independently	_____ %	_____ %
Identify the letters of the alphabet	_____ %	_____ %
Be interested in learning new things	_____ %	_____ %