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The Effects of Contextual Variables and Parental Cognition on Maternal Involvement in Korean Children's Early Education

This study examined the features of maternal involvement in Korean children's early education and their relation to contextual variables and three forms of parental cognition. For this study 333 Korean mothers with 5 to 7 year-old children completed questionnaires that covered aspects such as demographical characteristics, three forms of involvement in their children's education, and three forms of parental cognition. Descriptive analysis indicated that mothers who were more involved in monitoring homework paid more monthly activity fees for supplementary classes and engaged more in cognitively stimulating activities at home. Financial investment in supplementary classes for children was not associated with engagement in cognitively stimulating activities at home. Stepwise regression analysis found that mothers who were more involved in monitoring their young children's homework expressed higher aspirations for their children's future occupation. Korean mothers who paid more for their child's supplementary classes had higher family incomes. Korean mothers who engaged more often in cognitively stimulating activities at home expressed higher parental self-efficacy, had a higher educational level, had a younger child, and had an earlier birth order or only child.

Parental involvement has strong effects on a child's development and educational achievements. Parental involvement means the dedication of resources by the parent to the child within a given domain (Grolnick & Slowiaczek, 1994). Parents are involved in their children's schooling through their overt behavior, by providing children various resources, and by exposing children to cognitively stimulating activities and materials (Grolnick & Slowiaczek, 1994; Lareau, 1987; Phillipson, 2009). Parental involvement has a positive influence on school related outcomes for children (Cooper & Crosnoe, 2007; Hill & Taylor, 2004; Huang & Mason, 2008; Miedel & Reynolds, 1999). For young children, parental involvement is associated with early school success, including academic and language skills and social competency by increasing social capital and social control (Hill, 2001), and is also likely to foster self-regulated learning (Xu et. al., 2010). Parents who are more involved with their children's schooling become knowledgeable about school goals and communicate the importance of education to children (Hill & Taylor, 2004). McMillan (2001) highlighted collective parental pressure as an important determinant of school performance.

Various elements influence parental involvement in their children's schooling. Contextual elements, such as the education level of the parents, family income, maternal employment status, community

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resources, gender, child's age, and birth order have been verified as some of the variables that affect parental involvement in education. It is because parent-school relationships do not occur in isolation, but in community and cultural contexts (Hill & Taylor, 2004). Parental involvement in education is one of family process factors that are associated with students' academic attainment at school (Xia, 2009). To what extent parental cognition affects the involvement of parents in their children's early education has also been explored. Hoover-Dempsey and Sandler (1997) believed that three major constructs are central to the involvement of parents in decisions: role construction by parents, parental efficacy for helping their children succeed in school, and parental perceptions that the child and school want them to be involved. Holloway *et al.* (2008) explored parental cognition as a major contributor to the willingness to engage in supportive parenting. They suggested parental aspirations concerning the future occupation of their children, parenting self-efficacy in rearing and educating their children, and their perceptions of the teacher and school as some variables that affect parental involvement in children's early schooling.

Despite the importance of parental involvement in children's education, the aspects of parental involvement in children's early education in non-western countries are not well known. Because parents from different cultures reflect different traditions in the ways they involve themselves in their child's academic life (Chang *et al.*, 2010; Hunstsinger & Jose, 2009), it can be expected that the features of parental involvement in non-western countries might have some differences from western cultures. Some research on the involvement of Japanese mothers in their children's schooling (Holloway *et al.*, 2008; Yamamoto, Holloway, & Suzuki, 2006) and on the parental involvements in Chinese culture (Hung, 2007; Hunstsinger & Jose, 2009) has been conducted; however, there has been very limited research on Korean parental involvement in their children's schooling. U.S. President Barak Obama praised the Korean educational system repeatedly (The Korea Times, 2009, 2010; The Korea Herald, 2011) and it is

generally accepted that education in South Korea has made a tremendous contribution to its economic growth over the last several decades. Due to the educational success, it is also verified that the Korean children's academic achievement is relatively higher in comparison to other developed western countries. While it is true that Korean education system and professionals have played a certain amount of role in helping students to prepare to survive in an era of keen global competition, one should not overlook the significant role of Korean parents' education fervor for their children's success. Though it can be expected that Korean parents might be involved deeply in their children's education with their education fervor, the aspects of Korean parents' involvement in their children's education still need to be studied more deeply. In this present study, the involvement of Korean mothers in their children's early education will be explored in relation to contextual variables and the three forms of parental cognition.

LITERATURE REVIEW

Parent Involvement in Early Education in Korea

Parental involvement in Korea is so that children can achieve higher academic scores in schools and enter prestigious post secondary schools (Park, 1993). Usually parental attention for children's academic achievement starts in early childhood and becomes more serious in the kindergarten and early grades of elementary school (Kim, 1999). Similar to Japanese mothers who are characterized as overly focused on academic achievement (Holloway, 2000), Korean mothers' involvement in their children's early schooling is focused primarily on better school scores. In this study, three forms of parental involvement in Korean children's early education will be documented: monitoring homework, financial support for supplementary lessons, and cognitive stimulation at home.

Korean mothers tend to carefully monitor their children's homework to help their children achieve better grades. But it seems that they generally do not engage in activities at school as much as they do at

home. Chinese American parents focused more on the systematic teaching of children at home than European American parents (Hunstinger & Jose, 2009) and Japanese mothers preferred to privately monitor their children's school work rather than actively participate in school (Holloway *et al.*, 2008). So it can also be expected that Korean parents prefer to be involved in their children's schooling at home rather than actively participate at school due to the three Asian countries' cultural similarities (Okagaki & Fresh, 1998). There are some studies on the tendency of private parental involvement in Japanese and Chinese culture; however, there is limited documented information on the involvement of Korean parents' involvement at home. Therefore, the features of Korean mothers' educational involvement at home in facilitating their children's academic achievement, such as monitoring their children's homework, need to be examined more closely.

In Korea, financial support for supplementary lessons is an important strategy for parents to enhance their children's academic achievements (Kim, 2006). Parental efforts in selecting and monitoring private tutoring are significantly associated with increased math and English test scores in Korea (Park, Byun, & Kim, 2011). Therefore, in Korea, one of the most important parenting roles is to find, to pay for, and to monitor their children's involvement in supplementary classes as well as monitor their academic progress by interacting with private tutors (Park, Byun, & Kim, 2011). In Korea, 88.8% of elementary school students enroll in supplementary schooling and they pay average 227,000 won (about 200.00 USD) per month (The Korea National Statistics Office, 2008). It was also found that the families with a higher income spent more on private supplementary classes that helped to achieve higher academic scores (The Korea National Statistics Office, 2008). So it is important to understand the general features of financial investment for supplementary classes as a form of Korean parental involvement in early education, and how and to what extent the payment for supplementary lessons are affected by the contextual variables and the three forms of parental cognition.

Along with the direct monitoring of their

children's homework and financially supporting supplementary classes, engaging in cognitive stimulation at home is regarded as another important aspect of parents' involvement for their young children's academic achievement in Korea. It has been established that cognitive stimulation by the parents at home has tremendous effects on young children's development and academic achievement (Kim, Kim, & Jeon, 2008). Korean parents, especially mothers, recognize this fact well enough and try to provide quality home environments for their children's cognitive development (Kim, 1999). Korean mothers read to children, engage in cognitively stimulating activities, and engage in computer activities with their children to enhance their cognitive development at home (Kim, 1999). Cognitive stimulation at home has a positive effect on the academic achievement of young children (Crosnoe *et al.*, 2010) and the aspects of Korean mothers' cognitive stimulation for the children and the variables that influence the mothers' involvement in their young children's activities need to be documented to understand the Korean parents' educational involvement in their children's early schooling.

Parental cognition and Parental involvement

Parental cognition on their role as parents has been identified as a major contributor to the willingness to engage in supportive parenting (Holloway, *et al.*, 2008). There are several forms of parental cognition, such as parental self-efficacy, parental aspirations for their children, and parental perceptions about school and teachers. Parental self-efficacy, the expectation caregivers hold about their ability to successfully parent, is a potentially important cognitive construct (Jones & Prinz, 2005). Many studies have demonstrated that parental self-efficacy is a critical element associated with parental involvement in their children's education (Eccles & Harold, 1996; Hoover-Dempsey, & Sandler, 1997). Both direct and indirect evidence have supported the association of parental self-efficacy and children's academic performances. Children of parents with higher parental self-efficacy report higher school grades (Bogenschneider, Small, & Tsay, 1997). Parental self-efficacy also acts

indirectly via parental involvement and the monitoring academic achievement of children (Shumow & Lomax, 2002). According to Okagaki and Fresch (1998), who have studied parenting and the academic achievements of children from a multiethnic perspective, Asian-American parents tend to be less confident about their ability to help their children than European-American parents. Through a few studies on Japanese parents' self-efficacy, it has been revealed that Japanese mothers express less confidence in their parenting abilities than mothers do in other industrialized countries (Bornstein *et al.*, 1998; Kazui, 1997). Korean parents have similar cultural background with other Asian countries such as Japan and it can be assumed that Korean parents also have relatively low self-efficacy regarding their parenting. This low self-efficacy may affect their involvement in their children's education. Therefore, the aspects of Korean mothers' self-efficacy and its effects on their involvement in their children's early education need to be further examined.

Parental expectations have been recognized as an important factor that improves the academic achievements of children. Parental aspirations (a form of parental expectations) refer to idealistic hopes or goals that parents may form regarding the future attainment of a child (Holloway, *et al.*, 2008). Parents who hold higher aspirations for their children's future are more likely to be willing to exert efforts to ensure that these aspirations are realized (Holloway, *et al.*, 2008). Therefore, parental expectations play an important role in facilitating the educational aspirations of children (Kirk *et al.*, 2011) and enhancing children's academic achievement (Phillipson, 2009). It is shown that parental mastery goals for children directly affect the children and the mastery of goal adoption (Kim, Schallert, & Kim, 2010). Educational and occupational aspirations are associated with the ways parents shape a child's activities, time, and learning environment (Murphey, 1992); therefore, it is expected that parents who have higher parental aspirations for their children's future are more involved in their children's education. The aspects of parental aspirations and parental involvement in Korea might have some differences from other cultures because parental aspirations for

the improved educational achievements of children seem to be related to ethnicity (Spera, Wentzel, & Matto, 2009). Therefore, the features of Korean mothers' aspirations for their children's future and their relation to the mothers' educational involvement for their children need to be further documented.

Paternal involvement in a young child's education is affected by parental perceptions of the school and teachers (Holloway, *et al.*, 2008; Hoover-Dempsey & Sandler, 1997). If the parents perceive that the teacher seems to care for their children and have knowledge about their children, then the parents would feel free to be involved in their children's school activities and more thoroughly monitor their children's homework. Parents are more willing to be involved in their children's education if they think that their child's teacher knows about their child's academic ability, understands the personality of their child, cares about the welfare of the child, and effectively communicates with parents (Kim, 2005). The perception of Japanese mothers in regards to schools and teachers has changed lately (Holloway, *et al.*, 2008); however, the aspects of Korean mothers' perceptions of schools and teachers tend to be unknown. Therefore, it is necessary to explore the perception of Korean mothers on the attitudes of teachers and their relation to personal involvement in their children's early education. In this present study, parental self-efficacy, parental aspirations for their children's future occupation, and parental perceptions of their children's teachers are explored in relation to various aspects of parental involvement in their young children's early education. The results of this study about the general features of Korean parental involvement and their relation to various variables provide valuable insights regarding the educational involvement of Korean parents that has played a significant role in the academic success of children. The research questions are as follows:

1. What are the general features of Korean mothers' involvement in their children's early education?
2. How and to what extent the contextual variables and the three forms of parental cognition affect Korean mothers' involvement

Table 1. Characteristics of Participants

| Categories | | N (%) | | |
|-------------------|---------------------|---------------------------|-------------|-----------|
| Children | Age (grade) | 5 (kindergarten) | 125 (37.54) | 333 (100) |
| | | 6 (1st grade) | 124 (37.24) | |
| | | 7 (2nd grade) | 84 (25.23) | |
| | Gender | Boys | 156 (46.84) | 333 (100) |
| | | Girls | 177 (53.15) | |
| | Birth order | First & only child | 184 (55.3) | 333 (100) |
| | | Second & after | 148 (44.4) | |
| | | No answer | 1 (0.30) | |
| | Education level | Less than college | 89 (26.73) | 333 (100) |
| 2-year college | | 103 (30.93) | | |
| 4-year college | | 137 (41.15) | | |
| No answer | | 4 (1.20) | | |
| Employment status | Home maker | 177 (53.15) | 333 (100) | |
| | Full time/part time | 156 (46.85) | | |
| Mothers | Family income | Less than 2,000,000 (won) | 48 (14.4) | 333 (100) |
| | | 2-3,000,000 (won) | 70 (21.0) | |
| | | 3-4,000,000 (won) | 101 (30.3) | |
| | | 4-5,000,000 (won) | 45 (13.5) | |
| | | 5-6,000,000 (won) | 29 (8.7) | |
| | | More than 6,000,000 (won) | 30 (9.0) | |
| | | No answer | 10 (3.00) | |

in their children's early education?

METHODS

Participants and Data Collection

The participants for this study consisted of 333 Korean mothers with a 5, 6, or 7 year old child. In this study, mothers with a 5, 6, or 7 year old child were recruited as participants because formal schooling starts in the 1st grade of elementary school in Korea so the parents of kindergarten students (5 year-olds) and 1st and 2nd graders (6-7 year-olds) start to seriously consider issues that involve education. The participants were from several kindergartens and elementary schools in three urban regions (Seoul, Incheon, and Kyonggi Province), South Korea. The characteristics of the participants in this study are shown in Table 1. In October of

2010, the participants completed a survey that assessed their involvement in their children's education, three forms of parental cognition, and demographical information. The classroom teachers distributed 395 surveys and collected 348 (88.10%), with the exception of 15 that had been answered incompletely. A final total of 333 surveys were available for analysis.

Measures

The survey used in this study was originally developed to assess Japanese mothers' involvement in their children's education (Holloway *et al.*, 2008). The survey items were originally developed in English and were translated into Korean by the authors. A back translation was obtained in English and was checked by two bilingual professionals who were fluent in Korean and English to see whether the meaning of original items were expressed well

enough in Korean. Through two preliminary tests with 10 Korean mothers each with 5-7 years old children, the survey items were checked and corrected so that Korean mothers could understand them without any confusion. After correcting the items, content validity of the survey was checked by two professionals in the field of early childhood education and family studies.

Parental Involvement Scale This is a self-report measure to assess the features of parental involvement in their child's schooling. It consists of three subscales: 1) 'Monitoring homework' subscale has 4 items. Mothers indicated how often they checked and monitored their children's homework for completeness and accuracy (e.g. practice Korean (spelling and writing), math, and assess the accuracy of homework.). It used a 5-point Likert-scale response format, ranging from 1 (almost none) to 5 (almost every day), with higher scores reflecting a higher frequency by mothers to monitor the children's homework. The reliability of this category was Cronbach's $\alpha=.84$. 2) 'Financial investment in supplementary lessons' subscale has 1 item. To assess how much mothers invest in their children's supplementary lessons, mothers indicated the amount spent per month on their 5, 6, or 7 year old child's supplementary classes. 1=no cost, 2=less than 100,000 won, 3=100,000 won to 200,000 won, 4=200,000 won to 300,000 won, 5=over 300,000 won. 3) 'Cognitive stimulation at home' subscale has 6 items. Mothers indicated how often they engaged their child in cognitively stimulating activities at home (e.g. read to a child, listen to the child read, or engage in a child's favorite activity.). It used a 5-point Likert-scale response format, ranging from 1 (almost none) to 5 (almost every day), with higher scores reflecting the higher frequency of the mothers' engagement in cognitively stimulating activities. The reliability of this category was Cronbach's $\alpha=.74$.

Parental Cognition Scale This is a self-report measure to assess three forms of parental cognition. It consists of three subscales: 1) 'Parenting self-efficacy' subscale has 10 items. Mothers indicated how confident they were in performing parenting

behaviors related to supporting their child's social, emotional, and cognitive development (e.g. Praise my child when they do well, Let my child know I love him/her.). It used a 5-point Likert-scale response format, ranging from 1 (not confident) to 5 (very confident), with higher scores reflecting higher confidence in the mothers' parenting the child. The reliability of this category was Cronbach's $\alpha=.87$. 2) 'Parental occupational aspiration for children' subscale has 5 items. Mothers indicated the importance of five goals for their child's future (e.g. Achieve financial stability, Contribute to society.). It used a 5-point Likert-scale response format, ranging from 1 (not at all) to 5 (very important), with higher scores reflecting the higher level of mothers' recognition of the five goals. The reliability of this category was Cronbach's $\alpha=.74$. 3) 'Perceived caring attitude by teacher' subscale has 4 items. Mothers indicated how much they believed their child's teacher understood and cared for their child (e.g. Teacher knows how much child comprehends, Teacher understanding my child's personality.). It used a 5-point Likert-scale response format, ranging from 1 (disagree strongly) to 5 (agree strongly), with higher scores reflecting higher level of mothers' appreciation for the attitude of the teacher. The reliability of this category was Cronbach's $\alpha=.82$.

Statistical Analysis

The data were analyzed with a Statistical Package for Social Science (SPSS Version 10.1) by the following steps: (1) Participants' demographic characteristics were analyzed through simple descriptive analyses (e.g. frequencies, measures of central tendency, and distribution). (2) Regression models for each of the three maternal involvement variables (monitoring homework, financial investment for supplementary lessons, and cognitive stimulation at home) were constructed for analysis. Predictors included the six contextual variables (child age, gender, child birth order, mothers' education level, maternal employment status, and family income) and the three forms of parental cognition (parenting self-efficacy, parental aspirations for the child's occupation, and perceptions of teacher care). Correlation coefficients were calculated first and then regression analyses were

Table 2. Correlations among Major Variables

| Item | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|------|---------|-------|---------|---------|-------|---------|---------|---------|-------|---------|------|----|
| 1 | 1 | | | | | | | | | | | |
| 2 | .109* | 1 | | | | | | | | | | |
| 3 | .030 | -.007 | 1 | | | | | | | | | |
| 4 | -.119* | -.012 | -.112* | 1 | | | | | | | | |
| 5 | .109* | .011 | .011 | .010 | 1 | | | | | | | |
| 6 | -.216** | -.011 | .000 | .341*** | .036 | 1 | | | | | | |
| 7 | -.075 | .067 | -.010 | .192** | .131* | .201** | 1 | | | | | |
| 8 | .039 | .047 | -.072 | .168** | .041 | .034 | .348*** | 1 | | | | |
| 9 | -.084 | .082 | .027 | .073 | .010 | .008 | .357*** | .290*** | 1 | | | |
| 10 | .104 | .067 | -.064 | .047 | -.106 | -.008 | .203** | .274*** | .056 | 1 | | |
| 11 | .003 | .051 | -.083 | .044 | -.079 | .356*** | .073 | .071 | -.011 | .132* | 1 | |
| 12 | -.227** | .030 | -.172** | .277*** | .019 | .213** | .384*** | .228*** | .093 | .271*** | .110 | 1 |

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

1. Child's age, 2. Gender, 3. Child's birth order, 4. Mothers' education level, 5. Maternal employment status, 6. Family income, 7. Parenting self-efficacy, 8. Occupational aspirations for children, 9. Perception of teacher's caring, 10. Monitoring homework, 11. Financial investment for supplementary lessons, 12. Cognitive stimulation at home

performed with the variables correlated to each other. A simple regression analysis was performed if only one variable was correlated to any form of maternal involvement. If more than two variables were correlated, then the stepwise regression analysis was performed in which the input order of variables for regression analysis was decided through a computer program. The intent of this study was to understand which variables have a stronger influence on the involvement of parents in their child's early education.

RESULTS

Korean mothers' educational involvement:

Descriptive Results

The correlation analysis (Table 2) revealed that mothers who were more involved in monitoring homework paid more monthly activity fees and engaged in more cognitively stimulating activities at home. Paying monthly activity fees was not associated with engagement in cognitively stimulating activities at home. Mothers who reported an increased monitoring of homework had greater parental self-efficacy and higher occupational

aspirations for their children. Mothers who paid more for monthly activity fees for their children's supplementary lessons had higher family incomes. Mothers engaged in more cognitively stimulating activities at home had a younger child, an earlier born child, higher educational levels, and higher family incomes. They also had greater parental self-efficacy and higher occupational aspirations for their children.

Stepwise Regression Analysis for Parental Involvement

Monitoring homework The correlation analysis revealed that Korean mothers' involvement in monitoring homework was correlated with parental self-efficacy ($r = .203$, $p < .01$) and occupational aspirations for their children ($r = .274$, $p < .001$). A stepwise regression analysis was performed to examine the independent contribution of parental self-efficacy and occupational aspirations to Korean mothers' homework monitoring. In this process, the R^2 of parental self-efficacy was not statistically significant and it was excluded from the regression analysis; therefore, Korean mothers' occupational aspirations for their young children was the only variable which significantly contributed to the mothers' involvement in monitoring their children's

Table 3. Stepwise Regression for Monitoring Homework

| Predictors | B | | t | F | R ² |
|--------------------------|-------|------|----------|-----------|----------------|
| Constant | 9.603 | | 9 | | |
| Occupational Aspirations | .333 | .263 | 4.568*** | 20.865*** | .069 |

*** $p < .001$

Table 4. Regression for Monthly Activity Fees

| Predictors | B | B | t | F | R ² |
|---------------|-------|------|----------|-----------|----------------|
| Constant | 1.516 | | | | |
| Family Income | .252 | .356 | 6.718*** | 45.137*** | .126 |

*** $p < .001$

homework. The variable explained 6.9% ($F=20.865$, $p < .001$) of mothers' monitoring homework. Regression equation was Y_2 (monitoring homework) = $9.603 + 0.333X$ (occupational aspirations) + E . Therefore, it was concluded that Korean mothers who were involved more in monitoring their young children's homework expressed higher aspirations for their children's future occupations (Table 3).

Financial investment for supplementary lessons The correlation analysis revealed that Korean mothers' financial investment in supplementary lessons for their children was correlated with family income ($r=.356$, $p < .001$). A regression analysis was performed to examine the independent contribution of family income on Korean mothers' financial investment in supplementary lessons. The variable explained 12.6% ($F=45.137$, $p < .001$) of mothers' financial investments in supplementary lessons. The regression equation was Y_2 (monthly activity fees) = $1.516 + 0.252X$ (family income) + E . Therefore, it was concluded that Korean mothers who paid more for supplementary lessons had a higher family income (Table 4).

Cognitive stimulation at home A correlation analysis revealed that Korean mothers' cognitive stimulation at home was correlated with child's age ($r=-.227$, $p > .01$), child's birth order ($r=-.172$, $p > .01$), mothers' educational level ($r=-.277$, $p < .001$), family income ($r=.213$, $p < .01$), parental self-efficacy ($r=.384$, $p < .001$), and occupational aspirations for

children ($r=.228$, $p < .001$). Stepwise regression analysis was performed to examine the independent contribution of child's age, child's birth order, mother's educational level, family income, parental self-efficacy, and parents' occupational aspirations for their child to Korean mothers' cognitive stimulation at home. In this process, the R^2 of family income and occupational aspirations were not statistically significant and they were excluded from the regression analysis. Therefore, Korean mothers' self-efficacy, educational level, child's birth order, and child's age were the variables that contributed significantly to the mothers' cognitive stimulation at home. Korean mothers' parental self-efficacy explained 13.7% ($F=43.949$, $p < .001$) of mothers' cognitive stimulation at home. Korean mothers' cognitive stimulation was explained 5.0% ($F=30.138$, $p < .001$) more when mothers' educational level was added. In addition, it was explained 1.9% ($F=23.727$, $p < .001$) more when child's birth order was included. It was explained 1.8% ($F=19.998$, $p < .001$) more when the child's age was included. A regression equation was Y_3 (cognitive stimulation at home) = $9.570 + 0.271X_1$ (parental self-efficacy) + $0.872X_2$ (mothers' educational level) - $1.389X_3$ (child's birth order) - $0.786X_4$ (child's age) + E . Therefore, it was concluded that Korean mothers who were more often engaged in cognitive stimulating activities at home expressed a higher parental self-efficacy, had higher educational level, had a younger child, and an earlier birth order or only child (Table 5).

Table 5. Stepwise Regression for Cognitive Stimulation at home

| Predictors | B | B | t | F | R ² | R ² |
|----------------------------|--------|-------|----------|-----------|----------------|----------------|
| Constant | 9.570 | | | | | |
| Parental Self-efficacy | .271 | .337 | 6.226*** | 43.949*** | .137 | |
| Mothers' Educational Level | .872 | .165 | 2.986** | 30.138*** | .187 | .050 |
| Child's Birth Order | -1.389 | -.161 | -2.984** | 23.727*** | .206 | .019 |
| Child's Age | -.786 | -.145 | -2.683** | 19.998*** | .227 | .018 |

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

DISCUSSION

Parental involvement in their children's early education has tremendous effects on enhancing young children's academic achievements; however, most international studies are from western cultures and leave the features of parental involvement in non western countries relatively unexplained. Although, several studies have been performed in Japanese and Chinese cultures lately, studies on Korean parents are very limited. In this study, the general features of Korean mothers' involvement in their children's early schooling and relation to contextual variables and three forms of parental cognition were examined.

The results from this study suggested that Korean mothers engaged in any form of parental involvement with their children's schooling tended to be more involved in other forms of involvement as well. The result of this study regarding the parental involvement in children's schooling was similar to a previous study of Japanese mothers (Holloway *et al.*, 2008). However, financial investment in supplementary lessons was not associated with engagement in cognitively simulating activities at home, which was also the case in the previous study on Japanese mothers. The reason could be that Korean mothers who paid more for their children's supplementary lessons tended to yield their responsibility to educate children at home to the private tutors or institutions that offer supplementary lessons. It could also be that mothers simply did not have enough time to teach their children at home for a variety of reasons. Further investigation is needed to clarify the explanations for this finding.

Korean mothers who were more involved in monitoring their young children's homework

expressed higher aspirations for their children's occupation, as did the Japanese mothers in a previous study (Holloway *et al.*, 2008). Korean mothers who aspired to a higher level of achievement for their children tended to monitor their children's homework for completeness and accuracy; in addition, they more often had them practice academic skills at home. This tendency makes it possible for their children to achieve better grades in school, which is essential to earn admission to prestigious post-secondary schools. Korean parents are desperate to have their children admitted to the best high schools or colleges so that the children can succeed in Korean society regarded as one of the most competitive societies in the world (Kim, 2006). Compared to Japanese mothers who appear to aim for moderate achievement, rather than aspiring to the highest achievement level possible (Holloway *et al.*, 2008), Korean mothers seem to have higher aspirations for their children's future occupation (Han, 1994; Kim, 2006; Park, 1993). The difference can be explained by the cultural differences between Korea and Japan. Even though some Asian countries, such as Korea, Japan, and China, share similar cultural characteristics based on Confucianism, they also have unique cultural characteristics due to their distinct historical and geographical background (Han *et al.*, 2009; Okagaki & Fresch, 1998). Therefore, it is expected that the aspects of parental involvement among these countries may share both similarities and differences at the same time. Further in-depth studies and discussions are needed to explain this finding in the study, which may have stemmed from the uniqueness of Korean culture.

This study revealed that Korean mothers who

paid more for their children's supplementary lessons had a higher family income. Korean education is distinctive with its high prevalence of private tutoring. Private tutoring is an important strategy for parents to enhance their children's educational attainment in Korea (Park, Byun, & Kim, 2011). Family income is positively associated with children's participation in activities outside of school (Dearing *et al.*, 2009) and private supplementary schooling in Korea depends exclusively on parental resources and convictions (Kim, 2003), as was in Japan (Holloway *et al.*, 2008). Parental efforts in selecting and monitoring private tutoring are significantly associated with increased test scores in Korea (Park, Byun, & Kim, 2011) and the children's acceptance rate for prestigious schools, it is important to discuss the relationship between family income and private financial investment, and their lasting effects on future success of the children. Considering the long term effects of this tendency on Korean students' later academic achievement and success in society (Kim, 2006), it is necessary to discuss this matter further in order to narrow the discrepancies of educational opportunity and educational quality which result from differences in the level of resources of the families. It will be necessary to provide public complementary lessons for the children from economically disadvantaged families since it has been confirmed that parental involvement is more critical to academic success of children from lower income families than to that of children from higher income families (Cooper & Crosnoe, 2007; Dearing *et al.*, 2009).

This study also suggested that Korean mothers' who engaged more often in cognitively stimulating activities at home expressed higher parental self-efficacy, had higher educational levels, had a younger child, and an earlier birth order child. This result confirmed the previous studies where parenting self-efficacy was related positively to Japanese mothers' frequency of engagement in home reading (Yamamoto *et al.*, 2006) and cognitive stimulation at home (Holloway *et al.*, 2008). The result was also consistent with the previous study where mothers of higher SES background were more likely to engage in daily home reading with their children (Yamamoto *et al.*,

2006). Previous studies showed that children had higher math achievements and higher reading achievements when they were consistently cognitively stimulated at home (Crosnoe *et al.*, 2010). Children had higher Barley MDI scores when their mothers provided more at-home linguistic and cognitive stimulation (Chang *et al.*, 2009); in Korea, cognitive stimulation at home is a critical element associated with children's educational attainment in early education. The findings of this study indicated that mothers with a younger child, and an earlier birth order child tended to engage more frequently in cognitively stimulating activities at home than mothers who had an older child, and a later birth order child. This result can be explained by the Korean education system that starts formal public education in the 1st grade in elementary school, which differs from the education system of many western countries where formal schooling starts at the kindergarten level. Korean mothers seemed to think that once their child started to go to 'real school', the educational responsibility became that of the school and teachers. The participants of this present study had children in kindergarten, 1st and 2nd grade, and the mothers who had kindergarten children seemed to bear more responsibility for their children's cognitive stimulation at home than mothers who had 1st and 2nd grade children. In addition, in this study, mothers with an earlier birth order child engaged more often in cognitively stimulating activities at home. This can be explained by traditional Confucian beliefs in Korea where the first-born child has distinctive privileges in a family.

This study revealed the general features of Korean mothers' involvement in their children's early education and its relation to various variables. Mothers are one of the best informants about their children's education; however, fathers also need to be included in future studies because fathers' child rearing roles are increasing. And considering that school plays a major role in promoting parental involvement in education in many countries (Zhao & Akiba, 2009), the role of the school in Korean parents' involvement in their children's early education also needs to be studied further. In addition, various contextual variables need to be

considered more thoroughly in future research because multiple perspectives are important for understanding parental involvement in children's education (Hill & Taylor, 2004). Qualitative research on Korean parents' educational involvement is also needed to attain a more in-depth understanding of parental involvement in early schooling in Korea.

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Appendix 1: Parental Involvement (Descriptive Data)

| Subscales | Items | M | SD |
|---|---|------|------|
| Monitoring Homework | Practice Korean (spelling and writing) and Math | 3.90 | 1.15 |
| | Help with Homework | 3.78 | 1.24 |
| | Check that Homework is Complete | 4.44 | .94 |
| | Check Accuracy of Homework | 4.39 | .97 |
| Financial Investment in Supplementary Lessons | 1. No Cost | 2.30 | 1.03 |
| | 2. Less than 100,000 won | | |
| | 3. 100,000-200,000 won | | |
| | 4. 200,000-300,000 won | | |
| | 5. Over 300,000 won | | |
| Cognitive Stimulation at Home | Read to Child, Listen to Child Read | 3.97 | 1.12 |
| | Participate to Computer Activities with Child | 2.47 | 1.19 |
| | Play Cards or Board Game (which has Educational Purposes) | 2.18 | 1.11 |
| | Visit Library or Book Store | 2.22 | 1.06 |
| | Visit Museums, Zoos, and Aquariums | 1.66 | .85 |
| | Engage in a Child's Favorite Activity | 2.90 | 1.17 |

Appendix 2: Parental Cognition (Descriptive Data)

| Subscales | Items | M | SD |
|--------------------------------------|--|------|-----|
| Parenting Self-efficacy | Listen to My Child | 4.14 | .82 |
| | Understand My Child's Feelings | 4.00 | .79 |
| | Control My Emotions in front of My Child | 3.43 | .79 |
| | Avoid Over-reacting When My Child Misbehaves | 3.53 | .84 |
| | Create a Calm And Peaceful Home | 3.53 | .88 |
| | Set a Good Example by Being Polite and Respectful | 3.61 | .83 |
| | Explain Things So That My Child Will Understand | 3.99 | .84 |
| | Praise My Child When He Does Well | 4.55 | .66 |
| | Discipline My Child Firmly When He Misbehaves | 4.27 | .77 |
| | Let My Child Know I Love Him | 4.55 | .69 |
| Parental Occupational Aspirations | Contribute to Society | 4.18 | .80 |
| | Achieve Financial Stability | 4.52 | .67 |
| | Develop Expertise in a Sport, Hobby, or Area of Interest | 4.25 | .73 |
| | Have a Rewarding Job | 4.13 | .83 |
| | Become Active Internationally | 3.78 | .94 |
| Perceived Caring Attitude of Teacher | Teacher Knows How Much Child is Comprehending | 3.94 | .80 |
| | Teacher Understanding My Child's Personality | 4.07 | .83 |
| | Teacher Cares about My Child's Welfare | 3.80 | .92 |
| | Teacher is willing to Communicate With Me About My Child | 4.10 | .96 |