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Five- and Eight-Year Old Children's Joint Planning With Mother Among Korean-American and European-American Families

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Dedication

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ABSTRACT OF THE DISSERTATION

Five- and Eight-Year Old Children's Joint Planning With Mother Among Korean-American and European-American Families

by

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Parent-child interactions provide opportunities for children's development and learning (Vygotsky, 1978). Cultural belief systems shape parents' parenting and socialization practices and can provide insight into variations in children's learning environments (Gauvain & Perez, 2015; Super & Harkness, 1986). Cultural differences between Asian- and European-American families suggest different socialization practices and children's learning experiences (Bornstein & Cheah, 2006; Parmar, Super, & Harkness, 2004). My dissertation investigates variations in parent-child interaction and parental instruction among Korean- and European-American families and how these interactions contribute to children's planning skills in early to middle childhood.

Using the microgenetic method, I observed 88 mother-child dyads (44 Korean-, 44 European-Americans) across three activity-planning tasks (child-only pretest and posttest, mother-child interaction). Mothers reported on their parental beliefs (socialization goals, *guan* parenting, freedom to learn) and age-related expectations about

children's planning. Video recordings of mother-child interactions were transcribed and coded for maternal instructions and affective feedback as well as the child's planning performances. The findings showed cultural differences in parental beliefs about learning and planning as well as variations in maternal instructions based on parental ethnotheories, child age, ethnoracial background, and mother's acculturation. Lastly, the findings revealed several dimensions of parental beliefs and maternal interaction patterns that facilitated children's planning skills. My research extends understanding of how maternal instruction may take different forms for children with different cultural histories and has implications for the development of culturally-responsive learning environments.

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CHAPTER 1

Introduction

Parent-child interactions are one context that provides opportunities for children's development and learning (Bornstein & Cheah, 2006; Gauvain & Perez, 2015; Vygotsky, 1978). Numerous studies have identified effective parental interaction behaviors and cognitive strategies that facilitate children's cognitive skills, including literacy, memory, executive functioning, and problem solving (Bibok, Carpendale, & Müller, 2009; Mulvaney, McCartney, Bub, & Marshall, 2006). Yet, examining parental interaction strategies and instructions in relation to several important cultural processes has received little research attention (Carr & Pike, 2011; Wang, 2007). The sociocultural perspective emphasizes the important role of culture on children's cognitive development and more empirical studies are required to investigate this theoretical relation among diverse cultural communities. Previous studies have shown cultural differences between Asian- and European-American families, suggesting different learning experiences and variations in the child's learning environment (Bornstein & Cheah, 2006; Parmar, Super, & Harkness, 2004). Therefore, my dissertation investigates variations in parent-child interactions and parental instructions among Korean American and European American families as these relate to parent's ethnotheories, socialization goals, and acculturation.

This dissertation focuses on the development of planning skills as Korean American and European American children at ages 5 and 8 plan activities on their own and with their mother. Previous studies have shown five-year old's competence in some planning skills and have also suggested increasing complexity in planning for children in

middle childhood (Gardner & Rogoff, 1990; Gauvain, Perez, & Reisz, 2018; Gauvain & Rogoff, 1989). While research with some ethnic subgroups of Asian samples have focused on the relations between parent-child interaction patterns on children's literacy (Cho, McBride, & Lin, 2017) and mathematical skills (Cankaya & LeFevre, 2016; Huntsinger, Jose, Larson, Krieg, & Shaligram, 2000), maternal instruction in planning tasks is not yet well understood. Moreover, examining these different age groups allows for comparative analysis of parental instruction and child planning when children are just beginning school and after they have experience in the grade school. Ultimately, my dissertation aims to evaluate how maternal instruction patterns during a planning task depend on child age and ethnoracial background, and how these interactions contribute to children's planning skills.

This chapter begins by providing a broader context to the study population in problematizing the portrayal of Asian parenting as being harsh and controlling and by highlighting the importance of studying culturally-nuanced patterns in developmental research. The next section describes the theoretical framework fundamental to the current study, followed by literature reviews of studies on the developmental of planning, cultural difference in parental beliefs and socialization, and variations in parent-child interactions during a cognitive activity. The last section of this chapter briefly outlines the current study's research goals and hypotheses.

Model Minority Myth and Beyond Tiger Parenting

The model minority stereotype or myth refers to the pervasive idea that Asian Americans are highly educated and financially well off, picturing the image of problem-

free immigrant success, in which Asians' hard work, determination, and perseverance has enabled them to bootstrap their way out of hardship (Lee, 1996; Li, 2005). This model minority myth had historically positioned Asian Americans against other ethnoracial minority groups and especially served as a tool of anti-Blackness in 1960s when the Civil Rights and Black Power Movements were unfolding (Kiang, Tseng, & Yip, 2016; Suzuki, 2002). Early East Asian gold miners and railroad workers were praised for their hard work and complacent postures, serving as the successful exemplar that was juxtaposed against the "culture of poverty" and "complaining," "disruptive" African American communities (Suzuki, 2002; Wu, 2014). In this dissertation, the term "Asian Americans" is used to refer to both U.S.-born Americans of Asian heritage and Asian immigrants who were born in Asian countries and migrated to the United States.

One consequence of the pervasive model minority stereotype is the overgeneralized view of Asian Americans that masks the heterogeneity of ethnic backgrounds and lived experiences within this pan-ethnic category (Ngo & Lee, 2007; Kiang, Hyunh, Cheah, Wang, & Yoshikawa, 2017). This stereotype and overgeneralization have been suggested to overlook the hardship and negative experiences that some Asian Americans must cope with, including a wide income gap in the country, great disadvantage in workforce, and significant disparities in mental health (Budiman, Cilluffo, & Ruiz, 2019; Clough, Lee, & Chae, 2013; Ngo & Lee, 2007). Yet, the model minority stereotype that portrays Asian Americans to be academically successful and overall problem-free, often results in overlooking Asian Americans who need interpersonal, professional, and systemic support (Kiang et al., 2017). Scholars

across disciplines have continued to deconstruct misconceptions around the experiences of Asian American children and families (Cheah, Leung, & Zhou, 2013; Kiang et al., 2017; Lee & Zhou, 2015; Ramakrishnan & Ahmad, 2014).

In particular, the large demographic data on Asian Americans and Pacific Islanders depicting the great disparities in educational attainment within subgroups of Asian American communities have supported the need to further unpack heterogeneity in this population (AAPI Data, 2015; Ramakrishnan & Ahmad, 2014). Many Southeast Asian students (e.g., students who identify as Cambodian, Hmong, Vietnamese, Thai, Laotian) tend to have lower rates of completing higher education compared to East Asian students (e.g., Taiwanese, Korean, Chinese, Japanese) and Indian students (AAPI Data, 2015; Ramakrishnan & Ahmad, 2014). Moreover, we see that Vietnamese students tend to be high achieving compared to other students from the Southeast Asia region. Another report from the *Children of Immigrants Longitudinal Study* (CILS, 2001-2003) states that early school dropout was as low as 6.9% among Chinese and Koreans and as high as 47% among Cambodians and Laotians, suggesting the importance of disaggregating data to reveal the disparities in academic trajectories within Asian American communities (Portes & Rumbaut, 2014).

A widespread image of Asian Americans as the model minority has been prominent in studies emphasizing their academic achievement. Even though numerous studies have attempted to attribute the immigrant success and achievement on Asian American's cultural values, sociologists have pointed out the importance of turning to the structural factors and immigration histories, such as the immigrant selection process of

recruiting highly educated and skilled workers as well as the domestic policies, such as the White House Commission on Asian American and Pacific Islanders (Lee & Zhou, 2015; Nopper, 2008). The effort to move beyond the model minority has also been reflected in the recent Special Issue of the Asian American Journal of Psychology that highlights how the pervasive image of the model minority have been shaping and damaging the development of Asian American children and families (Kiang et al., 2017).

Moreover, the perpetual portrayal of tiger parenting and stereotypes of controlling parenting in East Asian families have gained great attention among the Asian parenting literature. The "tiger mother" portrayal in Amy Chua's book, *Battle Hymm of the Tiger Mother,* in which Chinese parenting is depicted as being extremely harsh, strictly controlling, and having a singular focus of child's success (Chua, 2011), has raised concerns among scholars in the parenting literature about an inaccurate image of Asian American parenting (Cheah et al., 2013; Choi, Kim, Kim, & Park, 2013; Way et al., 2013). In fact, researchers, such as Ruth Chao and colleagues (1994; 2000; Chao & Tseng, 2002), have raised questions about the conceptualization of parenting even before the debate around tiger parenting, suggesting the importance of understanding cultural meaning and nuances in parenting practices. Chao (1994) proposed the use of the indigenous parenting strategy, *guan* parenting, because the traditional parenting typology established by Diana Baumrind (1971) does not seem to accurately capture the characteristics of the Asian American parenting.

Furthermore, studies have suggested that the Asian American parenting may reflect a unique combination authoritarian and authoritative parenting, in which

authoritative and authoritarian parenting styles are not inversely related, as it is the case in European American families (Choi, Kim, Pekelnicky, Kim, & Kim, 2017; Deater-Deckard et al., 2011). Although certain aspects of Asian American parenting, such as a high level of parental control or emphasis on traditional practices, may seem authoritarian, the construct of parental control in Asian American families has not been shown to be uniformly coercive or punitive or to result in negative outcomes (Bornstein, 2012). For example, one study with Korean immigrant parents has shown that their emphasis on traditional practices was not related to parental rejection or negative discipline, indicating that endorsement of the traditional etiquette (e.g., properly greeting adults by bowing, using honorifics) does not evoke harsh parenting. Studies with Chinese American (e.g., Cheah et al., 2013) and Korean American (e.g., Choi et al., 2013) families have suggested the coexistence of both traditional and American parenting strategies, suggesting the dynamic acculturation process of bicultural parenting, in which immigrant parents may be navigating how to maintain cultural heritage values while socializing their children for adaptive development in the U. S. society. Several studies suggest the importance of studying cultural-specific family processes to understand culturally nuanced patterns that underlie children's development and learning (Cheah et al., 2013; Choi, Park, Lee, Kim, & Tan, 2017; Lee, Keown, & Brown, 2018).

Korean American Families

The United States is home to many Korean immigrant families, with approximately 1.8 million ethnic Koreans residing in the United States in 2015 (U.S. Census Bureau, 2015). As of 2015, the median age of the U.S.-born Korean Americans is

18 years old (Pew Research Center), whereas the median age of the foreign-born Korean Americans is 45 years old. In looking at the proportion of Korean American children between the age 5 and 17 years old, and about 34% of the children were U.S.-born (15% were younger than 5 years of age; 27% were 18-29 years of age; 15% were 30-39 years of age; 6% were 40-49 years of age; 3% 50-64 were years of age; and 1% were 65 years of age and older). Children considered second-generation Korean Americans are raised by first-generation (i.e., born in Korea) or 1.5-generation Korean-American parents (i.e., born in Korea and arrived in the U.S. before the age of 13; Portes & Rumbaut, 2014). In these data reports (Pew Research Center, 2015), about 6% of the Korean American children age 5 to 17 were foreign-born. The term Korean Americans is used in this dissertation to refer both to U.S.-born Americans of Korean descent and Korean immigrants who were born in Korea (i.e., heritage country) and immigrated to the U.S. (i.e., host country).

When there are different immigration-generation status between parents and children, studies have documented challenges among Korean-American parents with the competing Korean and American value systems when interacting with their children and in structuring their children's school-relevant activities (Choi & Kim, 2011; Choi et al., 2017; Fuligni, Tseng, & Lam, 1999; Kim, 2011; Kwak, 2003). For example, Korean American mothers often fear that the loss of heritage language and traditional etiquettes (e.g., proper greetings for adults, use of honorifics) in children can create a disconnect in family relationships. This is also reflected in their effort to send their children to Korean heritage language school (Kim, 2011). Korean American parents also express feeling

pressured to change their disciplinary practices and the ways they provide compliments or express affection toward their child (Choi & Kim, 2011). The study describes that the ways that Korean American parents express affection may take a form of indirect expression through providing instrumental supports (e.g., sacrificing for the child, working hard, cooking child's favorite dish) rather than in the form of verbal support or physical touch (Choi, Kim, Pekelnicky, & Kim, 2013). Korean American parents also expressed difficulties negotiating the boundaries between granting autonomy and fostering respect in their children (Choi & Kim, 2011).

Challenges are also evident in the sense of disconnect that Korean-American mothers experience in their engagement with their children's academic learning due to language and cultural barriers in home-school relations (Hwang, 2007; Kwon, Suh, Bang, Jung, & Moon, 2010). Korean American parents' involvement strategies take a different form from the traditional definition of parental involvement in supporting home-school connections, such that Korean American parents engage in more indirect practices of support (e.g., structuring home environments, monitoring home-based activities) rather than actively participating in school activities (e.g., attending parent-teacher meetings, volunteering in school events, direct communication and discussion with teachers; Shin, 2009; Sy, 2006). This contrast, that separates parental involvement in the school and at home, often has been misinterpreted by teachers and school personnel to underestimate these parents' involvement and supports in their child's education as well as to have low expectations for these parents' active school involvement (Kim, An, Kim, & Kim, 2018; Kwon et al., 2010).

However, studies have revealed that Korean American parents have culturally different beliefs from European American parents about the appropriate role of parents in their child's education and learning (Kwon et al., 2010; Sy, 2006). Many Korean American parents assume the distinct responsibilities of teachers in providing school-based supports for their child's education and recognize teachers and school personnel as the educational authority figures (Sy, 2006). Studies have also revealed Korean American parents' strong interests in their child's education and different ways that these parents are engaged in facilitating their child's learning and educational success (Kim et al., 2018; Sy, 2006). For example, indirect practices of structuring and monitoring child's time and academic-related activities represent ways that Korean American parents prepare their children for regulated learning practices that mirror the structured classroom environment (Sy, 2006). Overall, these studies further support the need to take sociocultural context into consideration about how mothers are supporting their children's academic learning.

To find out more about how Korean American mothers support their children's learning broadly and how parent-child interactions unfold in a cognitive activity more specifically, the proposed dissertation compares Korean American and European-American mothers' parental beliefs about child's learning and planning skills and how differing cultural belief systems may contribute to maternal instruction patterns. My literature review draws on socialization research with East Asian families as well as studies with other Asian subgroups on parent-child interaction and scaffolding processes (i.e., a learning process in which the parents structure the interactions to extend child's

current capability of thinking and to support their development of becoming a mature member of the culture; Gauvain, 2005; Wood, Bruner, & Ross, 1976).

Currently, many of the studies comparing Asian families to European American families have blurred differences within Asian ethnic subgroups, frequently by grouping together the individuals from Chinese and Korean families. While Chinese and Korean communities share cultural values that are traditionally based on Confucianism, these two ethnic communities differ in their immigration histories in the United States as well as their approaches to acculturation as revealed in different strategies of negotiating their parenting goals and cultural practices (Bornstein & Cheah, 2006; Choi & Kim, 2010; Choi et al., 2013). In specific, Korean Confucianism tends to view the nuclear family as the fundamental unit of society and stresses a rigid hierarchy based on age and gender, resulting in different priorities of the socialization goals of Korean American and Chinese American parents (Park & Cheah, 2005; Shen, Cheah, & Leung, 2019; Zhou & Kim, 2006).

Theoretical Framework

Sociocultural Theory

Sociocultural theory is concerned with how children's cognitive development is supported and guided in a social and cultural context (Vygotsky, 1978). A crucial element fundamental to sociocultural theory is the importance of understanding children's cognitive development as a social process and a cultural way of thinking as transmitted through interactions with a more experienced partner (Gauvain & Perez, 2015; Vygotsky, 1978). According to sociocultural theory, developmental change is best

illustrated in the process in which the child internalizes the ways of thinking from interacting with a more competent partner that advances the child's independent cognitive activities and performances (Vygotsky, 1978). This internalization process occurs as the child learns in the zone of proximal development (ZPD). The ZPD is defined as the region that is beyond what a child can do alone, but is within the range of what a child can do with the help of others, that is in which optimal learning occurs (Miller, 2011; Vygotsky, 1978). Children may not benefit in their learning when the guidance given is beyond the child's ZPD. Therefore, sensitive and responsive guidance must happen in consideration of the developmental status of the child. Such interaction is evident across cultures, including among Korean mothers who have been observed as they engage in instructional conversations within their child's ZPD in a natural history museum (Kim, Heo, Lee, & Kim, 2007), as well as in mother-child joint writing interactions at home (Cho et al., 2017).

Scaffolding occurs when the more competent partner provides guidance within the child's ZPD. Scaffolding is defined as a process in which something external to the child can extend the child's current capacities of thinking or doing (Wood et al., 1976). The essential part of scaffolding involves a gradual removal of the scaffolds or guidance as the child takes on more responsibility and competence in performing the task. Moreover, a key aspect of effective scaffolding is the adult's sensitivity to the child's developing capabilities, such that the adult adjusts the guidance by being responsive to the child's current and changing competence (Wood et al., 1976). For example, studies have documented the ways mothers adjust their instruction in response to their child's

mastery and familiarity with the task, cognitive abilities, and compliance (Carr & Pike, 2012; Gauvain & Perez, 2008; Gauvain, Fagot, Leve, & Kavanagh, 2002; Heckhausen, 1987; Mast, 2002; Mulvaney et al., 2006).

Planning requires greater cognitive demands and involves more complexity as the child grows. Moreover, the development of planning has been shown to benefit from adult assistance as a child works on more complex tasks (Gauvain, 1992; Gauvain & Rogoff, 1989; Hustedt, 2015; Perez & Gauvain, 2009). For example, a child who engages in advance-scanning, an effective planning strategy, produces more effective plans after learning interactions with more experienced planners, such as their parents (Gauvain, 1992; Gauvain & Rogoff, 1989). Moreover, more contingent scaffolding with greater sensitivity to a child's changing competence occurs with mothers compared to fathers (Gauvain et al., 2002). Thereby, this dissertation uses the sociocultural approach to examine the contribution of mother-child joint planning to advancement in the child's individual planning skills. Learning opportunities with mothers may promote children's learning and individual performance in planning tasks.

Furthermore, the dissertation uses the *microgenetic method*, which is a method that assesses individual developmental change over short periods of time or intervals (Siegler, 2006). The sociocultural perspective suggests that mental functioning must be studied in its "motion" or process of change (Vygotsky, 1978), and the microgenetic method allows for the study of the process of change as the child moves from being only able to do the task with help from mother to being able to do it on his or her own (Gauvain & Perez, 2015; Vygotsky, 1978).

Developmental Niche: Ethnotheories

The ways in which cultural beliefs organize children's developmental environment are reflected in the idea of the developmental niche (Super & Harkness, 1986). The developmental niche framework suggests how parent's beliefs, values, and practices may contribute to variations in parental scaffolding (Super & Harkness, 1986). In one of three subsystems of the developmental niche, parental ethnotheories about development mediate the child's developmental experiences by influencing parents' socialization practices within their culture (Super & Harkness, 1986). Parental ethnotheories are culturally-informed belief systems about developmental timing (i.e., when it is appropriate for the child to do or know something) and childrearing goals (i.e., qualities the parents want their child to develop or not develop) that influence the ways parents organize children's activities and interaction patterns (Parmar et al., 2004; Super & Harkness, 1986). Previous studies have referred to the concept of parental ethnotheories as *parental cognitions* (Bornstein & Cote, 2004; Sigel & McGillicuddy-De Lisi, 2002), *parental thinking* (Aukrust et al., 2003), and *parental ideas* (Goodnow & Collins, 1990), referring to the ideologies that parents have about development and socialization that guide their approaches to childrearing and parenting practices.

The ethnotheories or parental beliefs are culturally constructed. Therefore, studying socialization goals and parent's interactions with their child can provide insights into culturally shared beliefs and values that shape parenting practices and that have impact on the child's development and thinking (Goodnow & Collins, 1990; Ng, Tamis-Lemonda, Godfrey, Hunter, & Toshikawa, 2012; Park & Kwon, 2009). Parental beliefs

can include ideas about the child's developmental timetable, that is, when the child is capable of carrying out particular activities or what age is appropriate for the child to engage in various tasks and thinking. It can include goals and expectations about the qualities that parents desire their children to develop as well as ideas about who should be involved in childrearing and the parents' own role in their child's development (Park & Kwon, 2009; Salehuddin & Winskel, 2016). For example, parents who emphasize socioemotional development might encourage their children to help others and to practice self-control, whereas parents who emphasize cognitive development might encourage children to engage in school-based activities or getting a head start in early academics (Park & Cheah, 2005; Park & Kwon, 2009; Parmar et al., 2004). Parents who assume the role of playmate versus the role of teacher would facilitate play and learning differently in their interactions with their children (Parmar et al., 2004).

Moreover, cross-cultural literature on parental beliefs and socialization have demonstrated the need to examine cultural frameworks beyond dichotomous Eastern versus Western differences, as described in collectivism and individualism (Edwards, Knoche, Aukrust, Kumru, & Kim, 2006; Kagitcibasi, 2007; Raeff, Greenfield, & Quiroz, 2000; Shen et al., 2019). Previous studies in parenting have shown ethnoracial differences in socialization goals and parenting strategies across cultural communities, such as the differences in parents' orientation toward children's autonomy, morality, achievement, obedience, and relatedness (Arcia & Johnson, 1998; Keller et al., 2007; Suizzo, 2007).

Parental Beliefs Regarding Participation in Everyday Activities

Child's participation in everyday activities afford learning opportunities reflective of culturally valued competence (Gauvain, 1999; Gauvain & Perez, 2005; Rogoff, Paradise, Arauz, Correa-Chávez, & Angelillo, 2003; Göncü, 1999; Petrogiannis et al., 2013). Gauvain (2001) has highlighted that not only the direct, dyadic interactions with more experienced members of the society, but also indirect social experiences, such as the parents' provision and regulation of children's everyday activities, can facilitate cognitive development. Parental beliefs about their child's participation in everyday activities reflect parents' views about culturally appropriate developmental goals and significance, and these beliefs and expectations inform how parents organize children's learning environments and regulate activities (Harkness et al., 2011; Parmar et al., 2003; Petrogiannis et al., 2013). For example, parents may decide to allow child's participation in various types of activities (e.g., play, work, exploration, etc.), structure physical settings and resources, and assume different parental or partner roles in these activities with their child (Tudge et al., 1999). Parents' organization and understanding of their children's daily lives reflect their expectations about the developmental timetable of what and when it is appropriate for children to carry out particular activities. Research have shown that routine practices as well as informal activities in the family context can provide multiple opportunities for child to practice and learn essential cognitive skills (Gauvain & Perez, 2005; Spagnola & Fiese, 2007).

Studying parental expectations for children's developmental timetable or pace of development allows us to examine underlying childrearing goals and cultural values

(Salehuddin & Winskel, 2016; Super & Harkness, 1986). One study suggests that parents from diverse cultural groups differ in their expectations regarding their child's ability to plan on their own, as shown in European American parents expecting a younger age for when the child is able to develop these skills compared to Latino parents (Savage & Gauvain, 1998). Another study showed that European American mothers had younger age-related expectations for their children's ability to decide on activities than Latino mothers and that this expectation was related to children's participation in planning informal activities (Gauvain & Perez, 2005). In specific, European American mothers expected children to be able to decide on informal activities at a younger age than Latino parents. However, they differed in the way in which children participated in planning their activities at home, such that European American parents tended to decide on children's informal activities with their children, whereas Latino parents tended toward solitary decision making (Gauvain & Perez, 2005). The younger age-related expectation for deciding on informal activities was consistent with the value of child independence shown in European American families (Gauvain & Perez, 2005).

The present dissertation examines parental ethnothoeries in conjunction with cultural-specific parenting practice (i.e., *guan*) and socialization goals in Korean American and European American families. This allows us to examine parents' beliefs and expectations about children's engagement in everyday activities within a cultural framework as well as how these beliefs may underlie maternal instruction patterns among Korean American and European American mothers during activity-planning tasks.

Literature Review

Development of Planning and Joint Planning

The present dissertation employs a joint planning task to examine children's learning. Planning is a process of deliberately organizing sequences of actions toward achieving a goal and utilizes other cognitive skills, such as inhibitory control, flexibility, future-oriented thinking, and memory (Gauvain, 2001; Haith, 1997; Hudson & Fivush, 1991; McCormack & Atance, 2011). Planning is also an aspect of executive functioning skills that play an important role in children's adjustment in the early years of school as children are expected to take more responsibility for regulating their own behaviors and activities (Baker-Sennett, Matusov, & Rogoff, 1993; Gauvain & Perez, 2005; Perez & Gauvain, 2009). Although the process of problem solving and planning are intertwined and both involve goal-oriented actions, planning requires more metacognitive skills because they require envisioning and delineating future-oriented actions (Gauvain, 2001). Planning involves devising future-oriented actions and includes the formation of plans as well as the monitoring of the effectiveness and employing of flexible mean to reach the goals of the plan (Baker-Sennett et al., 1993; Gauvain & Rogoff, 1989).

Studies of planning have shown a rudimentary form of planning in children's early years of development, such as 12-month-old's coordination of a sequence of actions to obtain an object (Willatts, 1990; Benson & Haith, 1995), 19-month-old's orientation of hands to grasp an object (McCarty, Clifton, & Collard, 1999), and 3-year-old's capability of reasoning about future events, including the ability to make choices of items for future goals (Atance & Sommerville, 2014; Prabhakar & Hudson, 2014). While these future-

oriented processes provide a foundation for children's later planning behaviors, the conceptualization separating future thinking from planning has been blurred in the literature (Benson & Haith, 1995; McCormack & Atance, 2011). In specific, planning involves other processes beyond prospection about future, in that it includes the process of deliberate organization, anticipation, goal-setting, and monitoring of actions (Gauvain, 2001; Gauvain & Rogoff, 1989; Scholnick, Friedman, & Wallner-Allen, 1997)

Children show increasing competence in planning skills over time, especially in early to middle childhood. Studies have demonstrated age-related differences in children's planning skills, comparing preschool children to school-aged children. When planning for familiar events (i.e., shopping), 3- and 4-year-olds demonstrated their ability to construct a plan and execute them. However, in a more complex task, younger children showed difficulty in their planning while 5-year-olds showed the ability to construct a plan and execute two events simultaneously (i.e., planning for breakfast and then breakfast; Hudson & Fivush, 1991).

In another study with a joint planning task (i.e., grocery planning), children at ages 8 and 9 showed greater advance-planning skills than 4- and 5-year-olds, demonstrating more advanced scanning strategies (e.g., scanning the entire store, locating task items prior to moving the shoppers) and efficient route plans (Gauvain & Rogoff, 1989). Studies have documented children's flexibility in coordinating planned actions under specific circumstances and goals of the task. A study employing a maze task showed that older children (7-9 years old) showed greater flexibility in adapting the use of a planning strategy to the varying goals of the task (i.e., accuracy vs. speed) and

planned more in advance than younger (4-7 years old) children (Gardner & Rogoff, 1990). Another study found that older children (7-8 years old) engaged in more strategic planning involving opportunistic planning during action (Gauvain, 1992). Children's ability to plan more effectively continues to develop over the early school years.

Types of Planning Tasks & Activity Planning

Different planning tasks have been employed to study children's development in planning. One of the classic planning tasks is the *Tower of Hanoi* (Welsh, 1991) in which children were asked to transfer disks onto pegs using the fewest moves possible given rules and constraints. Another task is a *Truck Loading* or *Delivery Task* (Fagot & Gauvain, 1997; Gauvain & Perez, 2008) in which the task requires children to reverse-sequence items to be loaded onto a truck to be delivered in an efficient manner. While both require children to consider sequences of actions, these tasks have limited solutions. This kind of task may allow greater task responsibility taken by the mother, especially if the task seems complex and difficult for the child (Gonzalez, 1996).

Atance and colleagues (Atance & Meltzoff, 2005; Atance & O'Neil, 2001) have suggested a picture-book scenario and item-choice task which involves children to think about going to a particular scene and to choose the item they would need to bring to the location. While it is suggested as a planning task, it is a one-step planning task that does not require temporal order of future sequences of events (McColgan & McCormack, 2008). It may be better understood as a future thinking task involving prospection (Atance & Meltzoff, 2005).

Tasks involving more naturalistic contexts have been suggested, including errand

planning (Gauvain & Rogoff, 1989) and shopping task (Hudson, Shapiro, & Sosa, 1995). Route planning tasks, such as grocery errands, instruct children to plan the most efficient route to obtain instructed items (Gauvain & Rogoff, 1989). Hudson's (Hudson et al., 1995) task involved asking children to construct plans for familiar events. With its ability to consider the process of children's ability to order sequences of events, the route planning task has been modified to understand different aspects of the planning process.

One example is an activity planning task that involves sub-goals (Gauvain et al., 2018; Prabhakar & Hudson, 2014). When planning activities to meet future goals, the child must consider sequence dependency in which one event must occur before another for efficient planning. While Hudson's task requires memory demands (e.g., more features in the model), the activity planning externalizes the list to be remembered, reducing the memory demand (Scholnick et al., 1997). Moreover, activity planning tasks allow greater flexibility in solution and ecologically valid engagement for both younger and older children, where younger children can still generate solutions even when it may not necessarily be the most efficient route for completing the task.

Social Processes in the Development of Planning: Maternal Interaction Behaviors

Studying social process of cognitive development has demonstrated how social interactions with a more experienced planner can facilitate children's development in planning (Gauvain, 2001; Gauvain & Rogoff, 1989; Vygotsky, 1978). Maternal assistance in activity planning tasks have shown children's improvement in planning skills following a joint planning session. More experienced planners who are more familiar with task procedures can employ more strategies for effective plans (Gauvain,

1992). Some of the effective mother-child interactions have highlighted that children's problem-solving and planning skills improved when the mothers constructed their interactional supports to the developmentally appropriate level of the child and shared task responsibility (Gauvain, 1992; Gauvain & Perez, 2008). Such interactions reflected ways that allowed more active participation from their child to practice planning skills (Gauvain, 1992; Gauvain & Perez, 2008).

Mother's Instruction is Contingent on the Child's Capability

Studies have shown age-related differences in how mothers respond sensitively and adjust their instruction in response to the developmental capability of the child (Carr & Pike, 2012; Gauvain, 2001; Gauvain et al., 2002; Gauvain & Perez, 2008). A longitudinal study examining mother-child planning over three years of middle childhood suggested that mother-child interactions are affected by child age as well as the difficulty of the task (Gauvain et al., 2018). Mother and child joint planning involves reciprocal processes, in which the child informs mother's guidance on the task with areas that need more support from the mother (Gauvain, 2001).

For example, a study with children at ages 4 to 8 showed that mothers with younger children (i.e., 4-to-5 years old) are more likely to do more task management to establish shared understanding of the task rules (e.g., "Remember, the shopper can't fly."), organization of the task (e.g., information about which items need to be retrieved), and reminders about correct task procedures (Gauvain, 1992, 2001). Mothers with older children, whose understanding of the task did not need to be clarified, had focused much of their interactions on strategic concerns (e.g., "Let's get the farthest things first.").

These interactional patterns are reflective of Vygotsky's ZPD and how mothers' input during interactions are attuned to the child's developmentally appropriate skills (Vygotsky, 1978). Results showed that mother's task management resulted in less efficient route planning, and children whose maternal cognitive assistance involved higher levels of strategy showed more scanning and constructed more efficient plans (Gauvain, 1992).

The Child's Active Participation

Share of Task Responsibility. In mother-child planning, sharing responsibility involves collaboratively sharing the planning responsibilities with each other, such that decision making is shared rather than independently made. Preschool children are shown to have more difficulty in understanding the task and benefit more from opportunities to practice planning skills. In one study, five-year-old children's ability to plan in advance, a skill important for effective errand planning, has shown improvement in their later independent planning following joint planning involving greater shared responsibility (Gauvain & Rogoff, 1989).

Suggestions and Elaborations. Mother's guidance can involve instructions intended to regulate or influence the child's problem-solving actions or behaviors that allow the child to decide on how to proceed or respond (Eason & Ramani, 2017; Gauvain & Perez, 2008). Studies have used similar constructs to distinguish forms of maternal guidance to reflect the child's autonomy (i.e., elaborative and directives; Bibok et al., 2009) or mother's behavioral control (i.e., directives; Gauvain & Perez, 2008). Interactions that encourage the child to contemplate a decision without giving away

which step to take next can facilitate the child's cognitive engagement, thus promoting the child's active role in the problem solving, have been associated with positive outcomes (Bibok et al., 2009; Gauvain & Perez, 2008). In addition, the explicit nature of the instruction in mother's directives has also shown to be appropriate in reducing the complexity of task, and such form of guidance was elicited more based on the child's individual differences, such as child age (e.g., younger children who may require direct instruction to engage with the task), child's noncompliance, and executive functioning skills (Bibok et al., 2009; Eason & Ramani, 2017; Gauvain & Perez, 2008).

The above review of studies examining maternal interactional behaviors and the development of child planning skills have heavily focused on samples of middle-income, European American families, and some Latino families. How the form and meaning of mother-child interactions may show similar or different pattern for Asian American families has received little research attention. The following section reviews cultural and social processes in the development and learning of Asian American children. The studies are drawn from the parenting and socialization literature.

Parental Ethnotheories and Socialization Goals in East Asian Families

Many empirical studies with Asian families have focused on academic learning and school achievement. For example, not only did Taiwanese mothers mention their 3- and 4-year-old children's academic achievement to be more important than the U.S. parents in one study, Asian parents were shown to endorse greater importance for early learning and getting a head-start on academics in another study (Parmar et al., 2004; Wang & Tamis-LeMonda, 2003). Emphasis on learning was also evident in children's

storybooks, showing that the prevalence of learning-related qualities (e.g., malleability of intelligence, desire to master complex skills, and putting in effort) was higher in the Chinese storybooks compared to U.S. or Mexican storybooks (Cheung, Monroy, & Delany, 2017).

Parental ethnotheories among East Asian families are well represented in the literature of play and learning. Cultural differences between East Asian and European-Americans in parents' perception about the role of play in children's development were manifested in parental practices at home related to provisions of toys and organization of time and space for play (Parmar et al., 2004). East-Asian parents' approach to "learning" can take more formal and serious forms of interactions and undermine the role of playful learning in child development (Farver, Kim, & Lee, 1995). This is also reflected in Asian parents' separation of academic learning from play, where play is assumed to reflect entertaining physical and social activities rather than a vehicle of learning (Parmar et al., 2004). Another study showed that Chinese parents employed more systematic and teaching-like methods in their interactions with their child around a mathematics task (Huntsinger et al., 2000; Huntsinger & Jose, 1995).

Cultural Models of Learning

While the emphasis on "learning" (or academic achievement) has received much attention in the literature, the concept of "learning" may take on different meaning in an East-Asian parenting context. Cultural differences in learning beliefs that guide children's learning have been documented. The Chinese cultural model of learning views learning as a process of cultivating virtues and "self-perfecting" to a "whole" person,

whereas the cultural emphasis of learning in the U.S. is based on mind-task attributes, expertise, or skills (Li, 2004; 2005). Additionally, pursuit of knowledge is considered a moral virtue, and diligence and persistence in the learning process are highly valued under the Chinese model of learning (Li, 2002).

Parental beliefs about learning, which are reflective of socialization goals valued in the culture, can influence how parents interact with their children during a cognitive activity. East Asian parents' emphasis on the importance of seeking knowledge and academic training have been well documented to reflect the cultural value of learning (Parmar et al., 2004; Wang & Tamis-LeMonda, 2003). Li and colleagues (Li, 2005; Li, Fung, Bakeman, Rae, & Wei, 2014) have compared cultural beliefs about learning in Chinese and European-American parents. Findings suggest that East-Asian parents tend to utilize a virtue-oriented learning approach, whereas the European-American parents utilize a mind-oriented learning approach (Li, 2005)

Socialization Goals

The ethnotheories or parental beliefs include parents' goals and cultural values that shape parenting behaviors and practices (Goodnow & Collins, 1990; Harkness & Super, 2002). These parental goals and values are reflected in socialization goals, which refers to the qualities, ways of behaving or thinking, and values that parents desire their child to develop or not develop to be a competent member in their cultural community (Gauvain & Perez, 2015; Grusec & Davidoc, 2010; Harkness & Super, 2002; Tamis-LeMonda et al., 2008). The socialization goals are also shown to indirectly influence

child's social and cognitive development through their parenting practices and socialization processes (Rubin & Chung, 2006).

Numerous studies have shown differences in socialization goals across ethnoracial groups and have frequently contrasted Eastern versus Western groups (Keller et al., 2007; Park, Coello, & Lau, 2014). The findings have shown that socialization goals of the Asian American families reflected values aligned with Confucianism (e.g., obedience, group harmony), whereas the socialization goals for the European-American families focused on child-oriented goals (e.g., independence, self-esteem; self-expression; Padmawidjaja & Chao, 2010). Other studies have examined socialization goals within cultural subgroups, further revealing reoccurring childrearing goals prevalent among East Asian families (Park & Kwon, 2009; Rao, McHale, & Pearson, 2003; Shen et al., 2019). Therefore, identifying parents' socialization goals has shown insights into investigating cultural differences in socialization strategies across diverse communities.

Confucian-Related Goals. Filial piety is a Confucian virtue emphasized in socialization goals among the East Asian families. Filial piety refers to expectations that children obey and respect parents and elderly people, support parents and family, and honor the family through educational and occupational success (Luo, Tamis-LeMonda, & Song, 2013). East Asian parents have reported filial piety as more valued and important goals compared to the U.S. mothers (Luo et al., 2013). Obedience and respect were also the cultural values that Korean immigrant parents desired their children would preserve and maintain (Choi et al., 2014). This effort is also evident in Korean American parents' endorsement of the importance of maintaining traditional etiquettes such as the practice

of greeting adults with a bow, the use of two hands to receive or pass objects to adults, and the use of honorifics with the elders, such as ending a sentence with '*-yo*' or '*-imnida*' (Choi et al., 2014). The concept of filial piety (*Hyo*) is understood to be bidirectional in Korean culture, where parents also assume the responsibility of being a good model for their children to follow, respect, and obey (Kim, 2006).

Child-Centered Goals. Emphasis on cultivating child's self-esteem (i.e., a sense of self-worth) has been well documented to be a major goal of childrearing among European-American families (Miller et al., 2002). Studies have shown that European-American parents put greater value on the child's self-esteem compared to parents in Japan and China (Stevenson et al., 1990). The importance of independence and verbal self-expression has also been emphasized more among the U.S. mothers (Padmawidjaja & Chao, 2010). Some studies with Asian American families also challenged the individualism-collectivism dichotomous framework in their findings. They found that Asian American parents reflected values of supportive autonomy, personal choice, self-expression in their children, especially among some contemporary parents or immigrant parents undergoing acculturation process (Choi et al., 2013; Way et al., 2013).

Parental Role and Guan

Korean parents assume responsibility of the "teacher" or "educator" as reflected in their parental virtues. Studies have shown how devoted Korean parents are to their children's development, especially during early stages of development (Cote, Kwak, Putnick, Chung, & Bornstein, 2006). Parents from other Asian subgroups also have been shown to assume the role of teacher and academic coach at home rather than be a play

partner for their child (Parmar et al., 2004). Consistent with the Confucius emphasis on the role of parents in cultivating the child, one of the parental virtues in Korean families is "*ka-reu-chim*" (teaching or lesson; Kim, 2006). This is shown to be similar to the notion of *guan* in Chinese parenting, which refers to "teaching or educating children in appropriate or expected behavior" (Chao, 1994; Choi et al., 2017).

Chao (1994) has challenged the applicability of Baumrind's parenting typology (1971) for East Asian subgroups and emphasized the cultural context to understanding East Asian parenting that has previously been categorized as the strict "Authoritarian" parenting style (Chao, 1996; Sorkhabi, 2005; Wu et al., 2002). Dimensions of parental warmth/responsiveness and demands/control have been conceptualized to reflect parental control to be orthogonal to parental warmth (Maccoby & Martin, 1983). Because the primary dimension distinguishing between Authoritarian and Authoritative parenting falls in the expression of parental warmth or supportiveness, Asian American parents tend to display lower warmth and higher demands as measured in this scale (Russell, Crockett, & Chao, 2010). This low report of parental warmth in Asian American parents may be reflective of conceptual differences in the expression of warmth and supports in these communities, and perhaps the conceptualization of parental control and warmth may not be distinctively separate as measured in the traditional parenting typologies (Russell et al., 2010).

Chao (1994) suggested that Baumrind's (1971) authoritarian style of the parenting typology may not capture an important aspect of childrearing ideology, *guan* (training beliefs). Chao (1994) points out how the notion of "training" has different meaning and

implications, from authoritarian style in the traditional parenting typology, that have evolved from different sociocultural histories and traditions. The concept of "guan" reflects parents' care, concern, and close monitoring, as well as the responsibilities that parents assume in childrearing practices (Chao, 1994). Moreover, the close involvement in child's lives was aimed at promoting success in the child (Padmawidjaja & Chao, 2010). *Guan* parenting involves parental guidance and monitoring, often expressed in firm directives, and it is shown to reflect parental devotion and sacrifices to childrearing (Chao, 1994, 2000). Indeed, East Asian parenting styles have shown to reflect both disciplinary training and warmth (Chao, 1996). This culture-specific parenting ideology provides a way to understand the complexity of East Asian parenting and has led to insights regarding mothers' instructional interactions with their children (Chao, 1994; 1996). Guan parenting is continued to be used to describe parenting quality of different subgroups of East-Asian families, including Korean American (Choi et al., 2014; Wu et al., 2002).

Variations in Parent-Child Interactions

Given cultural differences in parents' beliefs and goals about child development and learning as well as the theoretical relations between parental beliefs and socialization practices, we can expect to see parents' beliefs and values reflected in parent-child interactions in the course of carrying out a goal-oriented task. The scaffolding literature had shown variations in maternal interaction patterns based on the child's age and competence (Bibok et al., 2009; Mulvaney et al., 2006). Similarly, mother's expectations about when the child is able to perform a particular task can influence how much

opportunities are offered in their interactions in a given task. This section reviews studies reflecting parent-child interaction patterns among East Asian families.

Parent-Child Interactions in East Asian Families

East Asian parents' emphasis on learning virtues that are reflective of Confucianism, such as effort, diligence, modesty, and self-restraint, have been evident in parental socialization practices as well as parents' teaching methods with their children (Cote et al., 2015; Miller et al., 2002; Ng, Pomerantz, & Lam, 2007). Therefore, studies showing contrasts in mother's affective feedback to their child as it relates to parents' socialization goals are reviewed.

Promoting Self-Esteem vs. Modesty. European-American mothers have been shown to present their children in a positive and affirming way during parents' interactions with their children when they share past experiences (Miller et al., 2002). European-American parents place great importance on protecting and cultivating children's self-esteem by praising and showing affection and respect for the child's individual differences (Miller et al., 2002). On the other hand, narrative practices of Taiwanese mothers are structured around telling their children about past transgressions and oriented toward concern with the learning of moral lessons through taking a self-critical stance (Miller et al., 2002). Similarly, Korean Americans have also been shown to encourage self-control and modesty when achieving goals (Farver et al., 1995; Farver & Shin, 1997).

The emphasis on self-improvement and modesty is reflected in the ways Asian parents structure interactions or respond to the child's performance in a task. One aspect

in which differing socialization goals influence parents' responses to the child's performance is reflected in the feedback parents provide. In one study, Chinese children reported that their parents emphasized their successes less and their failures more (Ng et al., 2007). The results also showed that the Chinese mothers responded to success with fewer positive statements and more negative statements and to failure with more negative statements and fewer positive statements than European-American mothers did (Ng et al., 2007). Additionally, Chinese parents of 5-year-olds have been shown to encourage modesty and discourage overconfidence, showing off, or acknowledgement of their accomplishments compared to U.S. parents (Wu et al., 2002). These findings are consistent with East Asian mothers' belief about how children with high self-esteem may be more vulnerable to experiencing frustration in the face of failure and be less receptive to corrections in ways that impeded learning opportunities and self-improvement (Luo et al., 2013; Miller et al., 2002).

Moreover, the idea of humility or modesty is emphasized in pursuing knowledge and respecting "teachers" rather than reflecting a self-denigrating posture, and it is reflective of moral character for further self-improvement (Li, 2005). Among the European mothers in the U.S., attributing success to internal factors (e.g., one's ability and effort) and failure to external factors (e.g., task difficulty) tend to emphasize the importance of protecting a positive sense of self (Cote et al. 2015). In Korea, downplaying one's own importance to preserve the group harmony is emphasized and valued (Cote et al., 2015). The concept of "*gyeum-son*" (modesty, humility; respecting others by lowering oneself and not being assertive) is reflective of how individuals can

better themselves by engaging in a self-reflective practice that focuses on the role of internal factors, such as effort, in the face of failure (Cote et al., 2015).

Freedom to Learn. One study examining ethnic differences in parental attitudes about learning (e.g., conformity, freedom to learn, autonomy) and its relation to children's Theory of Mind (TOM) demonstrated the need to consider "good parenting" in sociocultural context by examining relations between authoritarian parenting style and child's TOM in Korean- and European-American families (Vinden, 2001). Cultural differences were found, showing greater value on conformity among Korean-American mothers and greater autonomy-granting attitude among European-American mothers. Yet, a negative relationship between conformity and TOM was evident in European-American children but not among Korean-American children. Both Korean- and European-American mothers endorsed the importance of children's freedom to learn in the learning process. Findings mirrored the issue of how the same construct of parenting may have different meaning across diverse cultural communities. The strict behavioral conformity is supported on a family level by cultural expectations, not necessarily resulting in negative outcomes, especially when the strict parenting is attenuated by parents' encouragement of the learning process (Chao, 1995; Vinden, 2001).

Form and Meaning of Directive Instruction

Forms of the childrearing practices and parenting strategies that may appear to be the same across cultural communities may have different functional relations to children's developmental outcomes (Bornstein, 1995). Therefore, it is important to consider the context in which a particular dimension of childrearing practices or parental interaction patterns is expressed as well as how it may differently affect individuals from various ethnoracial groups. One example is the construct of directive instruction in studies with Asian American families. The current literature with predominantly European American samples posits that mothers' use of directives leads to a child's passive role, may hinder learning opportunities to practice thinking, and are associated with negative outcomes (Eason & Ramani, 2017).

Interestingly, some studies with Asian families suggested that maternal directive instruction may not necessarily relate to negative outcomes in the child's social and cognitive development. In a study with Korean families, mother's critical comments (i.e., tendency to call attention to flaws and errors, to demand the correction of mistakes, and to demand precision when learning to write *Hangeul* (Korean letters)) were positively related to reading acquisition for 4- and 5-year old children (Cho et al., 2017). A study with Hmong families in the U.S. (i.e., an ethnic community from Southeast Asia regions, such as Cambodia and Laos) also found that maternal directive instruction focused on a child's action about what to do in problem-solving tasks positively predicted the child's conscientious behaviors (e.g., following the rules, competing work on time, organizing desk and other materials) in kindergarten (Stright, Herr, & Neitzel, 2009).

Similarly, the importance of distinguishing directives from parental intrusiveness and control has been suggested with other ethnic subgroups (Kermani & Brenner, 2000). Previous studies have defined mother's directives as commands that presume child's passive role in the participation (Eason & Ramani, 2017). However, different cultural communities may use different forms of instruction or have qualitatively different meaning of adult involvement in their learning (Kermani & Brenner, 2000). For example, directive instruction can be reflective of mother's greater engagement in explicit teaching rather than being physically intrusive of the child's learning interactions (Kermani & Brenner, 2000). Recent studies with Koreans and Korean Americans have examined directive instruction in terms of parents' explicit instruction, telling the child what to do, and pointing out or correcting errors (Cho et al., 2017; Jwa & Frost, 2003). The next section details these findings.

Korean American Parent-Child Interactions During Cognitive Activities

While there is a broad recognition of Korean-American mothers' emphasis on academic learning for their children, we do not know much about how these learning interactions occur, nor how the parental beliefs about learning are instantiated in their instructional interactions with the child during a cognitive activity. Few studies have documented mother-child interaction strategies during joint activities among Korean Americans, and I review in below sections the studies that included cognitive interactions.

One study highlighted different instruction strategies by Korean American mothers on different types of cognitive tasks (i.e., pretend play vs. story-retelling task vs.

puzzle game task). An observational study of Korean American mothers and their 4-year-old children found that mothers' instructional behaviors and sensitivity to the child's mastery differed across three tasks. Mothers tended to explicitly organize children's play and to include various levels of probing questions during the story-retelling task, and mothers in both the play and story-retelling tasks used scaffolding without consideration of the child's current level of mastery in the tasks (Jwa & Frost, 2003). In contrast, mothers tended to use less directive instruction in their interactions with the child during the puzzle game task, with greater use of contingent scaffolding (Jwa & Frost, 2003). When the tasks involved verbal interactions, in the cases of pretend play and story retelling, there was more specific, directive, and demanding utterances by mothers that reflected mother's active organization of the interactions rather than following the child's play theme. These instructional patterns may be reflective of the Korean American mothers' engagement in explicit teaching during these tasks compared to a more play-like puzzle game task. The pattern of taking on a teaching role is also evident in the mother's attempt to explain the proper use of play materials to the child during the interactions.

Another study showed Korean American mother's scaffolding in relation to children's cognitive and literacy abilities (Kim & Anderson, 2008). The study examined mother's interactions with her three- and seven-year-old children during a shared reading task and found that the mother tended to focus on the child's interpretation of the story content with younger children, but focus on literacy practice of reading the text with older children (Kim & Anderson, 2008). Moreover, younger children's incorrect interpretations elicited mother's verbal guidance.

> *When the child misunderstood the illustration of fox coming to play as the fox stepping on, mother responded "That's not stepping on, but [he] asked fox to play with" "But [It] seems this one is going to step on."… "Now fox is sweeping the yard. [He] is helping dad to clean"* (Kim & Anderson, 2008, p236).

In this example, when the child misinterpreted the illustration of a fox coming to play to be a fox "stepping on," the mother responded by correcting the younger child's misinterpretation and facilitated the reading with a focus on the description of the content. Clarifying the content details may not be necessary with older children. This particular maternal interaction behavior is consistent with findings from European American mothers constructing her interaction to be responsive to the child's current level of understanding (Gauvain, 1992).

In sum, while previous studies have provided insights to mother-child interaction patterns of the Korean-families, specific instructional behaviors during a joint cognitive activity may reflect cultural belief systems. This topic is yet to be explored with Korean Americans. Whether maternal instructional behaviors, such as the directive instructions that have previously shown to result in negative outcomes for European American children take on different functional relations for Korean American children's learning is an open question.

Research Goals and Hypotheses

The present dissertation utilizes the *microgenetic method* (Siegler, 2006; Gauvain & Perez, 2015) to observe mother-child interactions during a joint planning activity and child's independent planning among Korean- and European-American dyads. This dissertation has five research goals: 1) to study whether the Korean- and European-American mothers differ in their parental beliefs about child's learning and planning skills; 2) to determine the relation of parental beliefs about child learning to maternal instructional behaviors during a joint planning task; 3) to replicate previous planning studies examining the role of child age on maternal instruction behaviors (Gauvain, 1992; Gauvain, 1995; Perez & Gauvain, 2005) 4) to compare maternal instructions (i.e., cognitive assistance, instructional support, encouragement of child's contribution, directive instruction, affective feedback) during joint planning based on the interplay of child age and ethnoracial background as well as mother's acculturation; and 5) to examine relations among parental beliefs, maternal instructions, and children's independent planning skills.

To accomplish these research goals, parental beliefs about child's planning skills and parental beliefs about child development and learning are examined. The main focus is on mother's socialization goals (e.g., Confucian goals, child-centered goals), *guan* parenting, and freedom to learn. The study examines how these parental beliefs may shape mothers' instructional patterns (e.g., cognitive assistance, instructional supports, affective feedback, encouragement of child's contribution, directive instruction) during a joint planning activity. Mother's cultural orientation to Korean and American cultures

(e.g., acculturation, enculturation) are examined in relation to maternal instruction within the Korean American families. Moreover, the study investigates how maternal instruction relates to child age, specifically how Korean American and European American mothers' cognitive assistance, directive instruction, and encouragement of the child's contribution may be more pronounced for older children who are in their early school years compared to younger preschoolers. Lastly, the study identifies which parental beliefs and maternal instructions facilitate the child's independent planning skills, including the exploration of whether mother's directive instruction (e.g., greater commands, physical demonstration, critical feedback/correction) impact post-test performance differently for Korean-American and European-American children.

Hypotheses

Comparing Cultural Differences in Parental Beliefs about Child's Learning and Planning Skills

Hypothesis 1a: Mirroring findings from research done with Chinese Americans who share the background of Confucianism, Korean-American mothers were expected to score higher on parenting beliefs aligned with Confucian goals (e.g., *guan*, Confucian goals) whereas European-American mothers were expected to score higher on parenting beliefs about child-centered goals (Choi et al., 2014; Padmawidjaja & Chao, 2010). No difference was hypothesized for the belief about freedom to learn (Vinden, 2001).

Hypothesis 1b (Exploratory): Given that parent's beliefs and expectations about children's planning skills have been found to differ in European American and Mexican American families (Savage & Gauvain, 1998), Korean American and European

Americans mothers' age-related expectations about child's planning skills were to reflect their parental ethnotheories.

Parental Beliefs and Instruction Patterns

Hypothesis 2a: Parental beliefs about learning are expected to be associated with maternal instructions, such that mothers who score higher on freedom to learn and child-centered goals are expected to use less explicit instructional support and directive instruction, encourage the child's contribution more, and give more positive feedback. Mothers who score higher on *guan* and Confucian goals are expected to use more directive instruction, especially commands and corrections.

Hypothesis 2b: Mothers' age-related expectations about when their own child is capable of carrying out plan-related activities are expected to be associated with maternal instructions, such that mothers who have younger age-related expectations, relative to their child's current age, are more likely to engage in high-level cognitive assistance (e.g., strategies) and encourage the child's contribution more.

Variations in Instructions in Relation to Child Age (5 vs. 8) and Ethnoracial Background (Korean American vs. European American) and the Role of Cultural Orientation (acculturation, enculturation).

Hypothesis 3a: Replicating previous findings of age differences, mothers of 8-year-olds, compared to 5-year-olds, are expected to provide more high-level cognitive assistance (i.e., general strategies; Gauvain, 1992) and less explicit instructional support, fewer directive instructions, and less encouragement of child's contribution. No age difference was hypothesized for affective feedback.

Hypothesis 3b: Maternal instruction is expected to differ based on child's ethnoracial background, such that Korean-American mothers are expected to provide more explicit instructional support, correction, and behavioral instructions toward their children whereas European-American mothers are expected to show greater encouragement of children's contribution and more positive supports (Cho et al., 2017; Jwa & Frost, 2003; Kermani & Brenner, 2000). No difference was hypothesized for cognitive assistance and negative feedback.

Hypothesis 3c: No age × cultural background interaction is hypothesized for mother's cognitive assistance and encouragement of child's contribution. An age × cultural background interaction is hypothesized for mother's directive instruction (i.e., proposing commands, physical demonstration, and correction). The greater use of directive instruction for Korean-American mothers, compared to European-American mothers, would be more pronounced for 8-year-old children than 5-year-old children as Korean-American mothers would engage in greater education socialization of their children during early school years compared to European-American mothers (Choi, Bempechat, & Ginsburg, 1994).

Hypothesis 3d (Korean-American mothers only): A within-group difference in maternal instruction patterns among Korean American mothers is hypothesized, such that Korean American mothers' acculturation is expected to predict greater positive feedback, more encouragement of child's contribution, but not the use of more explicit instructional supports.

Parental Beliefs and Instructions Facilitate Better Individual Planning

Hypothesis 4a: Based on previous findings about the interactions with mother providing learning opportunities for children's cognitive skills, children are expected to show improvements in planning from the pre-test to the post-test following the mother-child interaction task (Gauvain, 1992; Gauvain & Rogoff, 1989).

Hypothesis 4b: For both Korean Americans and European Americans, parental beliefs and effective maternal instructions are expected to facilitate better planning skills (Gauvain, 1995; Gauvain & Rogoff, 1989; Perez & Gauvain, 2005; Radziszewska & Rogoff, 1991). In specific, children whose mother provides more high-level cognitive assistance, encourage the child's contribution, and endorse parental beliefs of freedom to learn are expected to show better planning skills on the post-test.

Hypothesis 4c (Exploratory): Maternal directive instruction (e.g., more commands, physical demonstration, and correction) would predict worse performance in posttest planning for European American children as compared with Korean American children (Cho et al., 2017; Stright et al., 2009).

CHAPTER 2

Method

Participants

A total of 88 mother-child dyads (44 Korean American; 50% girls) with children either age 5 (*M* = 5.36 years old; Range: 4.25-6.58 years) or 8 (*M* = 8.38 years old; Range = 7.5-.25 years) participated. Table 1 includes more detailed demographic information of the participants. Most (41, 93%) of the Korean American mothers were born in South Korea (with an exception of 1 mother who was born in Canada) and immigrated to the U.S.; 42 (95%) of the European American mothers were U.S. born. All of the Korean American mothers completed some college or held a college degree, and 39 of the European-American mothers also held college degrees (22.7% Associate, 31.8% Bachelor, 9.1% Masters, 6.8% Doctoral or Professional). The median household income was $86,500 for Korean American and $87,500 for European American families.

Participant Recruitment

Participants were recruited through the Psychology Department child database (i.e., *Child Studies @ UCR Collaborative Participant Database*) as well as through community events and visits to local schools, libraries, and churches. During the recruitment events and visits, parents were approached by the researcher and/or research assistants, given flyers (see Appendix A) and brief description of the study, and asked whether they would be interested in participating. If interest was shown, parents were asked to provide their contact information. Potential participants were contacted by telephone, e-mail, or a text message based on their preference. When contacted, parents

were given a brief description of the study and asked several screening questions to verify their eligibility to participate in the study. To participate, Korean-American mothers had to meet the following criteria: (a) self-identify as Korean or Korean American, (b) have at least one parent (i.e., parent of the mother in the study) who had been born in the heritage country (i.e., South Korea), and lastly (c) have a child who is 5- or 8-years-old with no developmental delays. Similarly, European-American mothers had to have a child who is at ages 5 or 8 with no developmental delays. During the recruitment and scheduling procedures, mothers were also informed about their right to withdraw at any time of the study and the compensation they would receive for study participation.

Power Analysis

Statistical power analysis (*a priori*), using *G*Power 3.1*, revealed that 84 participants were needed for the study with 4 groups (21 in each group) to detect a moderate effect size (f = .21) with 80% power and an alpha value of .05 in the repeated measures, between factors ANOVA design (Faul, Erdfelder, Lang, & Buchner, 2007). A moderate effect size was calculated using the descriptive statistics from previous research with a similar research design (Perez & Gauvain, 2005).

Table 1

Distribution of the Participants' Demographic Characteristics

	All (N = 88)	Korean American (n = 44)	European American (n = 44)
Child			
Sex			
Female	44 (50.0%)	22 (50.0%)	22 (50.0%)
Male	44 (50.0%)	22 (50.0%)	22 (50.0%)
Grade in school			
Not in school	6 (6.8%)	1 (2.3%)	5 (11.4%)
Preschool or	38 (43.2%)	21 (47.7%)	17 (38.6%)
Kindergarten			
1^{st} – 4^{th} grades	44 (50.0%)	22 (50.0%)	22 (50.0%)
U.S. born	77 (87.5%)	33 (75.0%)	44 (100.0%)
Mother			
Age (mean years; range)	38.80 [a]	39.75 [a]	37.84 [a]
	[28 – 51] [b]	[30 – 50] [b]	[28 – 51] [b]
Marital status			
Married	78 (88.6%)	43 (97.7%)	35 (79.5%)
Single	6 (6.8%)	0 (0.0%)	6 (13.6%)
Divorced	4 (4.5%)	1 (2.3%)	3 (6.8%)
Employment status			
Homemaker	47 (53.4%)	24 (54.5%)	23 (52.3%)
Full-time	25 (28.4%)	12 (27.3%)	13 (29.5%)
Part-time	15 (17.0%)	6 (13.6%)	9 (20.5%)
Student	8 (9.1%)	5 (11.4%)	3 (6.8%)
Not employed	2 (2.3%)	2 (4.5%)	0 (0.0%)
Other	3 (3.4%)	1 (2.3%)	2 (4.5%)

Highest education			
High school	5 (5.7%)	0 (0.0%)	5 (11.4%)
Some college	12 (13.6%)	4 (9.1%)	8 (18.2%)
Associates	11 (12.5%)	1 (2.3%)	10 (22.7%)
Bachelor's	37 (42.0%)	23 (52.4%)	14 (31.8%)
Master's	17 (19.3%)	13 (29.5%)	4 (9.1%)
Doctoral or professional	6 (6.8%)	3 (6.8%)	3 (6.8%)
U.S. born			
Yes (i.e., second generation)	44 (50.0%)	2 (4.5%)	42 (95.5%)
No – moved to U.S. at age 13 or older (i.e., first generation)	40 (45.5%)	39 (88.6%)	1 (2.3%)
No – moved to U.S. before age 13 (i.e., 1.5-generation)	3 (3.4%)	2 (4.5%)	1 (2.3%)
Not reported	1 (1.1%)	1 (2.3%)	0 (0.0%)
Household Income			
(Median)	$87,500 [c]	$86,500 [c]	$87,500 [c]
Below $30,000	9 (10.2%)	4 (9.1%)	5 (11.4%)
$30,000 - $50,000	7 (8.0%)	4 (9.1%)	3 (6.8%)
$50,000 - $100,000	36 (40.9%)	15 (34.1%)	21 (47.7%)
$100,000 - $150,000	18 (20.5%)	10 (22.7%)	8 (18.2%)
Above $150,000	18 (20.5%)	11 (25.0%)	7 (15.9%)

Note. Numbers in the table denotes the number of individuals who reflect each demographic characteristic.

[a] The numbers reported are mean ages.

[b] The numbers reflect a range of ages.

[c] The numbers reflect media income.

Procedure

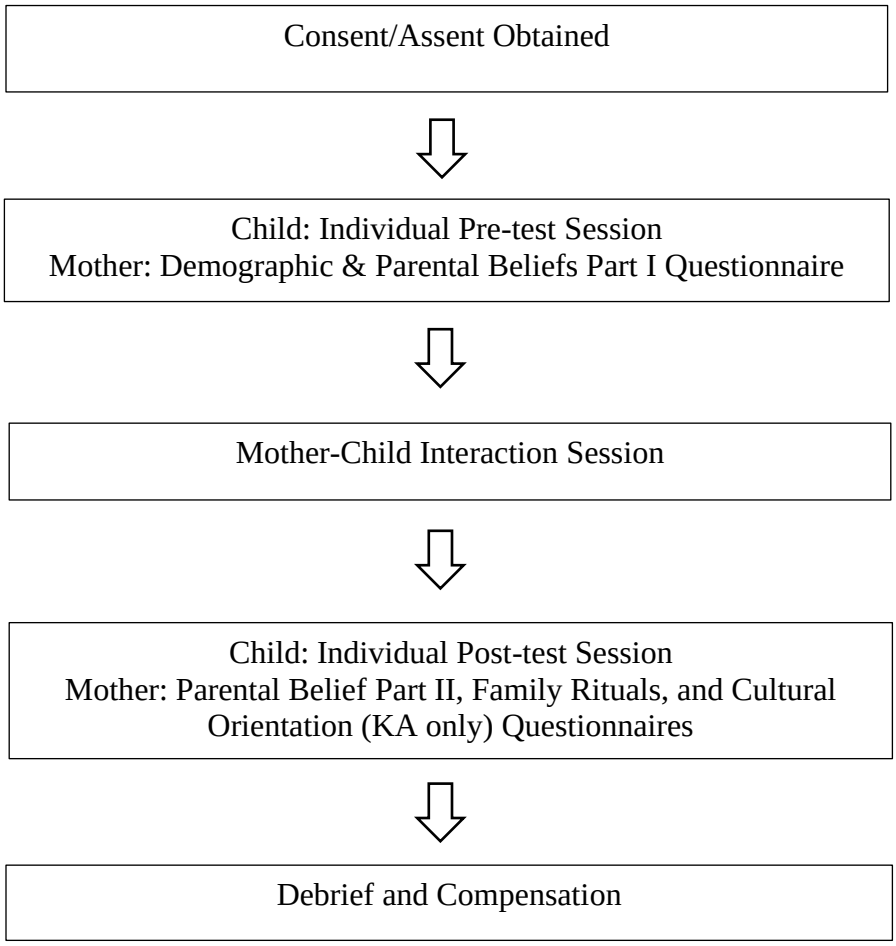
Figure 1 presents an overview of the procedure. Mothers who agreed to participate with their child were invited to visit the university laboratory (n = 75), or scheduled to do the study at their home (n = 12) or a private room of a local library (n = 1), for a single visit. At the outset of the visit, the experimenter provided a description of the study and its procedure before obtaining the mother's consent and the child's verbal assent to participate in the study. The child then was invited into a quiet observation room in the laboratory or a private room at home or public library, where the child worked on the individual pre-test chore-planning task. An experimenter provided instructions and then stayed in the room without offering any assistance while the child worked on the task. At this same time, mothers completed the demographic survey and one of the parental beliefs questionnaires (i.e., parental beliefs about children's planning skills) in a quiet, adjacent room.

When children completed the pre-test task, mothers were escorted to the observation room where they worked on the errand-planning task with the child. After giving task instructions to the dyad, the experimenter left the room and the dyad had as much time as they wanted to work on the task. The experimenter returned to the room when the dyad indicated they had completed the task. The mother then left the observation room and the child remained there and worked on the post-test chore-planning task alone in the presence of the experimenter. At this time, the mothers completed questionnaires about cultural orientation, family rituals, and another questionnaire about parental beliefs (i.e., parental expectation of their own child's

planning skills, *guan* parenting, freedom to learn, socialization goals, family rituals and routines). The entire visit took approximately one hour. At the end of the visit, the dyads were debriefed, thanked, and compensated for their participation. Mothers were given $15 in cash, and the children were given a small, age-appropriate toy item.

Figure 1

Process of Data Collection



Design and Materials

All study materials and measures were originally in English, and materials with Korean/Hangeul translations were provided for participants whose preferred language was Korean. Parent-report surveys that were previously utilized with Korean samples were obtained through contacting the original authors for their version of Korean-translated materials (i.e., Korean American Acculturation Scale 2, g*uan* parenting, enculturation questionnaires). The rest of the study materials, including the consent forms, scripts, stimuli, and questionnaires had undergone back-translations, in which the Korean translations were translated back to English by bilingual research assistants and the present author and then compared with the original measures and instructions (Erkut, 2010). This back-translation method ensured that the translated versions and the original versions were equivalent and valid.

Activity Planning Tasks

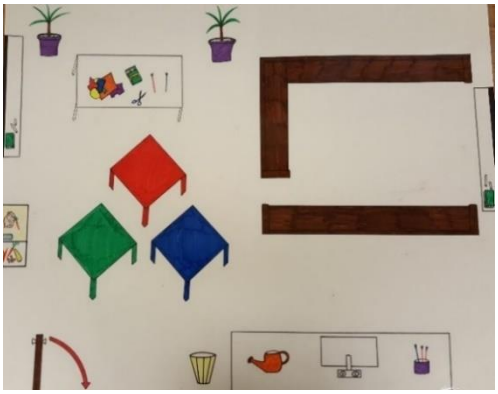
During the laboratory or home visit, the child participated in two independent chore-planning tasks and one errand-planning task with the mother. Each of the planning tasks required participants to create a plan for carrying out an activity, with schematic maps of the various activity spaces provided. In the pre- and post-test chore-planning tasks, the children planned a series of chores either in the classroom (pre-test) or the home (post-test). During the interaction, the mothers and children planned to carry out a series of errands in a village. For each session, a large, 22’’x 28’’ (55.88 cm x 71.12 cm) laminated map (see Figure 2), a list of chores (see Figure 3), writing materials, and two copies of the diagram mirroring the map (8.5” x 11”; 21.59 cm x 27.94 cm) were

provided to a child or dyad. Specifically, there was a map of a classroom for the pre-test (see Figure 4a), a map of a small town for the interaction (see Figure 4b), and a map of a house for a post-test task (see Figure 4c). The tasks are based on prior research on children's planning involving 7-to 9-year-old children (Gauvain et al., 2018; Pea & Hawkins, 1987; Perez & Gauvain, 2005). Materials with Korean/Hangeul translation were provided for families whose preferred language was Korean. The entire session was video recorded.

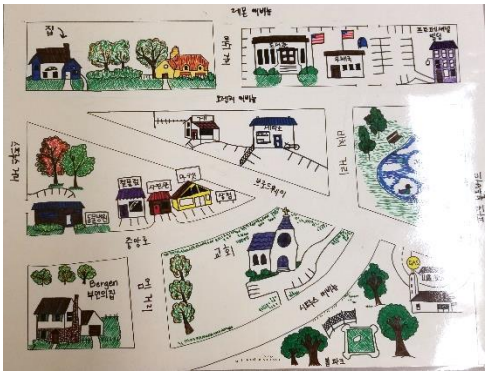
Figure 2

Maps Used Across Three Activity Planning Tasks

2A. Map of a Classroom for a Pre-test Chore-Planning Task



2B. Map of a Town for an Errand-Planning Task in English (left) and Hangeul (right)



2C. Map of a House for a Post-test Chore-Planning Task

Child only pre-test. Children were asked to plan the order in which they would do five clean-up activities in a classroom using a map of a classroom (see Figure 2a). At the outset of the session children were shown a large laminated map of the classroom. Children were then provided with a chore list, each item of chore pointed out in various areas in the map of the classroom, then instructed to plan to do the chores in the shortest way possible with the following prompt:

> *"There are a lot of chores to do here. Take your time in thinking about which chore to do first, second, and so on [point to child's list of chores]. You can do them in any order you want. Remember, some ways of doing the chores are better than others. For example, one way of planning how to do the chores may make you have to walk farther to do them. You want to find the shortest way of doing the chores."*

After examples were demonstrated, children were asked to write the order on the chore list (see Figure 3a) and to draw a line showing their best plan on the diagram (see Figure 4a) provided. The full instruction script can be found in Appendix B.

Mother-child interaction. Mother-child dyads were shown a large, laminated map of a town (see Figure 2b) and a list of errands (see Figure 3b), then were instructed to work together to plan the shortest route to complete eight errands, with the following prompt (For a full script, see Appendix B): .

> *"We would like for the two of you to work together to plan the shortest route that uses each street the least number of times. We would also like you to talk out loud to each other about what you are doing while you are working. OK? You can practice as many times as you like before you decide on the BEST (shortest) route to take. After you have decided on the best route, we would like you to number the tasks in the order you would do them in the spaces provided on this list. You can start from home."*

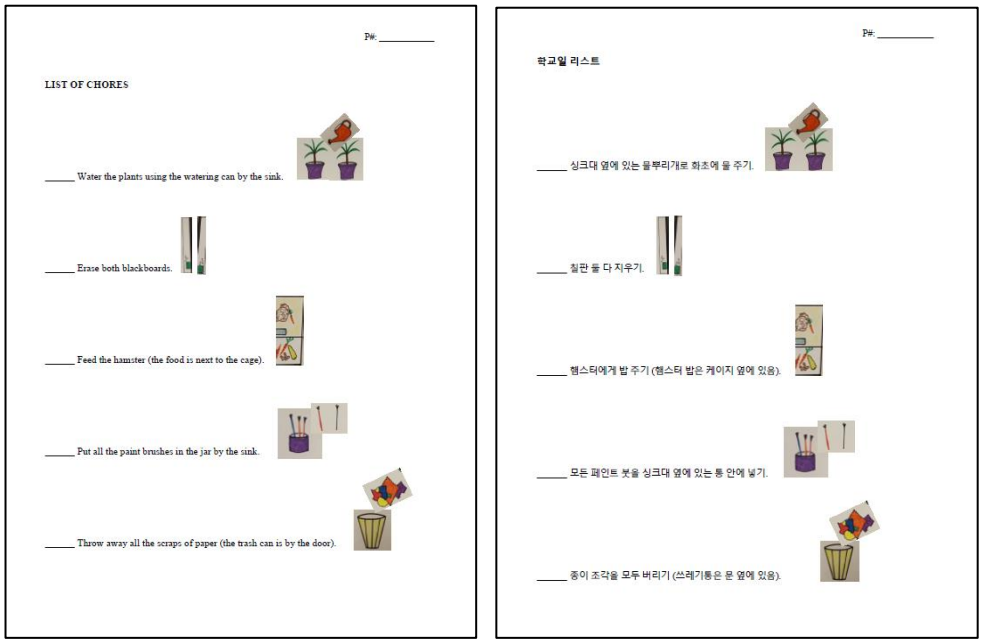
They were provided with two copies of the diagram on a 8.5" x 11" (21.59 cm x 27.94 cm) paper (see Figure 4b), on which they could try out different plans until they decided on the best plan. They were asked to record their final route on a map and enumerate the order for each of the errands on the list (see Figure 3b). The experimenter left the room during the interaction.

Child only post-test. After the mother-child interaction was completed, the mother left the room and the child remained in the room to do an individual post-test that also involved planning a sequence of activities, specifically household chores. This chore-planning task was similar to the task used in the pre-test, but it was more difficult in terms of the number of steps in completing the chores, including the subgoals in completing the chores (e.g., the child must pick up a bowl and a cat food before feeding it to the cat; the child must turn off both lamps in different rooms). After the experimenter showed the child the task materials and explained what the task involved, the child was instructed to plan out how to do the household chores in one afternoon in the shortest way possible. The posttest instruction mirrored the instruction given from the pretest, and the full script can be found in Appendix B.

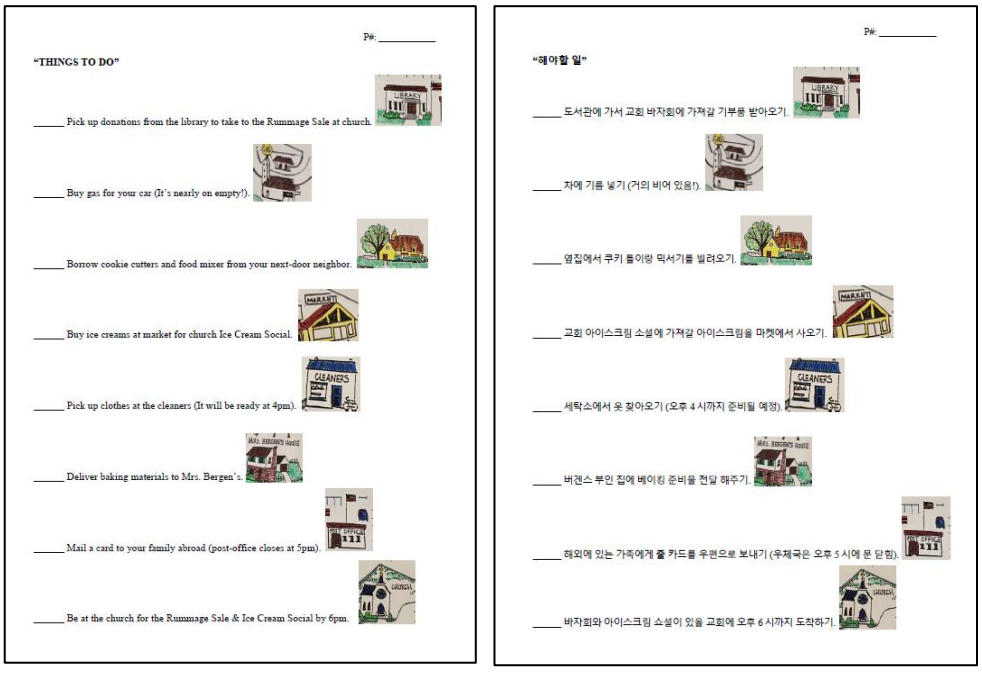
Figure 3

Chore list Paper Provided for Participants to Write On

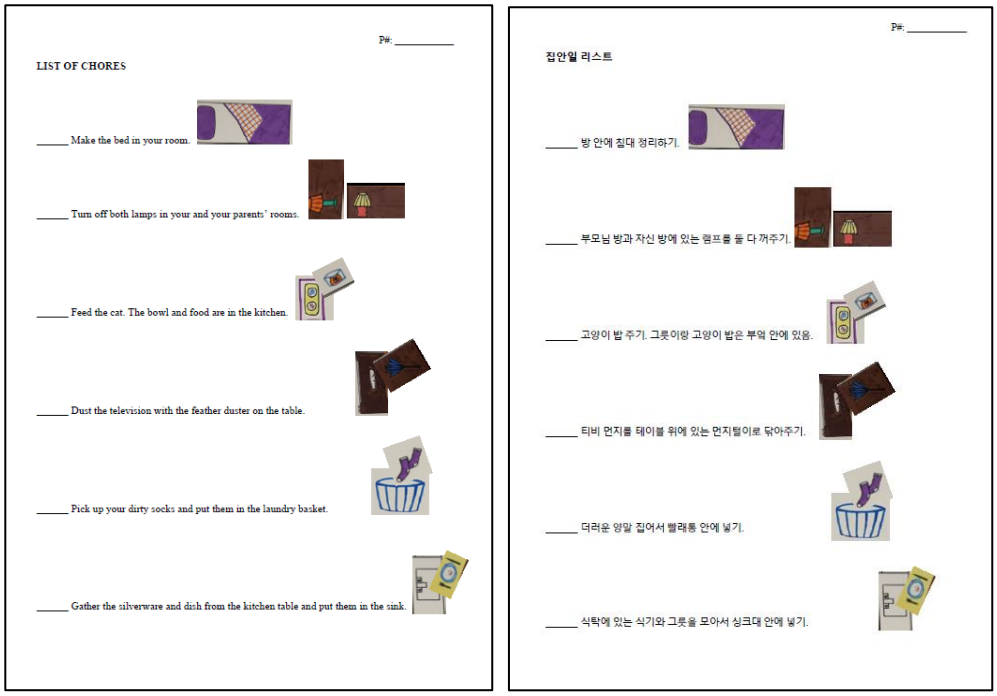
3A. List of Chores for the Pre-test Planning Task in English (left) and Korean (right)



3B. List of Errands for the Interaction Planning Task in English (left) and Korean (right)



3C. List of Chores for the Posttest Planning Task in English (left) and Korean (right)



P#: _____

LIST OF CHORES

_____ Make the bed in your room.

_____ Turn off both lamps in your and your parents' rooms.

_____ Feed the cat. The bowl and food are in the kitchen.

_____ Dust the television with the feather duster on the table.

_____ Pick up your dirty socks and put them in the laundry basket.

_____ Gather the silverware and dish from the kitchen table and put them in the sink.

P#: _____

집안일 리스트

_____ 방 안에 침대 정리하기.

_____ 부모님 방과 자신 방에 있는 램프를 둘 다 꺼주기.

_____ 고양이 밥 주기. 그릇이랑 고양이 밥은 부엌 안에 있음.

_____ 티비 먼지를 테이블 위에 있는 먼지털이로 닦아주기.

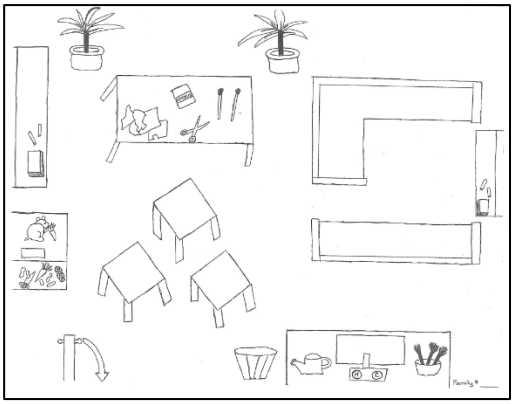
_____ 더러운 양말 집어서 빨래통 안에 넣기.

_____ 식탁에 있는 식기와 그릇을 모아서 싱크대 안에 넣기.

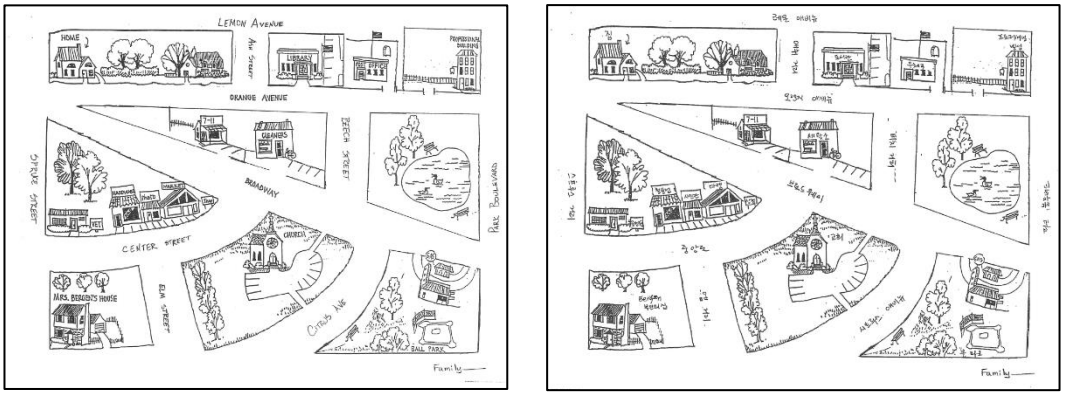
Figure 4

Diagrams of the Maps Provided for Participants to Write On

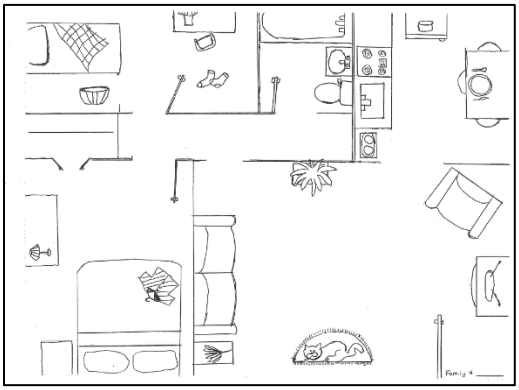
4A. Diagram of the Map for the Pre-test Chore-Planning Task



4B. Diagram of the Map for the Interaction Errand-Planning Task in English (left) and Hangeul (right)



4C. Diagram of the Map for the Post-test Chore-Planning Task



Measures

Demographics

Mothers responded to 24 questions to provide demographic information about the child and the parents, including age, gender, ethnicity, current and upcoming grade level (for the child) or highest education completed (for parents), occupation, years living in the United States, and household income (Appendix C).

Parental Beliefs About Child's Planning Skills

Mothers completed two questionnaires that asked about their beliefs about children's planning-related behaviors. One questionnaire asked the mothers to report when (i.e., what age) the average child is able to decide on and plan certain activities on his or her own. The other questionnaire asked when the mother's own child was able to decide on or plan certain activities on his or her own.

Parental Beliefs about the Average Child (PBAAC; Savage & Gauvain, 1998*).* This 21-item measure was developed to assess parent's expectations about when the average child is capable of carrying out plan-related activities. The questionnaire was modified for this study to include 4 additional items about children's routines, based on items in a prior questionnaire on this topic (*Child Routines Questionnaires*; Sytsma et al., 2001). These additional items pertain to the child's participation in cleaning up (i.e., clean up after meals or snacks; pick up dirty clothes after changing clothes), completing homework independently, and planning family activities. Mothers were asked to provide ages for when they expect the average child would be able to do each of listed 25 activities (21 original items and 4 added items; Appendix D). This measure was

administered to the mother along with the demographic questionnaire at the beginning of the laboratory visit while the child was working on a solitary pre-test task in an adjacent room. In this paper, this parental belief measure is referred as the parental general beliefs about child planning skills.

Parent's Report of Own Child's Participation (PROCP; Savage & Gauvain, 1998). This 21-item measure parallels the PBAAC measure, but it asks specifically about the mother's report of age-related expectations about when their own child is capable of carrying out plan-related activities. The same 4-additional items about children's routines were added to the measure. Mothers were asked to provide the age at which their own child was or would be able to participate in each of same 25 activities listed (Appendix E). This measure was administered, along with several other parental questionnaires, following the mother-child interaction session. Mothers did not have access to their responses on the questionnaire about parental beliefs about the average child when completing this measure. In this paper, this parental belief measure is referred as the parental child-specific beliefs about child planning skills.

Parent's Beliefs About Learning

Three measures were utilized to assess mother's beliefs about learning that have previously been used with East Asian and European-American samples (Choi et al., 2015; Padmawidjaja & Chao, 2010; Vinden, 2001). All mothers completed these measures.

Guan. This six-item measure (Appendix F) assesses mother's endorsement of *guan* parenting ideology on child development and learning, , drawn from concepts of

chiao shun, or training, and *guan*, or to govern and love (Chao, 1994; 2000). The mothers were asked to rate each item on a 5-point scale, ranging from *1* (*strongly disagree*) to *5* (*strongly agree*). This measure was used because the items reflecting Confucian-influenced parenting practices are presumed to be similar in both Chinese and Korean families, and it has been suggested for use with Korean immigrant families (Choi et al., 2015).

Socialization Goals. Socialization goals include parents' childrearing goals reflective of the qualities or characteristics that the parents want their child to develop. This 26-item measure was developed to measure Chinese immigrant parents' socialization goals of childrearing (Chao, 2001; Padmawidjaja & Chao, 2010). The scale includes 13 items pertaining to *Confucian goals* and 13 items pertaining to *Child-centered goals*. Confucian goals included qualities that aligned with Confucian virtues, such as obedience, respect for elders, and group harmony. Child-centered goals included qualities that were that were child-oriented, such as independence, self-esteem, and self-expression. Mothers were asked to rate on the extent to which they would foster in their children on a 5-point scale, ranging from *1* (*not at all desired*) to *5* (*strongly desired*). Although previous research has identified five items reflecting *Confucian goals* ($\alpha = .83$ for Chinese American and $\alpha = .81$ for European-American) and five other items reflecting *Child-centered goals* ($\alpha = .82$ for Chinese American and $\alpha = .77$ for European American) with Chinese- and European-American parents, all items were included in the questionnaire to be subjected for a confirmatory factor analysis to see if same items fall

within each goal for the sample in this dissertation (Padmawidjaja & Chao, 2010; Appendix G).

Freedom to Learn. This 3-item *Freedom to Learn* subscale measures mother's attitudes to child' learning. This subscale is drawn from the 20-item *Parenting Attitudes Inventory* (*PAI*; α = .85; Vinden, 2001; Appendix H) and has been utilized with Korean- and European-American samples. It was designed to tap three parenting autonomy-related values pertaining to child learning: conformity to parents' perspective, freedom to learn, and autonomy of perspective. Mothers were asked to rate each item on a 5-point scale, ranging from *1* (*strongly disagree*) to *5* (*strongly agree*).

Cultural Orientation

The Korean American mothers in the sample completed a 30-item questionnaire (see Appendix I) to assess their perception of their behaviors, language usages, social relationships and contacts that may relate to their cultural identification. (Cote et al., 2015; Farver & Shin, 2000). The E-A mothers did not complete this questionnaire The *Korean American Acculturation Scale 2* (*KAAS-2*; Bornstein & Cote, 2004) was modeled after the *Acculturation Rating Scale for Mexican Americans II* (*ARSMA II*; Cuéllar, Arnold, & Maldonado, 1995). It includes 2 subscales: (a) 17 items pertaining to the mother's *Korean Identification* subscale, reflecting mother's level of enculturation or adherence to the heritage culture; and (b) 13 items pertaining to the mother's *American Identification* subscale, reflecting mother's level of acculturation to the mainstream culture of the host country (i.e., United States). Mothers were asked to rate each item on a 5-point scale (*1 = not at all, 3 = moderately, 5 = extremely often or almost always*). The

KAAS-2 scale has been shown to have good internal reliability (αs = .88 and .90), good test-retest reliability (*r*s = .88 and 90), and good construct validity (*r* = .59; see reports on Cote et al., 2015).

Enculturation Expectations

Two subscales from *Ga-jung-kyo-yuk* measure (*Family Socialization*; Choi et al., 2015; see Appendix J) were included to assess Korean-American mothers' expectations about the values and traditional etiquettes they would like their child to preserve from their heritage culture. *Enculturation of Familial and Cultural Values* (Choi et al., 2013) includes 7 items about core values that parents wish to transmit to their children. *Important Korean Traditional Etiquettes* (Choi et al., 2013) includes 6 items about cultural-specific etiquette behaviors that parents consider important for their children to have. Mothers responded on a 5-point scale (*1 = not at all, 2 = not much, 3 = moderately, 4 = much, 5 = very much*).

Coding and Inter-Rater Reliabilities

The entire duration of the videos from the pre- and post-test tasks and the mother-child interaction task were transcribed and used to score the child and dyad's planning performances. Transcriptions of the mother-child interactions were coded for mother's cognitive assistance, instructional behaviors, and encouragement of child's contribution. The videos of the mother-child interactions were coded for maternal affective feedback. The coding was based on codes used in previous studies of joint problem-solving and planning tasks involving children and adults (Cho et al., 2017; Gauvain & Perez, 2008; Gauvain et al., 2018; Perez & Gauvain, 2005; Sun & Rao, 2012). Table 2 displays a

summary of maternal instruction and affective feedback coding. Table 3 presents how plan effectiveness was scored for each planning task. To obtain inter-rater reliability, 20% of the total sessions were coded independently by three coders, including the author. Intraclass correlation coefficients (ICC) were calculated to assess agreement between coders, a value of ICC = .80 or higher is considered an indication of good to excellent reliability among the coders (Koo & Li, 2015). Coders met to discuss any disagreement until good inter-rater reliability was achieved.

Maternal instructions were rated for cognitive assistance, instructional behaviors, encouragement of child's independent contribution, and affective feedback (i.e., positive support, negative feedback, correction). For the transcript coding, transcriptions were first broken down for every 30-second intervals, which resulted in a total of 2394 utterances across 88 dyads to be analyzed. For each utterance by the mother, coders evaluated the overall occurrence of each dimension of the maternal instruction and provided ratings for the statements, using the definition detailed below. For the video coding, coders rated behaviors or expressions reflective of the mother's affective feedback at 30-seconds intervals. Mother's affective feedback coding included ratings for positive support, negative feedback, and correction. A video coding software tool, *Datavyu*, was used for all video coding procedures.

Maternal Planning Behaviors

Cognitive Assistance. Statements identified as *cognitive assistance* (ICC = .85) pertained to how to perform and approach the task, including information about general (e.g., "let's ready through the list first.") and specific strategies (e.g., "I think we should

go to the neighbor's first, so we can drop off the materials at Mrs. Bergen's."), item placement (e.g., "Go to library.", "Do you want to put 2 there?"), and task management (e.g., "We have to finish in one trip."). Following Sun and Rao's (2012) scaffolding coding procedure, the mother's statement in each utterance was rated on a 4-point scale from Level 1 to Level 4. Levels were organized in order of general assistance (level 1) to more progressively specific assistance (level 2: specific strategy, level 3: item-placement only, level 4: task management). The higher-level instruction (i.e., general strategy) reflected more advanced strategies that placed greater cognitive demands on the child. The composite of rating frequencies of all coded utterances was taken to be the average cognitive assistance rating per participant.

Maternal Interaction Behaviors

Instructional Support. Statements identified as *instructional support* (ICC = .84) were suggestions or instructions intended to regulate the child's behaviors on the task, including suggestions to guide the child's thought or action, direct commands, physical demonstration, and asking yes-or-no (i.e., closed-ended) questions. Following Sun and Rao's (2012) scaffolding coding procedure, mother's statement in each utterance was rated on a 4-point scale, as falling from Level 1 to Level 4. Levels were organized in order of suggestive manner (level 1) to more progressively directive and explicit instructional supports (level 2: physical demonstration, level 3: proposing commands, level 4: asking yes-or-no questions). The high-level instruction (i.e., suggestion) reflected less explicit instruction. The composite of rating frequencies of all coded utterances was taken to be the average instructional support rating per participant.

Encouragement of Child's Contribution. Statements identified as the *encouragement of child's independent contribution* (ICC = .91) included attempts to urge the child to devise solutions independently. Coders used a 5-point scale (*1 = offered almost no encouragement, 5 = offered a great deal of encouragement*) to evaluate statements in each utterance. The composite of rating frequencies of all coded utterances was taken to be the average encouragement rating per participant.

Maternal Affective Feedback

Positive Support. Statements or expressions identified as the *positive support* (ICC = .89) included mothers providing a positive statement or expression that recognized the child's progress on the task, praised or approved of the child's performance, or maintained an overall supportive interaction with the child. Coders used a 5-point scale (*1 = almost no positive affect, 5 = a great deal of positive affect*) to evaluate statements in each utterance. The composite of rating frequencies of all coded utterances was taken by averaging the proportion of rating frequencies (i.e., frequency of each rating of positive supports divided by total utterances) to be the average positive support rating per participant.

Negative Feedback. Statements or expressions identified as the *negatives and disapproval* (ICC = .80) included mother negative reactions toward the child's involvement in the task or indication of disapproval with the child's performance on the task. This coding also involved any physical intervention that led to the mother performing the task on her own. Coders used a 5-point scale (*1 = almost no negative affect, 5 = a great deal of negative affect*) to evaluate statements in each utterance. The

composite of rating frequencies of all coded utterances was taken by averaging the proportion of rating frequencies (i.e., frequency of each rating pf negative feedback divided by total utterances) to be the average negative feedback rating per participant.

Corrections. Statements or expressions identified as the *critical comments or correction*s (ICC = .85) included mother pointing out and correcting the child's responses, mistakes, or behaviors. The correction rating also included mother's redirection of child's behaviors. Coders used a 5-point scale (*1 = almost no correction, 5 = a great deal of correction*) to evaluate statements in each utterance. The composite of rating frequencies of all coded utterances was taken by averaging the proportion of rating frequencies (i.e., frequency of each rating of correction divided by total utterances) to be the average correction rating per participant.

Composite of Directive Instruction

Directive instructions refer to statements or behaviors that had explicit intervention (verbal or nonverbal) to the child's behaviors or solutions. A composite of directive instruction was created by combining frequency ratings from the maternal instructional behaviors (i.e., physical demonstration and proposing commands) and correction (i.e., ratings of 3-5 in this scale) coding. Rating frequencies of physical demonstration, proposing commands, and correction were summed and divided by the total utterances to yield a proportion of directive instruction ratings.

Planning Performance

Planning performances were recorded in two ways: plan effectiveness and completion time. Plan effectiveness was assessed by calculating the average proportion of

correctly ordered steps, including sub-goals, in a given task. There were 10 steps in the pretest task, eight steps in the mother-child interaction task, and 11 steps in the posttest task. A detailed guideline for plan effectiveness scoring can be found in Table 4. The completion time was the amount of the time (in minutes) the child or dyad spent on each task, calculated by subtracting the start time from the end time. The same start cue (i.e., the moment the experimenter finished the last sentence in the instruction) and end cue (i.e., the moment the child responded with, “yes, I’m done” or “no, I don’t want to continue”) marked the start and end times in the pretest and posttest tasks. For the mother-child interaction task, the start point was the moment the experimenter left the room and the end point was the moment either mother or child called the experimenter to inform her that they were done.

Table 2

Coding for Maternal Instructions

Dimensions	Description	Example
Cognitive Assistance (ICC = .85)	Statements about how to do the task	
General strategy	Information or a procedure for best approaching the task for several items or the overall task	"Let's read through the list first."
Specific strategy	Information or a procedure that conveys possible strategies for carrying out a specific move or individual task items.	"I think we should go to neighbor's first, so we can drop off the materials at Mr. Bergen's."
Item placement only	Information about what to do for a single item without further explanation	"Go to library."
Task management	Information about task rules	"We have to finish in one trip."
Instructional Support (ICC = .84)	Instructions intended to influence the child's behavior	
Suggestions	Statements that guided the child to thought or action without explicitly telling the child to perform the action without explicitly telling the child to perform the action	"We could try mailing the card before it closes."
Physical demonstration	Physical demonstration of how to the task	Pointing to locations on the map; tracing a route with a finger
Commands	Verbal statement that directs the child's actions; tells the child what to do.	"Read the next thing on the list." "Show me where the library is."
Asking yes-or-no questions	Asking questions with answers of yes or no	"We gotta get gas, right?"
Affective Feedback		

Positive support (ICC = .89)	Any positive statements or nonverbal expression that recognize the child's progress on the task; praise or approval regarding the child's performance	"Good job" "I like your idea." Smiles
Negative/ Disapproving Intervention (ICC = .80)	Statements or nonverbal expression of disapproval about the child's behaviors; physical intervention that disrupts the child's task-related actions	"That is not the way I would do it." Taking the pencil away from the child.
Correction (ICC = .85)	Pointing out and correcting a mistake	"That is wrong" "That's not the right way to do it." "You did not pick up the materials."
Encouragement of child's contribution (ICC = .91)	Efforts to encourage the child to work on some aspects of the task independently or have the child come up with the plan.	"What do you think we should do next?" "Which way is the best way to go?"

Note. Coding for cognitive assistance are based on Gauvain & Perez (2008). Coding for maternal instructional behaviors are based on Gauvain and Perez (2008) and Sun and Rao (2012) and were adapted to be organized in the order of implicit to explicit instructions (Sun & Rao, 2012). Affective feedback was adopted from Gauvain and Perez (2008), and negative affect was further broken down to disapproval and critical comment to distinguish the feedback based on Cho et al. (2017). Encouragement of child's contribution was taken from Perez & Gauvain (2005).

Table 3

Coding for Plan Effectiveness for Pre-test, Interaction, and Post-test Tasks

Pre-test Chore Activities	Possible Points
Feed the hamster (the food is next to the cage)	1 point
Water the plants using the watering can by the sink	3 points for retrieving the watering can before watering both plants
Throw away all the scraps of paper (the trash can is by the door)	2 points for picking up scraps of paper before going to trash can
Erase both blackboards	2 points for both blackboards
Put all the paint brushes in the jar by the sink	2 points for picking up paint brushes before going to the can
Interaction Errands	**Possible Points**
Borrow cookie cutters and food mixer from your next-door neighbor and take baking materials to Mrs. Bergen's	2 points for picking up materials from the neighbor and for delivering to Mrs. Bergen's
Buy gas for your car (it's nearly on empty!)	1 point if done within first 4 stops
Pick up donations from the library to take to rummage sale at church	1 point
Mail a card to family abroad before closing at 5pm	1 point
Pick up clothes at the cleaners (be ready at 4pm)	1 point if done within last 3 stops
Buy ice creams at market for church Ice Cream Social	1 point if done second to last stop
Be at church for Rummage Sale & Ice Cream Social by 6pm	1 point if visited one-time only and done as a last task
Post-test Chore Activities	**Possible Points**
Make the bed in your room	1 point
Pick up your dirty socks and put them in the laundry basket	2 points for picking up socks before going to laundry baskets
Turn off both lamps in your and your parents' room	2 points for both lamps
Dust the television with the feather duster on the table	2 points for picking up feather duster before going to TV
Gather the silverware and dish from the kitchen table and put them in the sink	2 points for picking up silverware and dish before going to the sink

Prepare cat's food. The bowl and food are in the kitchen	2 points for picking up food before going to the bowl

Note. Adapted from Perez & Gauvain (2005)

CHATER 3

Results

This dissertation investigates parent-child interactions and parental instruction in Korean American and European American families, and how they contribute to children's planning skills. The study examines cultural differences in parental beliefs and evaluates how parental beliefs and expectations shape maternal instruction patterns during joint planning. Lastly, the study aims to identify within-group variations in instructional patterns based on Korean American mother's cultural orientation (i.e., acculturation, enculturation). This result section includes six subsections. The first section provides an overview of the plan of analysis. The second section reports results of preliminary analyses and the data reduction process used. The remaining four sections report results of each hypothesis tested. The hypotheses examined: a) cultural differences in parental beliefs about parenting and child development, b) relations between parental beliefs and maternal instructions, c) variations in maternal instruction based on ethnoracial group and child's age, and d) relations among parental beliefs, maternal instructions, and child's planning skills.

Plan of Analysis

To test the research hypotheses, mean-difference testing techniques (i.e., Multivariate Analysis of Variances, Analysis of Variances, Repeated-measure *t*-tests), Pearsons' correlation coefficients, and hierarchical multiple regressions were used. Multivariate analysis of variances (MANOVAs), rather than multiple independent-sample *t*-tests, were utilized to reduce the possibility of Type I errors. Preliminary

analysis involved a data reduction process by conducting exploratory factor analysis (EFA) on parenting beliefs measures (i.e., parental beliefs about child planning skills, socialization goals) as well as examination of potential covariates based on participants' demographic background.

Preliminary Analyses

Exploratory Factor Analysis of Parental Beliefs about Planning Skills

The exploratory factor analysis (EFA) was conducted to extract the underlying dimensionality of 25 items used on each of the two measures to assess parental beliefs about children's planning skills. The items were identical for the two questionnaires, with an exception that on one measure the parents reported the age at which the "average" child participates in planning-related activities and on the second measure they reported the age at which their "own" child participated (or they believe will participate) in the same activities. Because a previous study with Mexican American and European American samples (Savage & Gauvain, 1998) revealed different factor structures for these two questionnaires of the same items, separate EFA was carried out for each questionnaire in the present study. Descriptive statistics indicated that many of the 25 items were significantly correlated with each other at the .05 level, with some exceptions. Sample exceptions include the correlations between items such as "be responsible for keeping his/her own room clean" and "walk or ride bike to school." Means and standard deviations of parental beliefs about child planning measures, separated by ethnoracial groups, can be found in Tables 4 and 5.

Factors were extracted in *Mplus 6.12* (Muthen & Muthen, 2010) using the maximum likelihood method and oblique rotation. The number of factors was decided in consideration of the eigenvalues, screeplot, cumulative variance explained, interpretability, and the model fit indices. The Model fit indices included examination of the chi-square test of model fit, a comparative fit model (CFI), and root mean square error of approximation (RMSEA) values. A good fit is indicated by a nonsignificant chi-square test, with a CFI value greater than .95 (Hu & Bentler, 1999) and RMSEA values between .05 and .08 (Browne & Cudeck, 1993).

Exploratory Factor Analysis of Parental Beliefs about Planning Skills. A total of four factors were extracted and rotated. EFA analyses displayed four eigenvalues above 1 (Table 7). These four factors explain about 65.08% of the cumulative variance. The screeplot (in Figure 5A) further supported the four-factor structure, with 4 factors indicated before the elbow of the plot. The model fit was good, with CFI = .95, TLI = .92, $\chi^2_{(87)} = 121.65$, $p = .01$, RMSEA = .07, 90% CI [.04, .10], and RMSEA of .04. After removing 7 non-loading or cross-loading items, Table 7 displays factor loadings of 18 items that strongly and significantly loaded onto each of 4 factors.

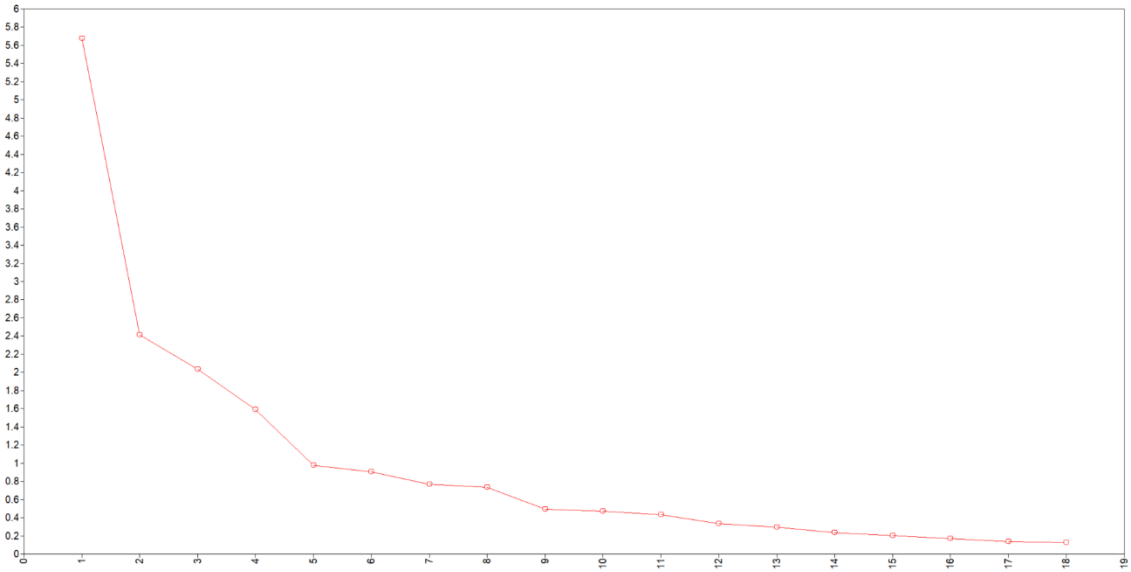
Exploratory Factor Analysis of Parental Child-Specific Beliefs about Planning Skills. A total of four factors were extracted and rotated. EFA analyses displayed four eigenvalues above 1 (Table 8). These four factors explain about 70.64% of the cumulative variance. The screeplot (in Figure 5B) further supported the four-factor structure, with 4 factors indicated before elbow of the plot. The model fit was good, with CFI = .97, TLI = .94, $\chi^2_{(74)} = 103.64$, $p = .01$, RMSEA = .07, 90% CI [.03, .10], and

RMSEA of .03. After removing 8 non-loading or cross-loading items, Table 8 displays the factor loadings of 18 items that strongly and significantly loaded onto each of 4 factors.

Figure 5.

Screeplots for Parental Beliefs about Planning Skills

5A. Screeplot for Parental General Beliefs about Planning Skills for the Whole Sample



5B. Screeplot for Parental Child-Specific Beliefs about Planning Skills for the Whole Sample

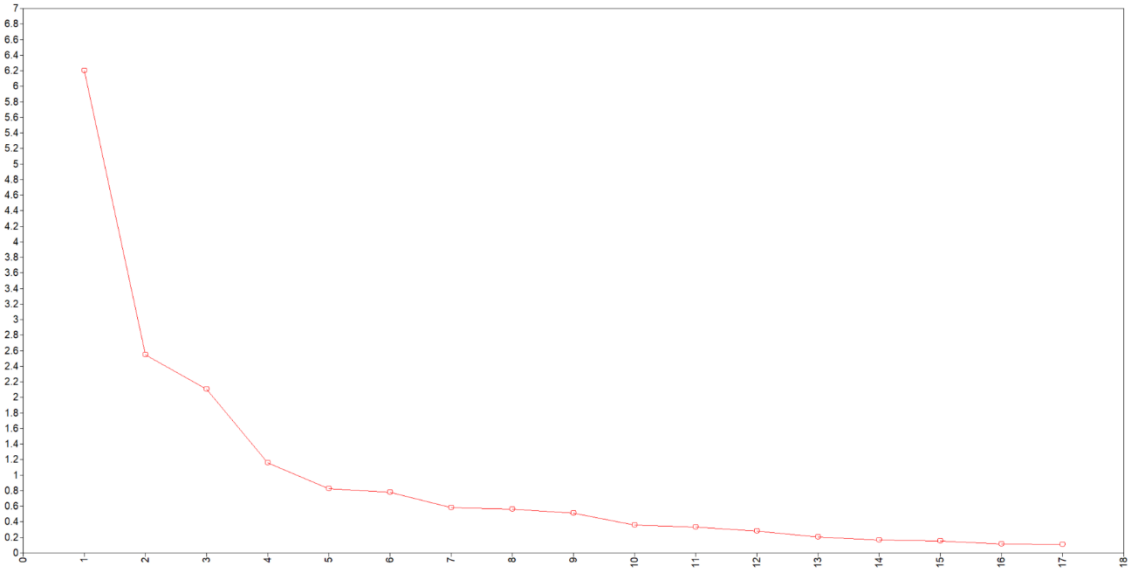


Table 4

Mean (SD) Age of Average Child Reported in Parental General Beliefs about Child's Planning by Ethnoracial Groups

Activity	KA (*n* = 44)	EA (*n* = 44)
Play outside in the neighborhood with friends	6.56 (4.06)	7.05 (2.68)
Walk to a neighborhood store alone during the daytime hours	10.41 (3.20)	12.09 (2.40)
Have regular chores around the house	6.00 (2.20)	5.09 (1.99)
Be responsible for keeping his/her own room clean	5.67 (1.57)	5.50 (1.84)
Clean up after meals or snacks	4.81 (1.61)	4.41 (1.72)
Pick up dirty clothes after changing clothes	4.66 (1.61)	3.64 (1.57)
Get a regular allowance	9.39 (2.82)	7.19 (2.62)
Walk or ride bike to school	10.61 (2.76)	10.41 (2.26)
Complete homework independently	7.16 (1.80)	7.95 (1.78)
Baby-sit for a younger siblings or child	8.27 (3.12)	12.82 (1.50)
Get a paid job outside the home	15.46 (2.27)	15.60 (1.28)
Stay home alone while a parent goes on an errand	11.84 (2.52)	11.09 (1.88)

Plan his/her own birthday party	9.36 (3.13)	9.36 (3.24)
Plan for family activities or events	9.30 (3.58)	9.52 (3.36)
Decide to take music or dance lessons	6.53 (2.32)	5.68 (2.05)
Decide to be on a sports team	6.83 (2.66)	5.52 (1.56)
Decide to participate in a club or organization (e.g., scouts)	7.77 (2.45)	5.73 (1.66)
Decide what chores he/she will do around the home	6.64 (2.21)	7.84 (3.72)
Decide what to wear to school	5.23 (1.63)	4.84 (1.46)
Decide what to eat for breakfast and lunch	5.95 (2.58)	5.59 (2.39)
Decide how to spend his/her allowance	8.35 (2.71)	6.82 (2.72)
Decide what to watch on TV	6.23 (3.53)	6.36 (3.01)
Decide what to do after school	6.45 (2.44)	7.11 (2.70)
Decide what to do in the evening before bedtime	6.33 (2.31)	6.98 (3.04)
Decide when to go to bed	8.14 (3.01)	12.39 (3.05)

Table 5

Mean (SD) Age of the Own Child Reported in the Parental Child-Specific Beliefs about Child's Planning by Ethnoracial Groups

Activity	KA (*n* = 44)	EA (*n* = 44)
Play outside in the neighborhood with friends	7.53 (4.49)	7.20 (3.54)
Walk to a neighborhood store alone during the daytime hours	11.07 (3.46)	12.88 (2.32)
Have regular chores around the house	6.58 (2.01)	5.23 (1.98)
Be responsible for keeping his/her own room clean	6.07 (1.72)	5.55 (2.00)
Clean up after meals or snacks	5.08 (1.67)	4.54 (1.49)
Pick up dirty clothes after changing clothes	4.85 (1.64)	3.82 (1.39)
Get a regular allowance	9.49 (2.90)	7.50 (2.13)
Walk or ride bike to school	11.07 (3.15)	11.05 (2.75)
Complete homework independently	7.00 (1.78)	7.86 (2.03)
Baby-sit for a younger siblings or child	8.25 (3.24)	12.80 (1.58)
Get a paid job outside the home	15.44 (2.41)	15.31 (2.05)

Stay home alone while a parent goes on an errand	11.55 (2.83)	10.91 (2.07)
Plan his/her own birthday party	8.82 (2.90)	8.64 (3.21)
Plan for family activities or events	9.16 (3.31)	8.36 (3.07)
Decide to take music or dance lessons	6.64 (2.68)	5.23 (1.55)
Decide to be on a sports team	6.86 (2.28)	5.37 (1.48)
Decide to participate in a club or organization (e.g., scouts)	7.43 (2.19)	5.68 (1.48)
Decide what chores he/she will do around the home	6.89 (2.15)	8.41 (3.58)
Decide what to wear to school	5.48 (1.69)	4.82 (1.35)
Decide what to eat for breakfast and lunch	5.84 (2.30)	5.75 (2.29)
Decide how to spend his/her allowance	8.30 (2.71)	7.02 (2.62)
Decide what to watch on TV	5.76 (3.22)	6.55 (3.47)
Decide what to do after school	6.43 (2.55)	6.82 (2.70)
Decide what to do in the evening before bedtime	6.30 (2.53)	6.77 (3.04)
Decide when to go to bed	7.48 (2.76)	12.50 (2.72)

Table 6

Exploratory Factor Analysis of the Parental General Beliefs about Child's Planning

Factors	*M* (*SD*)	1	2	3	4
Outdoor Activities					
1. Play outside in the neighborhood with friends	6.80 (3.43)	0.638*			
2. Walk to a neighborhood store alone during the daytime hours	11.25 (2.94)	0.889*			
8. Walk or ride bike to school	10.51 (2.51)	0.630*			
11. Get a paid job outside the home	15.53 (1.83)	0.355*			
Household Chores					
3. Have regular chores around the house	5.55 (2.13)		0.644*		
4. Be responsible for keeping his/her own room clean	5.59 (1.70)		0.583*		
5. Clean up after meals or snacks	4.61 (1.67)		0.774*		
6. Pick up dirty clothes after changing clothes	4.15 (1.66)		0.978*		
Deciding on Organized Extracurricular Activities					
15. Decide to take music or dance lessons	6.11 (2.22)			0.825*	

16. Decide to be on a sports team	6.18 (2.27)			0.918*	
17. Decide to participate in a club or organization (e.g., scouts)	6.75 (2.32)			0.894*	
Planning Non-Organized Activities					
9. Complete homework independently	7.56 (1.82)				0.531*
13. Plan his/her own birthday party	9.36 (3.16)				0.437*
18. Decide what chores he/she will do around the home	7.23 (3.09)				0.448*
19. Decide what to wear to school	5.03 (1.55)				0.408*
23. Decide what to do after school	6.78 (2.58)				0.734*
24. Decide what to do in the evening before bedtime	6.65 (2.70)				0.823*
25. Decide when to go to bed	10.26 (3.69)				0.706*
Eigenvalue		5.68	2.42	2.04	1.59
% of variance explained		31.53	13.42	11.31	8.82
Cronbach's alpha (α)		0.71	0.86	0.91	0.81

Note. 7 items that either did not load or cross-loaded were removed from the final model.

Table 7.

Exploratory Factor Analysis of the Parents' Child-Specific Beliefs about Planning Capabilities

Factors	*M* (*SD*)	1	2	3	4
Outdoor Activities					
1. Play outside in the neighborhood with friends	7.37 (4.03)	0.634*			
2. Walk to a neighborhood store alone during the daytime hours	11.99 (3.06)	0.913*			
8. Walk or ride bike to school	11.06 (2.94)	0.596*			
11. Get a paid job outside the home	15.37 (2.23)	0.357*			
Household Chores					
3. Have regular chores around the house	5.90 (2.09)		0.799*		
4. Be responsible for keeping his/her own room clean	5.81 (1.87)		0.788*		
5. Clean up after meals or snacks	4.81 (1.59)		0.813*		
6. Pick up dirty clothes after changing clothes	4.33 (1.60)		0.884*		
Deciding on Organized Extracurricular Activities					
15. Decide to take music or dance lessons	5.93 (2.29)			0.818*	

16. Decide to be on a sports team	6.13 (2.06)			0.959*	
17. Decide to participate in a club or organization (e.g., scouts)	6.56 (2.06)			0.914*	
Planning Informal Activities					
13. Plan his/her own birthday party	8.73 (3.04)				0.428*
20. Decide what to eat for breakfast and lunch	5.80 (2.28)				0.425*
22. Decide what to watch on TV	6.15 (3.35)				0.576*
23. Decide what to do after school	6.63 (2.61)				0.871*
24. Decide what to do in the evening before bedtime	6.53 (2.79)				0.937*
25. Decide when to go to bed	9.99 (3.71)				0.570*
Eigenvalue		6.20	2.55	2.10	1.16
% of variance explained		36.47	14.98	12.38	6.81
Cronbach's alpha (α)		0.75	0.90	0.93	0.83

Note. 8 items that either did not load or cross-loaded were removed from the final model.

Exploratory Factor Analysis of Socialization Goals

A confirmatory factor analysis (CFA) was first used to confirm previously identified items for Confucian goals and child-centered goals of the *Socialization goals* measure (Padmawidjaja & Chao, 2010). Conducting CFA on two subscales of the socialization goals did not reveal an acceptable model fit, suggesting that the original factor loadings may not be appropriately fitting the data from the current sample. Therefore, the exploratory factor analysis (EFA) was conducted to extract the underlying dimensionality of 26 items used to assess parents' socialization goals. Descriptive statistics indicated that many of the 26 items were significantly correlated with each other at the .05 level, with some exceptions. Sample exceptions include the correlations between items such as "to respect their elders" and "to be unique and their own individual."

Factors were extracted in *Mplus 6.12* (Muthen & Muthen, 2010) using the maximum likelihood method and oblique rotation. A total of three factors were extracted and rotated. EFA analyses displayed three eigenvalues above 1.5 (Table 9). These three factors explain about 65.08% of the cumulative variance. The screeplot (in Figure 6) further supported the four-factor structure, with 4 factors indicated before the elbow of the plot. The model fit was good, with $\chi^2_{(52)} = 76.30$, $p = .02$, RMSEA = .07, 90% CI [.03, .11], and RMSEA of .06. After removing 12 non-loading or cross-loading items, Table 9 displays factor loadings of 14 items that strongly and significantly loaded onto each of 3 factors.

Figure 6.

Screeplot for Socialization Goals for the Whole Sample

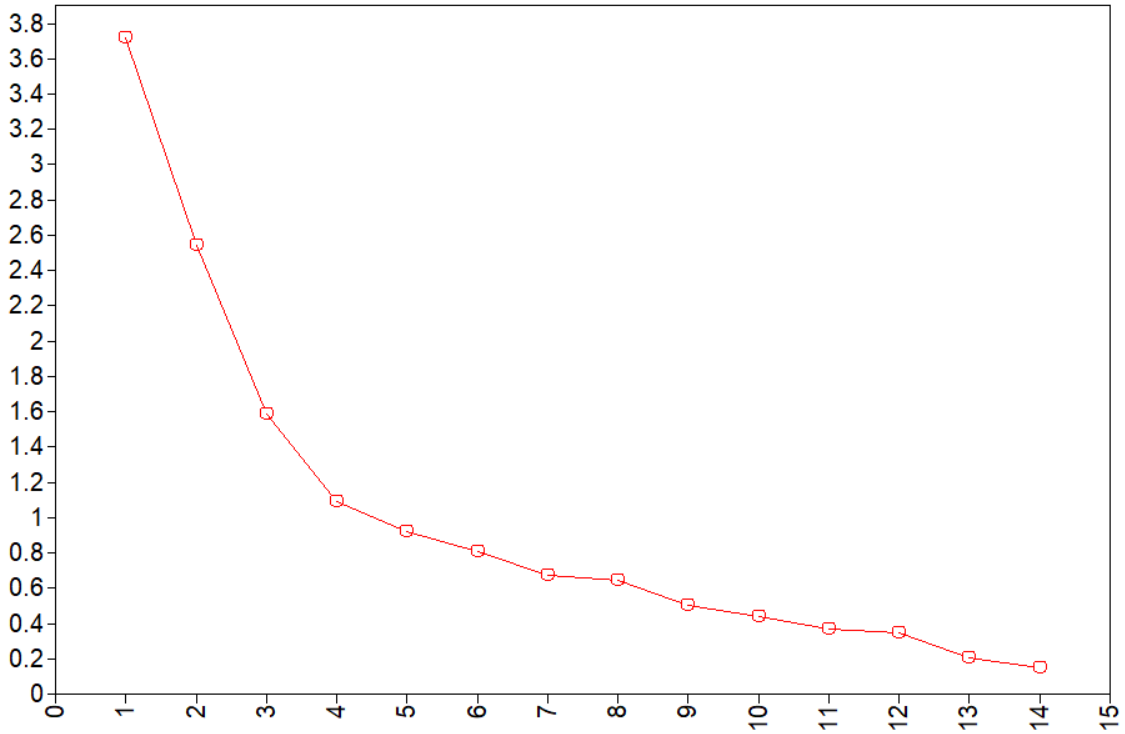


Table 8.

Exploratory Factor Analysis of the Socialization Goals

Factors	*M* (*SD*)	1	2	3
Confucian-Related Goals				
1. To respect their elders.	4.61 (0.37)	0.731*		
9. To be obedient.	3.47 (0.79)	0.628*		
17. To be humble.	4.50 (0.34)	0.574*		
19. To always try to improve themselves through hard work and effort.	4.66 (0.34)	0.430*		
Independence				
2. To be unique and their own individual.	4.46 (0.61)		0.492*	
6. To be very explorative and adventurous.	4.16 (0.61)		0.537*	
14. To establish their own independence from their parents.	4.21 (0.53)		0.461*	
18. To do what they think is right for themselves.	4.36 (0.62)		0.474*	
20. To trust their own judgment.	4.34 (0.50)		0.858*	
26. To think for themselves.	4.58 (0.38)		0.608*	

Academic Achievement				
5. To be the top student.	3.26 (0.88)			0.416*
7. To honor the family and succeed for the family.	2.88 (1.04)			0.806*
21. To do well in school for the family.	2.68 (1.07)			0.812*
23. To honor the family by doing well in school.	2.52 (1.02)			0.902*
Eigenvalue		3.72	2.55	1.59
% of variance explained		26.55	18.21	11.36
Cronbach's alpha (α)		0.70	0.74	0.84

Note. 12 items that either did not load or cross-loaded were removed from the final model.

Covariates

Demographic variables (i.e., mother's educational background, household income, child's sex) and setting of the study (i.e., lab or home) were examined as potential covariates. A series of one-way multivariate analysis of variances (MANOVA) was conducted for potential differences in all independent and dependent variables based on mother's educational level, household income, and child sex. Results suggested no statistically significant effect of household income, F (96, 240) = 1.10, p = .28, Wilk's λ = .24, η^2 = .30, and child sex, F (24, 63) = 0.997, p = .48, Wilk's λ = .72, η^2 = .28. The independent and dependent variables also did not differ based on the study setting, F (48, 124) = 1.19, p = .22, Wilk's λ = .47, η^2 = .32, on the independent and dependent variables. There was a significant effect of mother's level of education on the independent and dependent variables, F (144, 347) = 1.33, p = .02, Wilk's λ = .08, η^2 = .35, suggesting that about 35% of the variance in the study variables can be explained by mother's level of education. Only the mother's level of education was included as a covariate in subsequent analyses.

Differences in Parental Beliefs about Child's Learning and Planning Skills

Parenting and Socialization Goals

A one-way multivariate analyses of variance (MANOVA) was conducted to test the first hypothesis for cultural differences in various parental beliefs measures between Korean American and European American mothers. Results of the MANOVA suggested statistically significant differences in parental beliefs measures based on mother's ethnoracial background, F(5, 82) = 4.74, p = .001, Wilk's λ = .78, η^2 = .22. There was an

ethnoracial difference in guan parenting, $F(1, 86) = 10.38$, $p = .002$, $\eta^2 = .11$, and freedom to learn, $F(1, 86) = 7.38$, $p = .008$, $\eta^2 = .08$. Korean-American mothers scored higher on guan parenting ($M_{KA} = 4.00$, $SD_{KA} = 0.69$; $M_{EA} = 3.61$, $SD_{EA} = 0.40$) and lower on freedom to learn ($M_{KA} = 4.63$, $SD_{KA} = 0.46$; $M_{EA} = 4.85$, $SD_{EA} = 0.28$) compared to European American mothers (see Table 10).

Results of the MANOVA for socialization goals suggested statistically significant differences in values for independence, $F(1, 86) = 7.28$, $p = .008$, $\eta^2 = .001$, with European American mothers endorsing socialization goal for independence compared to Korean American mothers ($M_{KA} = 4.22$, $SD_{KA} = 0.47$; $M_{EA} = 4.49$, $SD_{EA} = 0.46$). There were no differences in Confucian goals and academic achievement goals between Korean American and European American mothers (see Table 10).

Table 9

Mean Ratings/Age and Standard Deviations Parental Beliefs Measures by Ethnoracial Group

Group	KA (n = 44)	EA (n = 44)	Multivariate Test	
Coding	*M* (*SD*)	*M* (*SD*)	*F* (1,85)	Partial η^2
Guan parenting	4.00[a] (0.69)	3.61[a] (0.40)	10.38**	.108
Freedom to learn	4.63[a] (0.46)	4.85[a] (0.28)	7.38**	.079
Parental general beliefs about planning				
Outdoor activities	10.76[b] (2.41)	11.29[b] (1.47)	1.55	.018.
Household chores	5.28[b] (1.45)	4.66[b] (1.51)	3.92†	.044
Organized extracurricular activities	7.05[b] (2.26)	5.64[b] (1.64)	11.03**	.114
Nonorganized activities	7.04[b] (1.91)	8.07[b] (1.69)	7.05†	.076
Parental child-specific beliefs about planning				
Outdoor activities	11.20[b] (2.78)	11.60[b] (1.94)	0.62	.007
Household chores	5.64[b] (1.58)	4.78[b] (1.49)	6.95*	.075
Organized extracurricular activities	6.98[b] (2.22)	5.43[b] (1.39)	15.38***	.152

Nonorganized activities	6.77[b] (2.32)	7.84[b] (1.95)	5.45*	.060
Socialization goals - Confucian goals	4.32[a] (0.51)	4.30[a] (0.47)	0.07	.001
Socialization goals - Independence	4.22[a] (0.47)	4.49[a] (0.46)	7.28**	.078
Socialization goals - Academic achievement	2.81[a] (0.81)	2.86[a] (0.85)	0.08	.001

Note. To account for the violation of homogeneity assumption for MANOVA, alternative statistical significance testing was used, such as the non-parametric test. The independent-samples Mann-Whitney U test confirmed that the findings for ethnoracial differences were present for guan parenting (p = .007), freedom to learn (p = .004), and organized extracurricular activities (p = .001).

$^{\dagger}p < .10$ $*p < .05$ $**p < .001$

[a] Reported values are mean ratings of the scale.

[b] Reported values are mean age of the child.

Parental Beliefs about Child Planning Skills

Two one-way multivariate analyses of variance (MANOVA) were conducted to test for cultural differences in parental beliefs about child planning skills between Korean American and European American mothers. Results of the MANOVA showed statistically significant differences in general parental beliefs about planning skills based on mother's ethnicity, $F(4, 83) = 14.57$, $p < .001$, Wilk's $\lambda = .59$, $\eta^2 = .41$. This suggests that about 41% of the variance in parental beliefs about child planning skills can be explained by mother's ethnicity. There were ethnoracial differences in parental beliefs about when the child can plan organized extracurricular activities, $F(1, 86) = 43.21$, $p = .001$, $\eta^2 = .11$, and decide on nonorganized activities, $F(1, 86) = 22.99$, $p = .009$, $\eta^2 = .08$. Korean American mothers, compared to European American mothers, reported higher age-related expectations for organized extracurricular activities ($M_{KA} = 7.05$ years , $SD_{KA} = 2.26$; $M_{EA} = 5.64$ years, $SD_{EA} = 1.64$), but lower age-related expectations for nonorganized activities ($M_{KA} = 7.04$ years, $SD_{KA} = 1.91$; $M_{EA} = 8.07$ years, $SD_{EA} = 1.69$). There was no significant ethnoracial difference in parental beliefs about when the child can do outdoor activities, $F(1, 86) = 6.14$, $p = .22$, $\eta^2 = .02$, though there was a marginal difference for household chores, $F(1, 86) = 8.59$, $p = .051$, $\eta^2 = .08$.

Results of the MANOVA also showed statistically significant differences in parental beliefs about their own child's planning skills based on the mother's ethnicity, $F(4, 83) = 12.53$, $p < .001$, Wilk's $\lambda = .62$, $\eta^2 = .38$. This suggests that about 38% of the variance in parental beliefs about their own child's planning skills can be explained by mother's ethnicity. There were ethnoracial differences in parental beliefs about when

their child can do household chores, $F(1, 86) = 16.30$, $p = .01$, $\eta^2 = .08$, plan organized extracurricular activities, $F(1, 86) = 52.80$, $p < .001$, $\eta^2 = .15$, and decide on nonorganized activities, $F(1, 86) = 25.01$, $p = .02$, $\eta^2 = .06$. Korean American mothers, compared to European American mothers, reported higher age-related expectations for household chores (M_{KA} = 5.64 years , SD_{KA} = 1.58 ; M_{EA} = 4.78 years, SD_{EA} = 1.49) and organized extracurricular activities (M_{KA} = 6.98 years , SD_{KA} = 2.22 ; M_{EA} = 5.43 years, SD_{EA} = 1.39), but lower age-related expectations for nonorganized activities (M_{KA} = 6.77 years, SD_{KA} = 2.32 ; M_{EA} = 7.84 years, SD_{EA} = 1.95). There was no significant ethnoracial difference in parental beliefs about when the child can do outdoor activities, $F(1, 86) = 3.55$, $p = .43$, $\eta^2 = .01$.

Repeated-measures MANOVA showed that, across both ethnoracial groups, mothers tended to report different age-related expectations for when most children versus their own child can do plan-related activities, $F(4, 84) = 3.46$, $p = .01$, Wilk's $\lambda = .86$, $\eta^2 = .14$. Mothers reported higher age-related expectations for outdoor informal activities and household chores and lower age-related expectations for deciding on nonorganized activities for their own children compared to their beliefs about when most children can do such plan-related activities. They did not differ in their expectations for children planning organized extracurricular activities.

Intercorrelations in Parental Beliefs. Table 11 shows that these parental beliefs measures are intercorrelated. For example, freedom to learn had a moderately positive correlation with socialization goals for independence ($r = .34$, $p = .001$). Guan parenting had a moderate-to-large positive correlation with Confucian goals ($r = .41$, $p < .001$) and

a weak-to-moderate positive correlation with academic achievement goals (r = .27, p = .01). Confucian goals had a moderate-to-large positive correlation with the academic achievement goals.

Moreover, guan parenting and academic achievement goals had a weak-to-moderate association with higher age-related expectations (i.e., older ages) about when the average child can do household chores (r = .28, p = .01; r = .26, p = .02, respectively); and a weak-to-moderate association between guan parenting and higher age-related expectations about when their own child can do household chores (r = .26, p = .02). Guan parenting also had a weak-to-moderate correlation to higher age-related expectations about when the average child can engage in outdoor activities (r = .24, p = .02) and when their own child can decide on organized extracurricular activities (r = .25, p = .02). On the other hand, freedom to learn and socialization goals for independence were associated with lower age-related expectations about when the children are able to do household chores (Average Child: r = -.25, p = .02; r = .26, p = .02, respectively; Own Child: r = -.28, p = .0071; r = -.31, p = .003, respectively) and deciding on organized extracurricular activities (Average Child: r = -.33, p = .002; r = -.40, p < .001; Own Child: r = -.41, p < .001; r = -.45, p < .001, respectively) for both the average children and their own child (see Table 10). Socialization goals for independence was associated with having a lower age-related expectation for when their own child can decide on nonorganized activities (r = -.24, p = .03).

Table 10.

Intercorrelations in Parental Beliefs

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Guan	-	-.04	.41**	-.07	.27*	.24*	.28**	.09	.08	.27*	.26*	.25*	.10
2. Freedom to learn		-	.05	.34**	-.03	-.06	-.25*	-.33**	-.16	-.14	-.28**	-.42***	-.08
3. Socialization goals – Confucian goals			-	.10	.40***	.02	.14	.02	.19†	.01	.02	.15	.11
4. Socialization goals – Independence				-	.11	-.03	-.29**	-.40***	-.24*	-.14	-.31**	-.45***	-.24*
5. Socialization goals – Academic achievement					-	-.01	.26*	-.13	.07	.02	.15	-.08	.004
6. PGB – Outdoor activities						-	.04	.04	.22*	.85***	.11	.04	.29**
7. PGB – Household chores							-	.28**	.40***	.13	.76***	.42***	.46***
8. PGB – Organized extracurricular activities								-	.43***	.11	.34**	.85***	.38***
9. PGB – Nonorganized activities									-	.27*	.31**	.49***	.85***
10. PCB – Outdoor activities										-	.29**	.13	.31**
11. PCB – Household chores											-	.52***	.29**
12. PCB – Organized extracurricular activities												-	.43***
13. PCB – Nonorganized activities													-

Note. PGB stands for parental general beliefs about child's planning skills. PCB stands for Parental child-specific beliefs about child's planning skills.

$^{\dagger}p < .10$ $^{*}p < .05$ $^{**}p < .001$

Relations between Parental Beliefs and Maternal Instructions

To examine the contribution of parental beliefs on maternal instructions during the joint planning task, the relations between parental beliefs measures and ratings of cognitive assistance, instructional support, encouragement of child's contribution, behavioral instruction, and affective feedback were examined. Table 11 displays the bivariate correlations of these variables. Socialization goals for independence was associated with high-level instructional support ratings (r = .28, p = .009). Mother's higher age-related expectation about when their own child can decide on organized extracurricular activities was positively associated with mother's encouragement of the child's contribution during the mother-child interaction (r = .25, p = .02). Mother's higher age-related expectation about when their own child can do outdoor activities (r = .22, p = .04), household chores (r = .22, p = .04), and decide on non-organized activities (r = .22, p = .04) was positively associated with mother's behavioral instructions during the mother-child interaction (r = .25, p = .02). No other parental beliefs measures showed significant correlations with ratings of maternal instruction and affective feedback.

Table 11

Bivariate Correlations between Parental Beliefs Measures, Maternal Instruction and Affective Feedback Ratings for All Mothers (N = 88)

	Cognitive assistance	Instructional support	Directive instruction	Encouragement of child's contribution	Positive support	Negative feedback	Correction
Guan parenting	.09	.05	.01	.11	-.13	.12	.10
Freedom to learn	.13	.13	.16	-.15	.05	-.06	.02
Socialization goals – Confucian goals	.07	.13	.13	.02	-.15	.04	.004
Socialization goals – Independence	.05	.28**	-.06	-.04	.01	.03	-.02
Socialization goals – Academic achievement	.11	.17	.09	-.06	-.10	.12	-.03
PCB – Outdoor activities	.07	.15	.22*	-.05	-.10	.21†	.20†
PCB – Household chores	.14	-.09	.22*	.16	-.13	.12	.02
PCB – Organized extracurricular activities	.14	-.11	.13	.25*	-.20†	.18†	-.03
PCB – Nonorganized activities	.14	.10	.22*	.03	-.12	.15	.02

Note. PCB stands for Parental child-specific beliefs about child's planning skills, reflecting age-related expectation, relative to child's current age.

†$p < .10$ *$p < .05$ **$p < .001$

Variations in Maternal Instruction Based on Ethnoracial Group and Child Age

Comparison by Ethnoracial Group

Means, standard deviations, and multivariate comparison of maternal cognitive assistance, instructional support, encouragement of child's contribution, and affective feedback between Korean American and European American mothers are shown in Table 12. Across both ethnoracial groups, mothers were rated as providing specific strategy information (level 2 of cognitive assistance) the most (.50 for KA, .45 for EA), followed by item placement information (level 3 of cognitive assistance) and task management assistance (level 4 of cognitive assistance). Mother's provision of general strategy information (level 1 of cognitive assistance) was rated the least frequent. Multivariate analysis, controlling for mother's level of education, showed that European American mothers were rated higher in the provision of general strategy information compared to Korean American mothers.

For instructional support, both Korean American and European American mothers were rated high in the use of physical demonstrations (level 2 of instructional support). The use of suggestions (level 1 of instructional support) was rated the most frequently for Korean American mothers, and they were rated higher on this behavior than European American mothers (.39 for KA, .27 for EA). The ratings for commands (level 3 of instructional support) and asking yes-or-no questions (level 4 of instructional support) did not differ between Korean American and European American mothers. Korean American and European American mothers did not differ in their ratings for directive instruction.

Korean American mothers were rated higher on the encouragement of the child's contribution compared to the European American mothers. Across both groups, mother's affective feedback was mostly positive, and their affective feedback ratings did not differ between ethnoracial groups.

Table 12

Mean Ratings and Standard Deviations of Maternal Instructions and Affective Feedback by Ethnoracial Group

Group	KA (n = 44)	EA (n = 44)	Multivariate Test	
Coding	*M* (*SD*)	*M* (*SD*)	*F* (1,85)	Partial η^2
Cognitive Assistance				
Level 1 General Strategy	0.05 (0.06)	0.08 (0.07)	7.43**	.080
Level 2 Specific Strategy	0.50 (0.21)	0.45 (0.20)	1.75	.020
Level 3 Item Placement Only	0.22 (0.15)	0.24 (0.17)	0.65	.001
Level 4 Task Management	0.16 (0.10)	0.16 (0.11)	0.08	.001
Average Rating	2.37 (0.31)	2.34 (0.30)	0.17	.002
Instructional Support				
Level 1 Suggestions	0.39 (0.22)	0.27 (0.17)	5.39*	.060
Level 2 Physical Demonstrations	0.26 (0.18)	0.30 (0.15)	0.02	.000
Level 3 Proposing Commands	0.15 (0.10)	0.14 (0.12)	0.03	.000
Level 4 Yes-or-no Questions	0.14 (0.09)	0.21 (0.19)	5.81*	.064

Average Rating	1.89 (0.33)	2.13 (0.53)	5.22*	.058
Directive Instruction	0.34 (0.09)	0.35 (0.11)	0.01	.921
Encouragement of Child's Contribution	2.36 (0.75)	1.94 (0.64)	7.10**	.077
Affective Feedback				
Positive	2.34 (0.55)	2.31 (0.58)	0.59	.007
Negative	1.53 (0.36)	1.63 (0.41)	1.33	.015
Correction	1.80 (0.27)	1.76 (0.42)	0.13	.002

Note. Covariate included mother' level of education.

*p<0.5 **p<.01

Comparison by Age Group

Means, standard deviations, and multivariate comparisons of maternal cognitive assistance, instructional support, directive instruction, encouragement of child's contribution, and affective feedback between mothers of younger children and of older children are shown in Table 13. The provision of strategy information as a form of cognitive assistance was similar across age groups, with the highest rate for the provision of specific strategy information and lowest rate for the provision of general strategy information. However, the average ratings for cognitive assistance suggest that mothers of older children tended to use higher level of cognitive assistance (M_5 = 2.43, M_8 = 2.27), providing more advanced support with older children than with younger children.

Average ratings for instructional support did not differ between mothers of younger and older children, and suggestions (M_5 = .35, M_8 = .30) and physical demonstrations (M_5 = .29, M_8 = .27) were rated the most for mothers for both age groups. However, mothers of younger children tended to be rated as using more commands (M_5 = .17, M_8 = .12) than mothers of older children. Mother's behavioral instruction (M_5 = .37, M_8 = .32) was used more with younger children compared to older children. Mother's ratings for encouragement of the child's contribution and affective feedback did not differ for mothers of younger and older children.

Table 13

Mean Ratings and Standard Deviations of Maternal Instructions and Affective Feedback by Age Group

Group	Age 5 (n = 44)	Age 8 (n = 44)	Multivariate Test	
Coding	*M* (*SD*)	*M* (*SD*)	*F* (1,85)	Partial η^2
Cognitive Assistance				
Level 1 General Strategy	0.06 (0.06)	0.07 (0.07)	0.97	.011
Level 2 Specific Strategy	0.48 (0.19)	0.47 (0.21)	0.06	.001
Level 3 Item Placement Only	0.24 (0.16)	0.22 (0.16)	0.48	.006
Level 4 Task Management	0.17 (0.10)	0.15 (0.12)	0.95	.011
Average Rating	2.43 (0.27)	2.27 (0.31)	6.56*	.072
Instructional Support				
Level 1 Suggestions	0.35 (0.18)	0.30 (0.22)	1.21	.014
Level 2 Physical Demonstrations	0.29 (0.17)	0.27 (0.17)	0.18	.002
Level 3 Proposing Commands	0.17 (0.12)	0.12 (0.10)	4.31*	.048
Level 4 Yes-or-no Questions	0.15 (0.12)	0.20 (0.18)	2.56	.029

Average Rating	2.01 (0.39)	2.01 (0.52)	0.002	.000
Directive Instruction	0.37 (0.09)	0.32 (0.10)	6.78*	.011
Encouragement of Child's Contribution	2.26 (0.72)	2.05 (0.72)	1.81	.021
Affective Feedback				
Positive	2.32 (0.55)	2.33 (0.60)	.05	.000
Negative	1.63 (0.40)	1.52 (0.37)	1.96	.023
Correction	1.83 (0.34)	1.74 (0.36)	1.45	.017

Note. Covariate included mother' level of education.

*p<0.5 **p<.01

Ethnicity x Age Interaction

A series of 2 (ethnicity: Korean American vs. European American) x 2 (age: five vs. eight) multivariate analyses of covariance (MANCOVAs) tested the interaction effects of these between-group variables on maternal instruction (i.e., cognitive assistance, instructional support, encouragement of child's contribution) and affective feedback as dependent variables, controlling for mother's level of education.

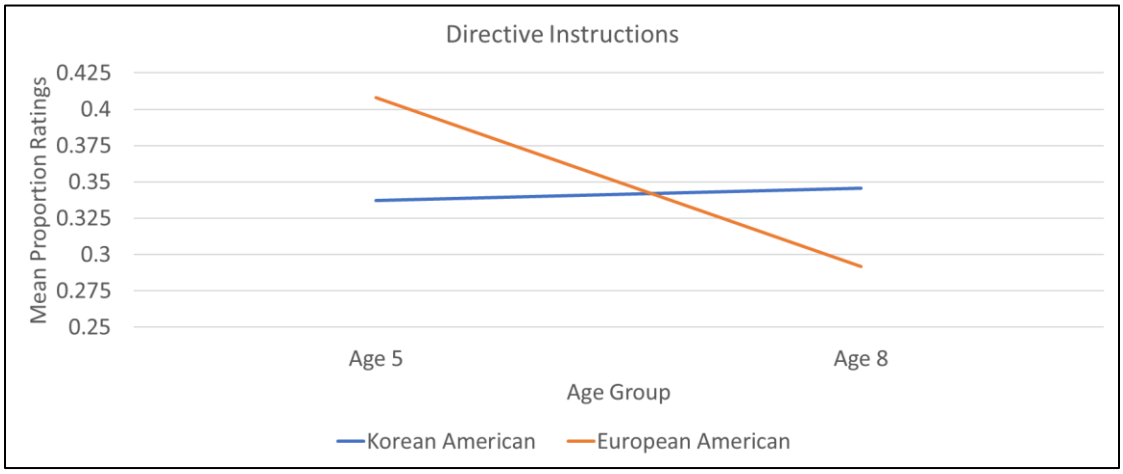
Results suggest a significant main effect of ethnoracial groups on ratings of mother's use of instructional support, $F(1, 83) = 5.46$, $p = .02$, $\eta^2 = .06$, and encouragement of child's contribution, $F(1, 83) = 7.46$, $p = .008$, $\eta^2 = .08$. There was also a significant main effect of age group for ratings of mother's use of instructional support, $F(1, 83) = 6.46$, $p = .01$, $\eta^2 = .07$. There was no ethnicity x age interaction for ratings of mother's cognitive assistance, instructional support, and encouragement of child's contribution.

For mother's directive instruction (i.e., composite of physical demonstration, proposing commands, and correction), results yielded no significant differences based on ethnoracial groups, $F(1, 83) = .005$, $p = .95$, $\eta^2 = .00$. There was a main effect of age, $F(1, 83) = 7.53$, $p = .007$, $\eta^2 = .08$, and a significant ethnicity x age interaction on mother's use of directives, $F(1, 83) = 10.57$, $p = .002$, $\eta^2 = .11$. European American mothers used more directives with younger than older children ($M_5 = .41$, $SD_5 = .09$, $M_8 = .29$, $SD_8 = .11$), whereas Korean American mothers used more directives with older than younger children ($M_5 = .34$, $SD_5 = .08$, $M_8 = .35$, $SD_8 = .10$). The interaction plot is presented in Figure 7.

For ratings of affective feedback, there were no differences in positive support, negative feedback, and corrections based on ethnoracial groups or child age. There were no significant interactions between age and ethnoracial groups for positive support, negative feedback, and corrections.

Figure 7.

Interaction Plot between Age x Ethnoracial Groups on the Directive Instruction Composite



Within-Group Analysis: Role of Acculturation in Korean American Mother's Instruction and Affective Feedback

Bivariate correlations between acculturation orientation, enculturation orientation, maternal instructions, and affective feedback for Korean American mothers are shown in Table 14. Acculturation orientation was moderately and negatively associated with enculturation orientation (r = -.41, p = .006). Acculturation orientation was not significantly associated with any of the maternal instruction variables (i.e., cognitive assistance, instructional support, directive instruction, encouragement of child's contribution), but it was moderately and positively associated with mother's positive support (r = .40, p = .008). Acculturation orientation was not significantly associated with mother's negative feedback or corrections. Enculturation orientation was not significantly associated with any of the maternal instruction variables (i.e., cognitive assistance, instructional, encouragement of child's contribution; there was a marginal association with directive instruction, r = .28, p = .07) and mother's positive support. Enculturation orientation was moderately and positively associated with mother's negative feedback (r = .35, p = .02), and it had a marginally positive association to mother's use of corrections (r = .28, p = .07).

Hierarchical multiple regression analysis was conducted for Korean American mothers to examine the role of acculturation on their maternal instruction and affective feedback during their joint planning with their child. Because the bivariate correlations between acculturation measures and maternal instruction ratings were not significant, the analyses only included the predictive role of acculturation on mother's affective

feedback. Acculturation and enculturation variables were centered and entered in the model as predictors. Results suggest that mother's acculturation (or American orientation) measures accounted for 17% of the variance in positive support, $\Delta F = 4.04$, $p = .03$, and 16% of the variance in negative support, $\Delta F = 3.70$, $p = .04$. Regression coefficients suggested that acculturation orientation ($B = .32$, $SE = .13$, $p = .02$), but not enculturation (or Korean orientation; $B = -.09$, $SE = .23$, $p = .02$), significantly predicted more positive support by mothers toward the child, after controlling for mother's education level. In other words, Korean American mothers who were more acculturated into U.S. mainstream cultural views tended to provide more positive feedback to their child during the interaction. Mother's enculturation or Korean orientation marginally predicted mother's negative feedback ($B = .30$, $SE = .15$, $p = .051$). Mother's enculturation was a significant predictor for mother's correction feedback ($B = .24$, $SE = .12$, $p = .05$). Table 14 displays full reports of regression coefficients.

A series of multivariate analysis of variance (MANOVAs) were used to test for differences in maternal instruction and affective feedback based on acculturation status. Descriptive statistics indicated that 13 of the Korean American mothers in the sample was classified as bicultural, 12 separated, 12 assimilated, and 7 marginalized. Results showed no statistically significant differences in maternal instruction, $F(12, 98) = .51$, $p = .90$, Wilk's $\lambda = .85$, $\eta^2 = .05$, or affective feedback based on acculturation status, $F(9, 93) = 1.37$, $p = .21$, Wilk's $\lambda = .74$, $\eta^2 = .10$.

Table 14

Hierarchical Regression Analysis of Acculturation Predicting Mother's Affective Feedback

	Positive Support			Negative Feedback			Correction		
Predictors	*B (SE)*	*β*	*t*	*B (SE)*	*β*	*t*	*B (SE)*	*β*	*t*
Step1: Covariate									
Mother's education	-.06 (.09)	-.10	-.63	.07 (.06)	.18	1.17	.03 (.05)	.11	.72
Step 2:									
Acculturation	.32 (.13)	.40	2.46*	-.08 (.08)	-.16	-.93	.04 (.07)	.09	.52
Enculturation	-.09 (.23)	-.06	-.38	.30 (.15)	.32	2.01†	.24 (.12)	.33	2.04*
R^2		.17			.16			.10	
ΔF		4.04*			3.70*			2.10	

†$p < .10$, *$p < .05$

Parental Beliefs, Maternal Instruction, and Child Planning Skills

First, children's planning performance was examined. To examine the changes in children's independent planning skills from the pretest to the posttest and the potential contribution of parental beliefs and maternal instructions on any such changes, a series of repeated-measures *t*-tests and multiple regressions were conducted. Prior to these analyses, two set of multivariate analysis of variance (MANOVAs) tested whether children's planning performance differed based on the child ethnoracial and age groups. Table 15 displays the mean plan effective score (in proportion correct) and mean time to completion (in minutes) separated by age and ethnoracial groups.

Plan Effectiveness

Korean American and European American children did not differ in their plan effectiveness on the pretest, during the mother-child interaction, or on the posttest considered together, $F(3, 84) = 1.82$, $p = .15$, Wilk's $\lambda = .94$, $\eta^2 = .06$. Plan effectiveness across the three phases of the study differed based on the child's age group, $F(3, 84) = 9.63$, $p < .001$, Wilk's $\lambda = .74$, $\eta^2 = .26$, indicating that older children performed better than younger children on the pretest ($M_5 = .59$, $SD_5 = .32$, $M_8 = .86$, $SD_8 = .20$, $p < .001$ and the posttest ($M_5 = .71$, $SD_5 = .22$, $M_8 = .90$, $SD_8 = .17$, $p < .001$), but not during the mother-child interaction ($M_5 = .85$, $SD_5 = .16$, $M_8 = .87$, $SD_8 = .19$, $p = .66$). Pearson's correlations confirm this pattern, and indicate strong positive associations between child age (in months) and plan effectiveness on the pretest ($r = .53$, $p < .001$) and posttest ($r = .52$, $p < .001$), but not during the mother-child interaction ($r = .00$, $p = .99$).

Time to Completion

Korean American and European American children significantly differed in their completion time (in minutes) across the pretest, mother-child interaction, and posttest $F(3, 84) = 4.88$, $p = .004$, Wilk's $\lambda = .85$, $\eta^2 = .15$, suggesting that European American children took longer to complete the posttest than Korean American children did (M_{KA} = 2.96 minutes, $SD_{KA} = 1.72$; $M_{EA} = 4.73$ minutes, $SD_{EA} = 3.59$, p = .004). There was no ethnoracial difference in completion time for the pretest or mother-child interaction.

There was an age-group difference in how much time the child or dyad took to complete the task, $F(3, 84) = 3.04$, $p = .03$, Wilk's $\lambda = .90$, $\eta^2 = .10$. The difference in completion time was only evident for the mother-child interaction task, in which younger children and their mothers spent longer time during the interaction phase compared to the older children and their mothers ($M_5 = 15.11$, $SD_5 = 7.14$, $M_8 = 11.44$, $SD_8 = 4.83$, $p = .006$). Completion time for the pretest and posttest did not differ between younger and older children. Pearson's correlations confirm this pattern, indicating moderate positive associations between child age (in months) and task completion time for the mother-child interaction ($r = -.35$, $p = .001$), but not for the pretest ($r = .002$, $p = .99$) or posttest ($r = -.09$, $p = .42$).

Child's Planning Skills from Pretest to Posttest

Repeated-measure *t*-tests indicated that children showed improvement in plan effectiveness from the pretest ($M = .72$, $SD = .30$) to the posttest ($M = .81$, $SD = .22$), $t(87) = -3.01$, $p = .003$, $d = .32$. The change in completion time (in minutes) from the pretest ($M = 4.38$, $SD = 3.29$) to the posttest ($M = 3.85$, $SD = 2.94$) was marginally significant, $t(87) = 1.74$, $p = .09$, $d = .19$. Children were faster in completing the child-

only posttest planning task, which was unexpected because the posttest task had more steps and was presumed to be more difficult.

Table 15

Planning Performance by Ethnoracial and Age Groups

			Ethnicity				Age			
	All (*N*=88)		Korean American (*n*=44)		European American (*n*=44)		Age 5 (*n*=44)		Age 8 (*n*=44)	
Plan Effectiveness										
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Pretest	72%	0.30	73%	0.29	71%	0.31	59%	0.32	86%	0.20
Interaction	86%	0.18	83%	0.19	89%	0.16	85%	0.16	87%	0.19
Posttest	81%	0.22	83%	0.20	78%	0.24	71%	0.22	90%	0.17
Time to Completion										
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Pretest	4.38	3.29	3.72	2.04	5.03	4.10	4.38	2.63	4.39	3.87
Interaction	13.28	6.33	14.36	7.04	12.19	5.41	15.11	7.14	11.44	4.83
Posttest	3.85	2.94	2.96	1.72	4.73	3.59	4.02	2.97	3.67	2.92

Note. For plan effectiveness, the mean values are average percentage correct (pretest out of 10, interaction out of 8, posttest out of 11). For time to completion, the mean values are in minutes.

Parental Beliefs and Child Planning Performance

Table 16 displays a full report of bivariate correlations between parental beliefs and the child's planning performance. Mother's rating of freedom to learn was positively related with children's longer completion time in the posttest (r = .22, p = .04). Children whose mother had younger age-related expectation about when the child can engage in plan-related activities were more likely to do well in the pretest (range: r = -.26 ~ .44, all p < .05) and the posttest (range: r = .23 ~ .48, all p < .05).

Maternal Instructions and the Child's Planning Performance

Table 17 displays a full report of bivariate correlations between maternal instruction and affective feedback ratings and the child's planning performance. Children whose mothers provided more higher-level cognitive assistance tended to do better on the pretest (r = -.32, p = .002), mother-child interaction (r = -.23 , p = .03), and posttest (r = -.33 , p = .002). Children whose mother engaged in directive instruction tended to do worse on the pretest (r = -.33, p = .002) and posttest (r = -.33, p = .002), but not on the mother-child interaction (r = -.09, p = .39). Mother's directive instruction (r = .21, p = .05) and negative feedback (r = .22, p = .04) were associated with the dyad taking longer to complete the task during the mother-child interaction.

Table 16

Bivariate Correlations between Parental Beliefs Measures and Planning Performance for All Child/Dyad (N = 88)

	Plan Effectiveness			Completion Time		
	Pretest	Interaction	Posttest	Pretest	Interaction	Posttest
Guan parenting	-.03	-.18†	-.02	-.09	.14	-.14
Freedom to learn	-.07	-.10	-.21†	.18†	.13	.22*
Socialization goals – Confucian goals	.01	.01	-.11	.04	-.10	-.13
Socialization goals – Independence	.09	-.06	-.03	.06	.13	.06
Socialization goals – Academic achievement	.14	-.13	-.15	.02	-.06	-.06
PCB – Outdoor activities	-.26*	.02	-.23*	-.01	.17	-.01
PCB – Household chores	-.35**	-.08	-.48***	-.01	.11	-.08
PCB – Organized extracurricular activities	-.44***	.10	-.25*	.08	.30**	-.08
PCB – Nonorganized activities	-.38***	.07	-.28**	.15	.14	.12

Note. PCB stands for Parental child-specific beliefs about child's planning skills.

†$p < .10$ *$p < .05$ **$p < .001$

Table 17

Bivariate Correlations between Maternal Instruction and Affective Feedback Ratings and Planning Performance for All Child/Dyad (N = 88)

	Plan Effectiveness			Completion Time		
	Pretest	Interaction	Posttest	Pretest	Interaction	Posttest
Maternal Instructions						
Cognitive Assistance	-.32**	-.23*	-.33**	.08	.08	.07
Instructional Support	.01	-.11	-.02	.08	-.13	.05
Directive Instruction	-.33**	-.09	-.33**	.06	-.10	.21*
Encouragement of Child's Contribution	-.02	-.01	.10	-.09	.15	-.12
Affective Feedback						
Positive Support	.13	-.20†	.06	-.03	.02	.07
Negative Feedback	-.16	.07	-.01	.03	.22*	.02
Correction	.01	-.05	.05	-.14	.01	.09

†$p < .10$ *$p < .05$ **$p < .001$

Directive Instruction and Child Planning Performance

Regression-based moderation analysis examine whether the association between directive instruction and the child's independent planning performance differed in Korean American and European American children. For this analysis, a composite variable combining instructional support and corrections was used to create the variable directive instruction. First, bivariate correlations between these variables were explored separately for Korean American and European American children. For European American children, mother's directive instruction had a moderate-to-large negative association with child's posttest plan effectiveness (r = -.43, p = .004) and marginally positive association with longer completion time (r = .26, p = .09). However, for Korean American children the associations between directive instruction and plan effectiveness (r = -.17, p = .28) and posttest completion time (r = .09, p = .55) were not significant. Hierarchical multiple regression showed that mother's directive instruction predicted worse posttest plan effectiveness in children (B = -.57, SE = .25, p = .03), after controlling for mother's level of education and pretest plan effectiveness. This relation was not moderated by child's ethnoracial group (B = -.09, SE = .14, p = .51), suggesting that this relation did not work differently for these two groups of children.

CHAPTER 4

Discussion

The purpose of this dissertation was to examine variations in mother-child interaction and maternal instruction among Korean American and European American families, and how these interactions contribute to the development of children's planning at ages 5 and 8. The study also examined parental beliefs of children's learning and planning skills in these two culture groups. The study also investigated how variations in maternal instructions were related to child's age and ethnoracial groups, as well as how they were associated with parents' ethnotheories, socialization goals, and acculturation. Lastly, the study identified which parental beliefs and maternal instructions contributed to children's independent planning skills.

The results revealed the following findings. First, Korean American and European American mothers differed in their beliefs about child's learning and planning skills. Second, some dimensions of parental beliefs were related to mother's instructional support and encouragement of the child's contribution, but not to the mother's cognitive assistance or affective feedback during joint planning. Third, Korean American mothers' cultural orientation (i.e., acculturation, enculturation) was related to their affective feedback, but not to other aspects of maternal instruction. Fourth, ethnoracial group differences in maternal instruction and affective feedback depended on child age. Lastly, several dimensions of parental beliefs and maternal instruction were shown to relate to the child's better independent planning skills. More detailed interpretations of the

findings, study limitations, future directions, and implications are discussed in the sections below.

Cultural Differences in Parental Beliefs about Child Learning and Planning Skills

The first hypothesis, examining cultural difference in parental beliefs between Korean American and European American mothers, was partially supported. Consistent with previous studies suggesting guan parenting to be a culture-specific parenting belief, Korean American mothers showed greater endorsement on guan parenting compared to European American mothers (Chao, 1994, 2000; Choi et al., 2013). Specifically, Korean American mothers tended to endorse the parental role of training children and providing continuous monitoring and correction of their child's behaviors more than the European American mothers did.

Consistent with an emphasis on the child's independence in European American families (Park et al., 2014; Suizzo et al., 2008), the European American mothers scored higher on socialization goals of independence and freedom to learn compared to the Korean American mothers. Greater emphasis on child independence reflected European American mothers' desire for children to be self-expressive, verbal, explorative, unique, independent from parents, and self-sufficient in trusting their own judgement. These qualities parallel child-centered goals previously identified with European American families (Padmawidjaja & Chao, 2010). While previous studies of parenting styles in European American and Korean American did not find a difference in mother's ratings on the freedom of fail measure, the current finding is not surprising when each item for this measure is considered. Korean American mothers were just as likely as European

American mothers to believe that it is okay for their child to try something and fail, but Korean American mothers differed in their belief about whether it is okay for their child to try new things on his or her own.

Equally interesting is the finding that Korean American and European American mothers did not differ in socialization goals that reflect Confucian values. Something to note is the different configuration of these socialization goals that emerged in this study compared to a previous study (Padmawidjaja & Chao, 2010). Only two factors differentiated the socialization goals to be either Confucian-related goals or child-centered goals in the previous study (Padmawidjaja & Chao, 2010). However, three factors of socialization goals emerged with the current dissertation sample, suggesting socialization goals of independence and Confucian-related goals and achievement- or task-oriented goals.

These configurations have also been observed in another study (Schwarz, Schäfermeier, & Trommsdorff, 2005), which suggest that academic achievement goals cannot necessarily be assigned to reflect the individualism-or-collectivism dichotomy, even though many collectivistic cultures have scored higher on this dimension. Moreover, a recent study with Korean mothers had shown that while they want their children to do well academically, they restrain from pressuring their child to succeed for the family (Park & Kwon, 2009). For Confucian-related goals in this current study, the items included qualities such as respect for elders, obedience, humility, hard work and effort. While it was not statistically significant, the overall pattern was that Korean

American mothers had higher ratings of these goals compared to European American mothers.

In addition, the exploratory analysis in parents' ethnotheories about child's planning skills revealed that Korean American and European American mothers differed in their age-related expectation about when their children are able to carry out plan-related activities. Korean American mothers reported higher age-related expectations for household chores and organized extracurricular activities, but lower age-related expectations for nonorganized activities compared to European American mothers. Research suggests that Korean parents value nurturance of their children and show extensive involvement in decision-making about their children's daily activities, choice of schools, and profession in later development (Kim, Im, Nahn, & Hong, 2012).

This emphasis is also reflected in the ways the parental beliefs measures were intercorrelated, such that mothers who tended to endorse greater guan parenting tended to expect older ages for when their child can carry out plan-related activities, whereas the mothers who tended to endorse greater socialization of independence and freedom to learn tended to expect younger ages for when their child can carry out various plan-related activities. Additionally, there was no cultural difference in mother's age-related expectation about outdoor activities. Whether there may be any differences between Korean American and European American mothers in this dimension needs further exploration. During the visit, some Korean American mothers hinted that they may answer differently depending on whether they are in Korea (e.g., where young children

are safe and normatively accepted to go to a store alone) versus the United States (e.g., legally forbidden to leave the child alone).

Relations between Parental Beliefs and Maternal Instruction

The second hypothesis, which proposed that parental beliefs about learning and planning skills would be instantiated in maternal instruction during a joint planning task, was partially supported. The relations between parental beliefs and maternal instructions emerged in directions different from the predictions. Contrary to the prediction that mothers who endorse socialization goal for independence would use fewer explicit instructional supports, results showed that mother's socialization goals for independence were associated with using more explicit instructional support during their interactions with the child.

It is possible that the nature of the task (i.e., goal-directed task) elicits mothers' use of more directives in interactions with their children. A study had suggested that mothers may engage in more deliberate and directive interactions when the mother is aware that their child will be working on a similar task by themselves later on (Gauvain, 2005). Further probing of ratings on each level of the instructional support has shown that the socialization goal of independence was associated with more use of yes-or-no questions (i.e., level 4 of instructional support), but not with other levels of instructional support (e.g., physical demonstration, verbal commands). Mothers may be telling the child the "correct" solutions and asking for their understanding or agreement afterwards (e.g., We gotta get gas first, right?). Because the dyad's utterances are not coded to include how mother reacted to their child's responses when mother suggested a solution

or commanded an action, it is difficult to know whether the mother's directives hindered the child's contribution and self-expression. For example, mothers may have agreed with the child rather than insisting on their solutions, which would have been aligned with the independence goal items (e.g., to trust their judgment, to think for themselves).

Another unexpected finding was the relation between parental beliefs about planning skills and mother's instruction. The mothers who had higher age-related expectations relative to their child's current age about deciding on organized extracurricular activities tended to encourage the child's contribution more during the joint planning. While this may seem contradictory, perhaps the coding for the mother's encouragement of the child's contribution may be more reflective of mothers trying to scaffold their child's participation rather than the child's independent solutions, especially if their child has yet to reach the age the mother expects them to be able to decide on organized activities. Coding child's engagement behaviors will allow us to further examine whether the direction of this relation changes in terms of how much child-initiated solutions are given. Moreover, it has been shown that the social process in mother and child's joint planning cannot be one sided. That is, it is not solely the mother's strategies or interaction behaviors that influence child's planning skills, but also that the child is involved in social co-construction such that the child's behaviors inform mother's guidance on the task (Gauvain, 2001). Therefore, the mother's instruction behavior, in which the mother encouraged the child's contribution more, may be informed by the mother's perceived expectation about their child's capability in engaging in a plan-related activity (as it is shown in their higher age-related expectation).

Lastly, parental beliefs about their own child's planning skills were associated with mothers' uses of directive instruction. Mothers who had higher age-related expectations about when their own child can engage in outdoor activities, household chores, and decide on nonorganized activities relative to the child's current age, tended to provide more explicit instructions with them, supporting the view that mother's perceived expectations about their child's abilities is shaping their instruction. No other dimensions of parental beliefs were related to ratings of maternal cognitive assistance or affective feedback. This suggests that the way that maternal beliefs in these ethnoracial groups correspond with maternal instruction during joint planning may be more complex than previously assumed (Keller et al., 2007; Johnston, Park, & Miller, 2018).

Variations in Maternal Instruction Based on Ethnoracial Group and Child Age

The third hypothesis examining whether variation in mother's instruction depended on child age and ethnoracial background was partially supported. The result revealed an age x ethnoracial group interaction on maternal instruction patterns. Findings on age group differences in maternal instruction provided support for the hypothesis, but the findings on the ethnoracial group differences in maternal instruction revealed some surprising and interesting results.

Maternal Instruction Based on Age Groups

The hypothesis that variation in maternal instruction would depend on child age was partially supported. As predicted, mothers provided cognitive assistance that was more advanced with older children compared to the younger children. Mothers of older and younger children did not differ in their use of explicit instructional supports and

directive instruction. However, mothers of younger children tended to use more commands than mothers of older children. This can be interpreted that, while mothers in both age groups shared information with their children (e.g., by suggesting ideas or demonstrating problem-solving actions), mothers of older children were less likely to direct child's actions by telling them what to do. These findings further support the view that mothers structure their interactions with their child based on the child's age-related competence (Bibok et al., 2009; Carr & Pike, 2011; Gauvain, & Perez, 2008; Mulvaney et al., 2006). The mothers of older and younger children did not differ in their use of encouragement of child's contribution nor in the provision of affective feedback.

Maternal Instruction Based on Ethnoracial Groups

Many surprising findings were revealed regarding ethnoracial group differences in maternal instructions. First, while no specific hypothesis was stated for ethnoracial group differences in mother's cognitive assistance, some differences emerged. The findings showed that while mothers from both groups mostly provided specific strategies to their children, the European American mothers' cognitive assistance also tended to include more general strategy support.

Second, contrary to the prediction that European American mothers would encourage the child's contribution more, Korean American mothers were rated higher in their encouragement of the child's contribution. Similar to the concerns raised earlier, further investigation is needed to unpack whether maternal encouragement was a form of mothers providing direct scaffolding for child's participation in a cognitive activity or

whether it is reflective of mothers providing more learning opportunities for the child's independent thinking.

Third, patterns for mother's explicit instructional support did not confirm the hypothesis that Korean American mothers would use more explicit, directive instruction in their interactions with the child compared to the European American mothers. Interestingly, both Korean American and European American mothers used physical demonstration the most, in which they modeled the problem-solving actions to the child. Moreover, Korean American mothers used more suggestive approaches compared to the European American mothers, perhaps taking a more collaborative approach to their interactions with their child. While this difference was observed after controlling for mother's level of education, future studies should examine different demographic factors that can potentially shape maternal instruction patterns among these groups (Carr & Pike, 2011).

Fourth, contrary to the predictions that Korean American mothers would give more negative feedback and corrections and also less positive support (Cho et al., 2017), mothers' affective feedback was mostly positive for both Korean American and European American mothers. They did not differ in any ratings of mother's affective feedback.

Maternal Instruction Based on Age x Ethnoracial Groups Interactions

Controlling for mother's level of education, we examined whether ethnoracial differences in maternal instruction depended on child's age group. Findings yielded an age x ethnoracial group interaction on the composite directive instruction rating, which included the proportion of ratings from both instructional support (i.e., physical

demonstration, proposing commands) and correction (i.e., ratings of 4-5 on corrections) coding. Results showed that European American mothers used more directive instruction with younger children than older children, whereas Korean American mothers did not differ in their directive instruction with their older or younger children. For European American families, the age difference in directives remains, such that the mothers of older children were less likely to direct child's actions by explicitly telling them what to do. For Korean American families, mothers in both age groups were just as likely to use directive instruction. While the parenting and socialization literature suggests that Korean American mothers are more indulgent with younger children than with older school-aged children, it might be that Korean American mothers are also engaging preschoolers in more explicit instructions with the anticipation to prepare them for the transition to school (Seo, Cheah, & Hart, 2017; Sy, 2006).

Role of Acculturation in Korean American Mother's Affective Feedback

The hypothesis examining variation in maternal instruction and affective feedback based on mothers' acculturation within Korean American families was partially supported. While the Korean American mothers' acculturation was not associated with differences in their cognitive assistance, directives, encouragement of child's contribution and correction, their acculturation was shown to relate to differences in their affective feedback to the child. Specifically, Korean American mothers who are more acculturated to the U.S. society tended to provide more positive support to their child. Korean American mothers who are more enculturated to their heritage society tended to provide more negative feedback to their child. This pattern of acculturation process in parenting

interactions have also been evident in previous studies with other Asian American families (Cheah & Park, 2006; Cheah et al., 2013)

Relations between Parental Beliefs, Maternal Instruction, and Child's Planning

The hypothesis examining age-related differences in child independent planning was supported. Older children planned more effectively than the younger children in both the pretest and posttest chore-activity planning tasks. While older and younger children did not differ in the time they took to complete the pretest and posttest, the mothers worked on planning longer with younger children compared to older children. The children, regardless of age and ethnoracial group, showed improvement in their plan effectiveness from the pretest to posttest. Therefore, the findings suggest that the children benefited from working on a joint planning task with their mother.

The dissertation ultimately aimed to identify parental beliefs and maternal instruction patterns that contribute to the development of planning skills. The hypothesis investigating the relations between parental beliefs and child's independent planning performances were partially supported. As predicted, mothers who endorsed freedom to learn had children who were more likely to take longer to complete the child-only posttest planning task. This may be reflective of the child's engagement with the task, perhaps by trying out different routes and solutions before deciding on the best plan. This link between the freedom to learn and the child's planning performance needs further investigation into the mechanisms by which this parental belief about child's learning may be manifested in learning opportunities with consequences for children's cognitive and socioemotional development (Park & Yoo, 2005; Ziehm, Trommsdorff, Heikamp, &

Park, 2013). Moreover, findings showed that mother's cognitive assistance was associated with the child's plan effectiveness in the posttest. Children whose mothers used a higher level of cognitive assistance tended to plan more effectively across all three activity-planning tasks.

The parental beliefs about children's planning skills also were associated with child's plan effectiveness. Children whose mother had younger age-related expectations, relative to the child's current age, for when their own child can engage in plan-related activities were more likely to plan more effectively in the independent activity-planning tasks. These findings suggest that mother's beliefs about children's capabilities to make decisions about future activities support the development of children's planning skills. Another explanation could be that mothers, in observing their children, are informed about when planning skills develop and then provide opportunities at home for children to use these skills. Similar questions were raised for taking the dynamic view of parents' socialization goals, in which parents adaptively adjust their perception of their child and their own childrearing practices in response to their interactions with and observation of their children's capabilities (Grusec & Goodnow, 1994; Miller, 1988; Ng et al., 2012). A previous study has shown how mothers shift their instructions during a joint planning task in relation to their perception of their child's temperament (i.e., emotional intensity; Perez & Gauvain, 2009). Other studies have shown mother's contingent shifts in scaffolding based on the child's performance and competence (Carr & Pike, 2012; Wood et al., 1978). Similarly, the mother's direct observation and interactions with their children can inform and contribute to mothers reconstructing their knowledge about child

development and shifting their socialization goals, and thus, the opportunities provided at home.

Surprisingly, mother's encouragement of the child's contribution during the joint planning task did not result in better planning skills for children. In this study, parents who had older age-related expectations about the child's capability to decide on plan-related activities, relative to child's current age, were found to encourage the child's contribution more. Given that the questionnaire about the expectation of their own child's planning skills was completed after their interaction with their child in a joint planning task, perhaps, these mothers' older age-related expectations may reflect mother's observation of their child's planning capability from their immediate interactions. A question still remains why encouraging the child's contribution may have not been effective in child's later planning. More study can be given to the interaction strategies and child's responsiveness and cooperative interactions to examine in what ways child's interactions with the mother provide learning opportunities that contribute to their development of planning skills.

Lastly, the hypothesis examining whether directive instruction contributes negatively to child's planning for European American, but not Korean American children, was not supported. Findings showed that mother's directive instruction was associated with worse performance in the child's later planning, and that this relation did not differ between European and Korean American children. Therefore, we did not find support that this behavior has different meaning for these two ethnoracial groups.

Limitations and Future Directions

The study presents several limitations and opportunities for future investigation. The first limitation is with the sample and recruitment method. While the sample size was sufficient for analyzing for group differences and changes over time, the current sample size is relatively small for regression-based analysis. Therefore, some of the proposed relations may have not been detected due to a lack of power. The current sample also relied on convenience sampling, and several participants (56% of the sample) were in a contact database in the psychology department. These families may have participated previously in psychological research or have a strong positive view toward learning and science. However, a preliminary assessment showed that the study variables in this dissertation did not differ between participants from the database and families recruited from outside the database. Also, the recruitment of the Korean American families took place through local language school or churches. While these settings may bias the representativeness of the Korean American families, previous research with this particular community has often relied on these recruitment sites (Cote, et al., 2015; Seo et al., 2017; Shen et al., 2019). Moreover, future studies can also include fathers to explore how parental instruction with their child may be similar or different and whether father's instructional behaviors have different impacts on child's development and learning in Korean Americans.

The second limitation concerns information about the participating children. The current study only measured mother's acculturation, parenting beliefs and strategies, but it is possible that children's acculturation or enculturation can shape the perception of

their interactions with their parents (Choi, et al., 2017). The main analyses in this dissertation focused on mother's behavior during joint planning and did not include the child's task engagement behaviors, involvement in suggesting solutions, affective responses, and cooperation with the mother. The benefits of interacting with the mother in a cognitive activity are related to the child's participation in practicing these skills (Gauvain, 2001). This information about the child could reveal a fuller picture of how the interactions unfolded and which aspects of child participation were related to improved planning performance from the pre- to the posttest. Deeper investigation of the dynamics of mother-child interaction and of the scaffolding process would also be useful. For example, future study can examine the child's responses to mother's particular instructions (i.e., correction, directives) and how mothers adjust their subsequent interactions based on the child's responses.

Third, there were a few observations that merit further investigation. One observation was the use of language and codeswitching (i.e., individuals using multiple languages within an utterance) in Korean American families. About 36% of the Korean American mothers (16 out of 44) spoke both English and Korean during the interaction task, and about 25% of the Korean American children (11 out of 44) spoke both English and Korean during the interaction task. Language is an important vehicle for learning and cultural transmission (Vygotsky, 1978). Using one language over another may influence parent-child interaction patterns and feedback to each other. It may also shape other aspects of development (i.e., cultural identity, parent-child relationship quality) not assessed in this study that, nonetheless, have an impact on child learning and

development (Choi et al., 2017; Kim, Lee, & Lee, 2015). In another study with a Korean American sample, Korean American mothers' use of English was shown to relate to giving more positive feedback to their children, suggesting that mother's access to a variety of expressions and praise vocabulary, such as "excellent!" "awesome!" may be more readily utilized by Korean American mothers with better English skills (Seo, et al., 2017). Another observation stems from a mother's comment that seemed to reflect on how often they engage in a similar planning (e.g., "Umma [Mom] had not have a plan for our family trip before…When you go to the Grand Flague, you may have to go to the grandmother's house, stop by the market, and there may be a lot of things to do…We need to make a reservation" (translated by the author). More ethnographic and survey studies of Korean immigrant families' problem-solving or everyday planning practices would be useful to document. It will allow us to examine maternal instruction in daily interactions and routine practices with their children.

Future studies can further unpack within-group differences in Korean American families. One cultural process, acculturation, was examined in this study. It revealed positive relations between mother's acculturation, enculturation, and affective feedback with their child. Studying the dynamics of parent-child interactions in the context of immigration warrants further investigation as bicultural socialization processes have gained much attention in recent studies (Cheah et al., 2013; Choi et al., 2013; Seo et al., 2017). Lastly, how mother-child instructional interactions and child's planning skills translate into the school context need further investigation. More importantly, studies of how children's school adjustment relates to home practices and how Korean American

mothers prepare their children for the school setting (Sy, 2006) will widen our understanding of these children's community strengths and inform more culturally responsive practices in the classroom.

Implications

Despite the highlighted limitations above, this dissertation presents an important theoretical contribution to developmental science, and it has practical implications relevant to children's learning and parental involvement. This dissertation was one of the first, to my understanding, to examine how cultural belief systems may be instantiated in Korean American mothers' instruction during a joint planning task with their children at ages 5 and 8. The parental beliefs measured in this study provided further support that parenting and socialization processes are culturally informed and may differ across diverse communities (Bornstein & Cheah, 2006; Parmar et al., 2004). The study also showed cultural differences in parental ethnotheories about child's planning between Korean American and European American families and, also, how these are intertwined with other parental beliefs about children's learning. The study also replicated previous studies and provided further support for how interactions with mothers in a goal-directed activity can provide learning opportunities for the development of cognitive skills. Another interesting point to note is that mother's ideas and expectations about the child's capabilities and the qualities important for children to develop are reflected in the ways that parents provide guidance during joint cognitive activity with their child.

The findings also have implications for bridging understanding of the child's cultural learning environment at home and with teachers in the classroom. Previous

studies have suggested the misperception of teachers on whether and how Korean American mothers are involved in their child's learning and schooling. The findings further emphasize the importance of understanding parental involvement in child's learning in sociocultural context and of broadening the form and strategies through which parents may be supporting their children's learning and developmental outcomes outside of school-based parental involvement (e.g., structuring child's learning activities or setting).

Another important contribution is that this project was a step toward providing insight into culturally nuanced ways that maternal instruction may facilitate the child's planning skills. While the study failed to find support that directive instruction may not result in negative outcomes for Korean American children as is the case with European American children, the findings provided insight into how mothers from these two ethnoracial groups use different instructional strategies and affective feedback. Despite variations in maternal instructions and affective feedback across these ethnoracial and age groups, findings have identified parental beliefs and maternal instruction patterns that were related to children's better planning performance.

Conclusion

The present dissertation extends our understanding of variation in maternal instruction that facilitate the development of children's planning skills at ages 5 and 8 among Korean American and European American families. Parental beliefs about child learning and age-related expectations regarding children's planning skills differed between Korean American and European American mothers. Korean American mothers

endorsed guan parenting and European American mothers endorsed socialization goal for independence and freedom to learn. Mother also differed in their age-related expectations for when their child is able to carry out plan-related activities. Thus, the differences in parental ethnotheories parallel the idea in the Developmental Niche framework (Super & Harkness, 1986) that the child's learning environment is organized by different parental beliefs across cultural communities. This dissertation revealed several interesting findings about the relations between parental beliefs, maternal instructions, and children's development of planning skills.

The findings revealed variation in maternal instruction based on various factors, including parental beliefs, child age and ethnoracial background, and mother's acculturation. Both Korean American and European American mothers provided more advanced cognitive assistance to older children compared to the younger children, spent more time carrying out the joint planning task with the younger children, provided guidance by demonstrating solutions to their younger children, provided less commands to the older children, and showed overall engagement in positive support during the mother-child errand planning task. Some ethnoracial differences were revealed in maternal instruction. European American mothers were more explicit in their instruction with their child, and Korean American mothers encouraged their child's contribution more. Moreover, European American mother engaged in more directive instruction with younger children than older children, whereas the Korean American mothers did not differ in their use of directive instruction across these age groups. Korean American mothers' cultural orientation was also shown to relate to mother's affective feedback,

such that more acculturated mothers were likely to provide more positive support whereas more enculturated mothers were likely to provide more negative feedback to their child. Some results require further study, such as the associations among mother's socialization goals, mother's age-related expectations about child planning, and mother's encouragement of the child's contribution, which were in unexpected directions. The results suggest how parental cultural beliefs can be manifested in mother-child interaction patterns, but the exact course of these influences is unclear. Nonetheless, these findings suggest interesting relations between mother's ideas and expectations about child capabilities and their development that are reflected in how mothers assist their children during joint planning.

The study also replicated previous studies and provided further support for how interactions with mothers in a goal-directed activity can provide learning opportunities for the child to practice cognitive skills and, specifically, develop planning skills. While older children showed better planning performance than younger children, children in both age groups showed improvement in their plan effectiveness from the pretest to the posttest planning tasks. Especially, children who received more advanced cognitive assistance from their mother and had mothers who had younger age-related expectations about their child's planning were shown to be more effective in their independent posttest chore-activity planning. In our sample, mother's directive instruction was associated with negative outcome (i.e., lower planning effectiveness) for both ethnoracial groups. However, the meaning and forms of maternal instruction among Korean American

families and how it can impact children's developmental outcomes needs further investigation.

References

AAPI Data (2015). *Infographic: AAPI Bachelor's Degree or Higher.* Demographic Data & Policy Research on Asian Americans & Pacific Islanders. Retrieved from https://aapidata.com/infographic-aapi-bachelors-degree-higher-2015/

Arcia, E., & Johnson, A. (1998). When respect means to obey: Immigrant Mexican mothers' values for their children. *Journal of Child and Family Studies, 7*, 79-95.

Atance, C. M., & Meltzoff, A. N. (2005). My future self: Young children's ability to anticipate and explain future states. *Cognitive Development, 20*, 341-361.

Atance, C. M., & O'Neill, D. K. (2001). Episodic future thinking. *Trends in Cognitive Sciences, 5*, 533-539.

Atance, C. M., & Sommerville, J. A. (2014). Assessing the role of memory in preschoolers' performance on episodic foresight tasks. *Memory, 22*, 118–128.

Aukrust, V., Edwards, C. P., Kumru, A., Knoche, L., & Kim, M. (2003). Young children's close relationships outside the family: Parental ethnotheories in four communities in Norway, United States, Turkey, and Korea. *International Journal of Behavioral Development, 27*, 481-494.

Baker-Sennett, J., Matusov, E., & Rogoff, B. (1993). Planning as developmental process. In H. W. Reese (Ed.), *Advances in child development and behavior*. New York: Academic Press.

Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology, 4*, 1-103.

Benson, J. B., & Haith, M. (1995). Future-oriented processes: A foundation for planning behaviour in infants and toddlers. *Infancia y Aprendizaje, 18*, 127-140.

Bibok, M. B., Carpendale, J. I., & Müller, U. (2009). Parental scaffolding and the development of executive function. *New Directions for Child and Adolescent Development, 123*, 17-34.

Bornstein, M. H. (1995). Form and function: Implications for studies of culture and human development. *Culture & Psychology, 1*, 123-137.

Bornstein, M. H. (2012). Cultural approaches to parenting. *Parenting, 12*, 212-221.

Bornstein, M. H., & Cheah, C. S. L. (2006). The place of "culture and parenting" in the ecological contextual perspective on developmental science. In K. H. Rubin & O. B.

Chung (Eds.), *Parenting beliefs, behaviors, and parent-child relations: A cross-cultural perspective* (pp. 3-33). London, UK: Psychology Press.

Bornstein, M. H., & Cote, L. R. (2004). Mothers' parenting cognitions in cultures of origin, acculturating cultures, and cultures of destination. *Child Development, 75*, 221-235.

Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136-162). Newbury Park, CA: Sage.

Budiman, A., Cilluffo, A., & Ruiz, N. G. (2019, May 22). *Key facts about Asian origin groups in the U.S.* Pew Research Center. Retrieved from https://www.pewresearch.org/fact-tank/2019/05/22/key-facts-about-asian-origin-groups-in-the-u-s/

Cankaya, O., & LeFevre, J. A. (2016). The home numeracy environment: what do cross-cultural comparisons tell us about how to scaffold young children's mathematical skills? In B. Blevins-Knabe & A. B. Austin (Eds.), *Early childhood mathematical skill development in the home environment*. New York, NY: Springer.

Carr, A., & Pike, A. (2012). Maternal scaffolding behavior: Links with parenting style and maternal education. *Developmental Psychology, 48*, 543-551.

Chao, R. K. (1994). Beyond parental control and authoritarian parenting style: Understanding Chinese parenting through the cultural notion of training. *Child Development, 65*, 1111-1119.

Chao, R. K. (1995). Chinese and European American cultural models of the self-reflected in mothers' childrearing beliefs. *Ethos, 23*, 328-354.

Chao, R. K. (2000). 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.

Chao, R., & Tseng, V. (2002). Parenting of Asians. In M. H. Bornstein (Ed.), *Handbook of parenting: Social conditions and applied parenting* (2nd ed., Vol. 4, pp 59-93). Mahwah, NJ: Lawrence Erlbaum Associates.

Cheah, C. S., Leung, C. Y., & Zhou, N. (2013). Understanding "tiger parenting" through the perceptions of Chinese immigrant mothers: Can Chinese and US parenting coexist? *Asian American Journal of Psychology, 4*, 30-40.

Cheung, C. S., Monroy, J. A., & Delany, D. E. (2017). Learning-related values in young children's storybooks: An investigation in the United States, China, and Mexico. *Journal of Cross-Cultural Psychology, 48,* 532-541.

Cho, J., McBride, C., & Lin, D. (2017). The relation of maternal literate mediation strategies and socioemotional comments to Korean children's Hangul reading. *Applied Psycholinguistics*, *38*, 155-179.

Choi, Y. E., Bempechat, J., & Ginsburg, H. P. (1994). Educational socialization in Korean American children: A longitudinal study. *Journal of Applied Developmental Psychology*, *15*, 313-318

Choi, Y., & Kim, Y. S. (2011). Acculturation and the family: Core vs. peripheral changes among Korean Americans, *Chaeoe Han in Yon Gu Studies of Koreans Abroad*, *21*, 135-190.

Choi, Y., Kim, T. Y., Pekelnicky, D. D., Kim, K., & Kim, Y. S. (2017). Impact of youth cultural orientation on perception of family process and development among Korean Americans. *Cultural Diversity and Ethnic Minority Psychology*, *23*, 244-257.

Choi, Y., Kim, Y. S., Kim, S. Y., & Park, I. J. (2013). Is Asian American parenting controlling and harsh? Empirical testing of relationships between Korean American and Western parenting measures. *Asian American Journal of Psychology*, *4*, 19-29.

Choi, Y., Kim, Y. S., Pekelnicky, D. D., & Kim, H. J. (2013). Preservation and modification of culture in family socialization: Development of parenting measures for Korean immigrant families. *Asian American Journal of Psychology*, *4*, 143-154.

Choi, Y., Park, M., Lee, J. P., Kim, T. Y., & Tan, K. (2017). Culture and family process: Examination of culture-specific family process via development of new parenting measures among Filipino and Korean American families with adolescents. In Y. Choi & H. C. Hahm (Eds.), *Asian American parenting: Family process and intervention* (pp. 37-68). New York, NY: Springer.

Chua, A. (2011). *Battle hymn of the tiger mother*. New York, NY: Penguins.

Clough, J., Lee, S., & Chae, D. H. (2013). Barriers to health care among Asian immigrants in the United States: a traditional review. *Journal of Health Care for the Poor and Underserved*, *24*, 384-403.

Cote, L. R., Kwak, K., Putnick, D. L., Chung, H. J., & Bornstein, M. H. (2015). The acculturation of parenting cognitions. *Journal of Cross-Cultural Psychology*, *46*, 1115-1130.

Cuéllar, I., Arnold, B., & Maldonado, R. (1995). Acculturation rating scale for Mexican Americans-II: A revision of the original ARSMA Scale. *Hispanic Journal of Behavioral Sciences*, *17*, 275-304.

Deater-Deckard, K., Lansford, J. E., Malone, P. S., Alampay, L. P., Sorbring, E., Bacchini, D., ... & Dodge, K. A. (2011). The association between parental warmth and control in thirteen cultural groups. *Journal of Family Psychology*, *25*, 790-794.

Eason, S. H., & Ramani, G. B. (2017). Parental guidance and children's executive function: Working memory and planning as moderators during joint problem-solving. *Infant and Child Development*, *26*, 1-24.

Edwards, C. P., Knoche, L., Aukrust, V., Kumru, A., & Kim, M. (2006). Parental ethnotheories of child development: Looking beyond independence and individualism in American belief systems. In U. Kim, K. Yang, & K. Hwang (Eds.), *Indigenous and cultural psychology: Understanding people in context* (pp. 141-162). New York, NY: Springer.

Fagot, B. I., & Gauvain, M. (1997). Mother–child problem solving: Continuity through the early childhood years. *Developmental Psychology*, *33*, 480-488.

Farver, J. A. M., & Shin, Y. L. (1997). Social pretend play in Korean-and Anglo-American preschoolers. *Child Development*, *68*, 544-556.

Farver, J. A., Kim, Y. K., & Lee, Y. (1995). Cultural differences in Korean- and Anglo-American preschoolers' social interaction and play behaviors. *Child Development*, *66*, 1088-1099.

Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*, 175-191.

Fuligni, A. J., Tseng, V., & Lam, M. (1999). Attitudes toward family obligations among American adolescents with Asian, Latin American, and European backgrounds. *Child Development*, *70*, 1030-1044.

Gardner, W., & Rogoff, B. (1990). Children's deliberateness of planning according to task circumstances. *Developmental Psychology*, *26*, 480–487.

Gauvain, M. (1992). Social influences on the development of planning in advance and during action. *International Journal of Behavioral Development*, *15*, 377-398.

Gauvain, M. (1995). Influence of purpose of an interaction on adult–child planning. *Infancia y Aprendizaje*, *69*, 141– 155.

Gauvain, M. (1999). Everyday opportunities for the development of planning skills: Sociocultural and family influences. In A. Göncü (Ed.), *Children's engagement in the world* (pp. 173-201). New York: Cambridge University Press.

Gauvain, M. (2001). *The social context of cognitive development*. New York: Guilford Press.

Gauvain, M. (2005). Scaffolding in socialization. *New Ideas in Psychology, 23,* 129-139.

Gauvain, M., & Perez, S. (2015). Cognitive development and culture. In R. Lerner (Ed.), *Handbook of child psychology and developmental science* (7th ed., pp. 1-43). New York: Wiley.

Gauvain, M., & Perez, S. M. (2005). Parent–child participation in planning children's activities outside of school in European American and Latino families. *Child Development, 76,* 371-383.

Gauvain, M., & Perez, S. M. (2008). Mother–child planning and child compliance. *Child Development, 79,* 761-775.

Gauvain, M., & Rogoff, B. (1989). Collaborative problem solving and children's planning skills. *Developmental Psychology, 25,* 139-151.

Gauvain, M., Fagot, B. I., Leve, C., & Kavanagh, K. (2002). Instruction by mothers and fathers during problem solving with their young children, *Journal of Family Psychology, 16,* 81–90.

Gauvain, M., Perez, S. M., & Reisz, Z. (2018). Stability and change in mother–child planning over middle childhood. *Developmental Psychology, 54,* 571-585.

Göncü, A. (Ed.). (1999). *Children's engagement in the world: Sociocultural perspectives*. New York: Cambridge University Press

Gonzalez, M. M. (1996). Tasks and activities. A parent-child interaction analysis. *Learning and Instruction, 6,* 287-306.

Goodnow, J. J., & Collins, W. A. (1990). *Development according to parents: The nature, sources, and consequences of parents' ideas*. Hillsdale, NJ: Erlbaum.

Grusec, J. E., & Davidov, M. (2010). Integrating different perspectives on socialization theory and research: A domain-specific approach. *Child Development, 81,* 687-709.

Grusec, J. E., & Goodnow, J. J. (1994). Impact of parental discipline methods on the child's internalization of values: A reconceptualization of current points of view. *Developmental Psychology, 30,* 4-19.

Haith, M. M. (1997). The development of future thinking as essential for the emergence of skill in planning. In S. L. Friedman & E. K. Scholnick (Eds.), *The developmental psychology of planning: Why, how and when do we plan?* (pp. 43–76). Mahwah, NJ: Erlbaum.

Harkness, S., & Super, C. M. (2002). Culture and parenting. In M. H. Bornstein (Ed.) *Handbook of parenting,* (Vol. 2, pp. 253-280) Mahwah, NJ: Earlbaum.

Heckhausen, J. (1987). Balancing for weaknesses and challenging developmental potential: A longitudinal study of mother-infant dyads in apprenticeship interactions. *Developmental Psychology, 23,* 762-770.

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6,* 1-55.

Hudson, J. A., & Fivush, R. (1991). Planning in the preschool years: The emergence of plans from general event knowledge. *Cognitive Development, 6,* 393-415.

Hudson, J. A., Shapiro, L. R., & Sosa, B. B. (1995). Planning in the real world: Preschool children's scripts and plans for familiar events. *Child Development, 66,* 984-998.

Huntsinger, C. S., & Jose, P. E. (1995). Chinese American and Caucasian American family interaction patterns in spatial rotation puzzle solutions. *Merrill-Palmer Quarterly, 41,* 471-496.

Huntsinger, C. S., Jose, P. E., Larson, S. L., Krieg, D. B., & Shaligram, C. (2000). Mathematics, vocabulary, and reading development in Chinese American and European American children over the primary school years. *Journal of Educational Psychology, 92,* 745-760.

Hustedt, J. T. (2015). The role of previous mother-child scaffolding in Head Start children's structuring of problem-solving tasks with a peer. *Journal of Research in Childhood Education, 29,* 287-304.

Hwang, B. J. (2007). Multicultural parental involvement: A case study of Korean immigrant parental involvement in their children's schooling. Retrieved from: https://pdfs.semanticscholar.org/bdb4/1c0cbd472bb3516ea301370d98c9a433779d.pdf

Johnston, C., Park, J. L., & Miller, N. V. (2018). Parental cognitions: Relations to parenting and child behavior. In M. R. Sanders, & A. Morawska (Eds.) *Handbook of parenting and child development across the lifespan* (pp. 395-414). New York, NY: Springer.

Jwa, S., & Frost, J. L. (2003). Contextual differences in Korean mother-child interactions: A study of scaffolding behaviors. *Play and Culture Studies, 5,* 299-322.

Kagitcibasi, C. (2007). *Families, self and human development across cultures: Theory and applications.* Mahwah, NJ: Erlbaum.

Keller, H., Abels, M., Borke, J., Lamm, B., Su, Y., Wang, Y., & Lo, W. (2007). Socialization environments of Chinese and Euro-American middle-class babies: Parenting behaviors, verbal discourses and ethnotheories. *International Journal of Behavioral Development*, *31*, 210-217.

Kermani, H., & Brenner, M. E. (2000). Maternal scaffolding in the child's zone of proximal development across tasks: Cross-cultural perspectives. *Journal of Research in Childhood Education*, *15*, 30-52.

Kiang, L., Huynh, V. W., Cheah, C. S., Wang, Y., & Yoshikawa, H. (2017). Moving beyond the model minority. *Asian American Journal of Psychology*, *8*, 1-6.

Kiang, L., Tseng, V., & Yip, T. (2016). Placing Asian American child development within historical context. *Child Development*, *87*, 995-1013.

Kim K. W. (2006). Hyo and parenting in Korea. In Kenneth, H. R., & Chung, O. B. (Eds), *Parenting beliefs, behaviors, and parent-child relations: A cross-cultural perspective* (pp. 207-222). New York, NY: Psychology Press.

Kim, A. Y., Lee, J. S., & Lee, W. (2015). Examining Korean American parent-child relationships through bilingual language use. *Journal of Family Communication*, *15*, 269-287.

Kim, E., Im, H., Nahm, E., & Hong, S. (2012). Korean American parents' reconstruction of immigrant parenting in the United States. *Journal of Cultural Diversity*, *19*, 124-132.

Kim, J. (2011). Korean immigrant mothers' perspectives: The meanings of a Korean heritage language school for their children's American early schooling experiences. *Early Childhood Education Journal*, *39*, 133-141.

Kim, J. E., & Anderson, J. (2008). Mother-child shared reading with print and digital texts. *Journal of Early Childhood Literacy*, *8*, 213-245.

Kim, K. S., Heo, J. Y., Lee, S. K., & Kim, C. J. (2007). The characteristics of parent-child dyadic discourses in an informal learning setting: Focusing on ZPD system. *Journal of the Korean Association for Science Education*, *27*, 832-847.

Kim, Y. A., An, S., Kim, H. C. L., & Kim, J. (2018). Meaning of parental involvement among Korean immigrant parents: A mixed-methods approach. *The Journal of Educational Research*, *111*, 127-138.

Koo, T. K., & Li, M. Y. (2016). A guideline of selecting and reporting intraclass correlation coefficients for reliability research. *Journal of Chiropractic Medicine*, *15*, 155-163.

Kwak, K. (2003). Adolescents and their parents: A review of intergenerational family relations for immigrant and non-immigrant families. *Human Development*, *46*, 115-136.

Kwon, K. Y., Suh, Y., Bang, Y., Jung, J., & Moon, S. (2010). The note of discord: Examining educational perspectives between teachers and Korean parents in the U. S. *Teaching and Teacher Education*, *26*, 497-506.

Lee, B., Keown, L. J., & Brown, G. T. L. (2018). Relationships between parenting practices and perceptions of child behaviour among Korean immigrant mothers and fathers. *International Journal of Psychology*, *53*, 402-410.

Lee, J., & Zhou, M. (2015). *The Asian American Achievement Paradox*. New York, NY: Russell Sage Foundation.

Lee, T. (1996). *Unraveling the "model-minority" stereotype: Listening to Asian-American youth.* New York: Teachers College Press.

Li, J. (2002). A cultural model of learning: Chinese ''heart and mind for wanting to learn.'' *Journal of Cross-Cultural Psychology*, *33*, 248-269.

Li, J. (2004). Learning as a task and a virtue: U.S. and Chinese preschoolers explain learning. *Developmental Psychology*, *40*, 595-605.

Li, J. (2005). Mind or virtue. *Current Directions in Psychological Science*, *14*, 190-194.

Li, J., Fung, H., Bakeman, R., Rae, K., & Wei, W. (2014). How European American and Taiwanese Mothers talk to their children about learning. *Child Development*, *85*, 1206-1221.

Luo, R., Tamis-LeMonda, C. S., & Song, L. (2013). Chinese parents' goals and practices in early childhood. *Early Childhood Research Quarterly*, *28*, 843-857.

Maccoby, E.E., & Martin, J.A. (1983). Socialization within the context of the family: Parent– child interaction. In P.H. Mussen & E.M. Hetherington (Eds.), *Handbook of child psychology* (4th ed., Vol. 4, pp. 1–101). New York, NY: Wiley.

Mast, V. A. (2002). *Maternal problem-solving behaviors and their impact on collaboration in preschool dyads*. University at Albany, New York: Unpublished doctoral dissertation.

McCarty, M. E., Clifton, R. K., & Collard, R. R. (1999). Problem solving in infancy: The emergence of an action plan. *Developmental Psychology*, *35*, 1091-1101.

McColgan, K. L., & McCormack, T. (2008). Searching and planning: Young children's reasoning about past and future event sequences. *Child Development, 79,* 1477-1497.

McCormack, T., & Atance, C. M. (2011). Planning in young children: A review and synthesis. *Developmental Review, 31,* 1-31.

Miller, P. H. (2011). *Theories of developmental psychology* (5th ed.) New York: Worth Publishers.

Miller, P. J., Wang, S., Sandel, T., & Cho, G. E. (2002). Self-esteem as folk theory: A comparison of European American and Taiwanese Mothers' beliefs. *Parenting: Science and Practice, 2,* 209-239.

Mulvaney, M. K., McCartney, K., Bub, K. L., & Marshall, N. L. (2006). Determinants of dyadic scaffolding and cognitive outcomes in first graders. *Parenting: Science and Practice, 6,* 297-320.

Muthén, L. K., & Muthén, B. O. (2010). *Mplus user's guide* (6th ed.). Los Angeles, CA: Muthén & Muthén.

Ng, F. F. Y., Tamis-LeMonda, C. S., Godfrey, E. B., Hunter, C. J., & Yoshikawa, H. (2012). Dynamics of mothers' goals for children in ethnically diverse populations across the first three years of life. *Social Development, 21,* 821-848.

Ng, F. F.-Y., Pomerantz, E. M., & Lam, S. (2007). European American and Chinese parents' responses to children's success and failure: Implications for children's responses. *Developmental Psychology, 43,* 1239-1255.

Ngo, B., & Lee, S. J. (2007). Complicating the image of model minority success: A review of Southeast Asian American education. *Review of Educational Research, 77,* 415-453.

Nopper, T.K. (2008) *Beyond the bootstrap: How Korean banks and US government institutions contribute to Korean immigrant entrepreneurship in the United States.* Temple University, Philadelphia: Unpublished doctoral dissertation.

Padmawidjaja, I. A., & Chao, R. K. (2010). Parental beliefs and their relation to the parental practices of immigrant Chinese Americans and European Americans. In S. T. Rusell, L. J. Crokett, & R. K. Chao (Eds.), *Asian American parenting and parent-adolescent relationships* (pp. 37–60). New York, NY: Springer.

Park, H., Coello, J. A., & Lau, A. S. (2014). Child socialization goals in East Asian versus Western nations from 1989 to 2010: Evidence for social change in parenting. *Parenting, 14,* 69-91.

Park, J. H., & Kwon, Y. I. (2009). Parental goals and parenting practices of upper-middle-class Korean mothers with preschool children. *Journal of Early Childhood Research, 7*, 58-75.

Park, S. Y., & Cheah, C. (2005). Korean mothers' proactive socialisation beliefs regarding preschoolers' social skills. *International Journal of Behavioral Development, 29*, 24–34.

Park, Y. S., & Yoo, A. J. (2005). The relationship between 3-and 5-year-old children's private speech and their mothers' scaffolding. *Korean Journal of Human Ecology, 14*, 59-68.

Parmar, P., Harkness, S., & Super, C. M. (2004). Asian and Euro-American parents' ethnotheories of play and learning: Effects on preschool children's home routines and school behaviour. *International Journal of Behavioral Development, 28*, 97-104.

Pea, R., & Hawkins, J. (1987). Children's planning processes in a chore- scheduling task. In S. L. Friedman, E. K. Scholnick, & R. R. Cocking (Eds.), *Blueprints for thinking: The role of planning in psychological development* (pp. 273-302). Cambridge: Cambridge University Press.

Perez, S. M., & Gauvain, M. (2005). The role of child emotionality in child behavior and maternal instruction on planning tasks. *Social Development, 14*, 250-272.

Perez, S. M., & Gauvain, M. (2009). Mother-child planning, child emotional functioning, and children's transition to first grade. *Child Development, 80*, 776-791.

Petrogiannis, K., Papadopoulou, K., & Papoudi, D. (2013). Measuring parental beliefs about the developmental significance of preschool children's daily activities: The children's daily activities-parental beliefs scale. *Journal of Educational and Developmental Psychology, 3*, 40-55.

Pew Research Center (2015). *Demographic characteristics of U.S. Korean population, 2015*. Retrieved from http://www.pewsocialtrends.org/fact-sheet/asian-americans-koreans-in-the-u-s/

Portes, A., & Rumbaut, R. G. (2014). *Immigrant America: A portrait*. Los Angeles: University of California Press.

Prabhakar, J., & Hudson, J. A. (2014). The development of future thinking: Young children's ability to construct event sequences to achieve future goals. *Journal of Experimental Child Psychology, 127*, 95-109.

Radziszewska, B., & Rogoff, B. (1991). Children's guided participation in planning imaginary errands with skilled adult or peer partners. *Developmental Psychology, 27,* 381-389.

Raeff, C., Greenfield, P. M., & Quiroz, B. (2000). Conceptualizing interpersonal relationships in the cultural contexts of individualism and collectivism. *New Directions for Child and Adolescent Development, 87,* 59-74

Ramakrishnan, K., & Ahmad, F. Z. (2014, April 23). State of Asian Americans and Pacific Islanders' Series: Educational Attainment. *Center for American Progress.* Retrieved from: https://www.americanprogress.org/issues/race/reports/2014/04/23/87520/state-of-asian-americans-and-pacific-islanders-series/

Rao, N., McHale, J. P., & Pearson, E. (2003). Links between socialization goals and child-rearing practices in Chinese and Indian mothers. *Infant and Child Development: An International Journal of Research and Practice, 12,* 475-492.

Rogoff, B., Paradise, R., Arauz, R. M., Correa-Chávez, M., & Angelillo, C. (2003). Firsthand learning through intent participation. *Annual Review of Psychology, 54,* 175-203.

Rubin, K.H. & Chung, O. B. (Eds.) (2006). *Parental beliefs, parenting, and child development in cross-cultural perspective.* London, UK: Psychology Press.

Russell, S. T., Crockett, L. J., & Chao, R. K. (2010). Introduction: Asian American parenting and parent-adolescent relationships. In S. T. Russell, L. J. Crockett, & R. K. Chao (Eds.) *Asian American parenting and parent-adolescent relationships* (pp. 1-15). New York, NY: Springer.

Salehuddin, K., & Winskel, H. (2016). Developmental milestone expectations, parenting styles, and self-construal of caregivers from Malay, Chinese and Indian Backgrounds in Malaysia. *Journal of Comparative Family Studies, 47,* 147-167.

Savage, S. L., & Gauvain, M. (1998). Parental beliefs and children's everyday planning in European-American and Latino families. *Journal of Applied Developmental Psychology, 19,* 319-340.

Scholnick, E. K., Friedman, S. L., & Wallner-Allen, K. E. (1997). What do they really measure" A comparative analysis of planning tasks. In S. L. Friedman & E. K. Scholnick (Eds.) *The developmental psychology of planning: Why, how, and when do we plan?* (pp. 127-156). Mahwah, NJ: Erlbaum.

Schwarz, B., Schäfermeier, E., & Trommsdorff, G. (2005). Relations between value orientation, child-rearing goals, and parenting: A comparison of German and South

Korean mothers. In W. Friedlmeier, P. Chakkarath, & B. Schwartz (Eds.), *Culture and human development: The importance of cross-cultural research for the social science*s (pp. 203–230). Hove, UK: Psychology Press/Erlbaum.

Seo, Y. J., Cheah, C. S., & Hart, C. H. (2017). Korean immigrant mothers' praise and encouragement, acculturation, and their children's socioemotional and behavioral difficulties. *Parenting, 17*, 143-155.

Shen, J. J., Cheah, C. S., & Leung, C. Y. (2019). The long-term socialization goals of Chinese and Korean immigrant mothers in the United States. *Journal of Child and Family Studies, 29*, 1771-1779.

Shin, H. (2009). *Parental involvement of Asian American immigrant mothers: Investigating social capital, English proficiency, length of US residency, and social class.* University of Maryland, College Park: Unpublished doctoral dissertation.

Sigel, I. E. & McGillicuddy-DeLisi, A. V. (2002). Parent beliefs are cognitions: The dynamic belief systems model. In M. H. Bornstein (Ed.), *Handbook of parenting* (Vol. 3, pp. 485-508). Mahwah, NJ: Erlbaum.

Sorkhabi, N. (2005). Applicability of Baumrind's parent typology to collective cultures: Analysis of cultural explanations of parent socialization effects. *International Journal of Behavioral Development, 29*, 552-563.

Spagnola, M., & Fiese, B. H. (2007). Family routines and rituals: A context for development in the lives of young children. *Infants & Young Children, 20*, 284-299.

Stevenson, H. W., Lee, S., Chen, C., Stigler, J. W., Hsu, C., Kitamura, S., & Hatano, G. (1990). Contexts of achievement: A study of American, Chinese, and Japanese children. *Monographs of the Society for Research in Child Development, 55*, 1-119.

Stright, A. D., Herr, M. Y., & Neitzel, C. (2009). Maternal scaffolding of children's problem solving and children's adjustment in kindergarten: Hmong families in the United States. *Journal of Educational Psychology, 101*, 207-218.

Suizzo, M. A. (2007). Parents' goals and values for children: Dimensions of independence and interdependence across four US ethnic groups. *Journal of Cross-Cultural Psychology, 38*, 506-530.

Suizzo, M. A., Chen, W. C., Cheng, C. C., Liang, A. S., Contreras, H., Zanger, D., & Robinson, C. (2008). Parental beliefs about young children's socialization across US ethnic groups: Coexistence of independence and interdependence. *Early Child Development and Care, 178*, 467-486.

Sun, J., & Rao, N. (2012). Scaffolding interactions with preschool children: Comparisons between Chinese mothers and teachers across different tasks. *Merrill-Palmer Quarterly, 58*, 110-140.

Super, C. M., & Harkness, S. (1986). The developmental niche: A conceptualization at the interface of child and culture. *International Journal of Behavioral Development, 9*, 545–569.

Suzuki, B. (2002). Revisiting the model minority stereotype: Implications for student affairs practice and higher education. In M. McEwan, C. Kodama, A. Alvarez, S. Lee, & C. Liang (Eds.), *Working with Asian American college students: New directions for student services* (Vol. 97, pp. 21–32). San Francisco: Jossey-Bass.

Sy, S. R. (2006). Rethinking parent involvement during the transition to first grade: A focus on Asian American families. *School Community Journal, 16*, 107-126.

Systema, S., Kelley, M., & Wymer, J. (2001). Development and initial validation of the Child Routines Inventory. *Journal of Psychopathology and Behavioural Assessment, 23*, 241-251.

Tamis-Lemonda, C. S., Sze, I. N., Ng, F. F., Kahana-Kalman, R., & Yoshikawa (2013). Maternal teaching during play with four-year-olds: Variation by ethnicity and family resources, *Merrill-Palmer Quarterly, 59*, 361-398.

Tamis-LeMonda, C. S., Way, N., Hughes, D., Yoshikawa, H., Kalman, R. K., & Niwa, E. Y. (2008). Parents' goals for children: The dynamic coexistence of individualism and collectivism in cultures and individuals. *Social Development, 17*, 183-209.

Tudge, J., Hogan, D., Lee, S., Meltsas, M., Tammeveski, P., Kulakova, N., Snezhkova, I., & Putnam, S. (1999). Cultural heterogeneity: Parental values and beliefs and their preschoolers' activities in the United States, South Korea, Russia, and Estonia. In A. Göncü (Ed.), *Children's engagement in the world* (pp. 62-96). New York: Cambridge University Press.

U.S. Census Bureau, Population Division (2015). *Annual Estimates of the Resident Population by Sex, Race Alone or in Combination, and Hispanic Origin for the United States, States, and Counties: April 1, 2010 to July 1, 2015*. Retrieved from https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk

Vinden, P. G. (2001). Parenting attitudes and children's understanding of mind: A comparison of Korean American and Anglo-American families. *Cognitive Development, 16*, 793-809.

Vygotsky, L. (1978). *Mind in society: The development of higher mental process*. Cambridge, MA: Harvard University Press.

Wang, Q. (2007). "Remember when you got the big, big bulldozer?" Mother–child reminiscing over time and across cultures. *Social Cognition*, *25*, 455-471.

Wang, S., & Tamis-Lemonda, C. S. (2003). Do child-rearing values in Taiwan and the United States reflect cultural values of collectivism and individualism? *Journal of Cross-Cultural Psychology, 34*, 629-642

Way, N., Okazaki, S., Zhao, J., Kim, J. J., Chen, X., Yoshikawa, H., ... & Deng, H. (2013). Social and emotional parenting: Mothering in a changing Chinese society. *Asian American Journal of Psychology*, *4*, 61-70.

Welsh, M. C. (1991). Rule-guided behavior and self-monitoring on the Tower of Hanoi disk-transfer task. *Cognitive Development*, *6*, 59–76.

Willatts, P. (1990). Development of problem-solving strategies in infancy. In D. F. Bjorklund (Ed.), *Children's strategies*. Hillsdale, NJ: Erlbaum.

Wood, D. J., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry*, *17*, 89–100.

Wu, E. D. (2014). *The Color of success: Asian Americans and the origins of the model minorit*y. Princeton, NJ: Princeton University Press

Wu, P., Robinson, C. C., Yang, C., Hart, C. H., Olsen, S. F., Porter, C. L., . . . Wu, X. (2002). Similarities and differences in mothers' parenting of preschoolers in China and the United States. *International Journal of Behavioral Development*, *26*, 481-491.

Zhou, M., & Kim, S. (2006). Community forces, social capital, and educational achievement: The case of supplementary education in the Chinese and Korean immigrant communities. *Harvard Educational Review*, *76*, 1-29.

Ziehm, J., Trommsdorff, G., Heikamp, T., & Park, S. Y. (2013). German and Korean mothers' sensitivity and related parenting beliefs. *Frontiers in Psychology*, *4*, 1-9.

Appendix A. Recruitment Flyers

Attention Parents:

If you have a child at ages 5 and 8, consider taking part in a study on children's learning!

C D L
Cognitive Development Laboratory

Families receive **$15** and a small toy for participating!

To participate:

- Child must be either 5 or 8 years of age.
- Mother must self-identify as Korean or Korean-American.
- Mother must have at least one parent who had been born in South Korea.

During the participation:

- Families participate in one-time session for about one hour.
- Mothers fill out surveys.
- Children do activities alone *and* with the mother.

To learn more:
Call: (951) 827-4032; Text: (951) 291-7088
Email: cogdevlabucr@gmail.com

Primary Investigator: Yeram Cheong, M.A., Graduate Student
Dr. Mary Gauvain ● Cognitive Development Lab ● Department of Psychology
University of California, Riverside ● 900 University Ave, Riverside, CA 92521

Attention Parents:

5 살 또는 8 살 자녀를 둔 어머님,
유아학습에 대한 연구에 참여 하시기를
부탁드립니다!

C D L
Cognitive Development Laboratory

참여한 가정은 **$15** 과 작은 장난감을 받습니다 !

참여 대상:

- 자녀가 5 살 또는 8 살 이어야 함.
- 어머님께서 한국인 (Korean) 또는 재미교포 (Korean American) 이어야 함.
- 어머님의 부모님 중 한분이 대한민국/한국에서 태어나셨어야 함.

참여 시:

- 1 회 참여이며 방문시 약 1 시간 정도 소요됨.
- 어머님께서 설문지를 답하실 것임.
- 자녀가 혼자서 그리고 어머님과 같이 과제를 함.

문의사항:
Call: (951) 827-4032; Text: (951) 291-7088
Email: cogdevlabucr@gmail.com

주 연구자: 정예람, M.A., 박사과정 대학원 생
Dr. Mary Gauvain ● Cognitive Development Lab ● Department of Psychology
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Appendix B. Instruction Prompts

A. Child Only Pretest Chore-Planning Task

Instructions:

This is a map of a classroom. Today I'd like you to do an activity.
In this activity, pretend it is the afternoon, just before school is over for the day.
Your classmates have already gone home, and your job is to make a plan to do the classroom chores I am going to tell you about. OK?
Now, these are the chores you need to do:

- You have to water the **PLANTS** [point] with the **WATERING CAN** by the sink [point].
- You have to erase the two **BLACKBOARDS** [point] in the room.
- There are a few things to do at the **ART TABLE** [point]:
    - The **PAINT BRUSHES** [point] there need to be put in the **JAR** [point] next to the sink.
    - The **TRASHPAPER** [point] on the art table should be put in the **TRASHCAN** by the door [point].
- Feed the **HAMSTER** [point]. The **FOOD** [point] is next to his cage.

These are a lot of chores to do here.
Take your time in thinking about which chore to do first, second, and so on [point to child's list of chores].
You can do them in any order you want. Remember, some ways of doing the chores are better than others. For example, one way of planning how to do the chores may make you have to walk farther to do them.
You want to find the shortest way of doing the chores. The shortest way is the best way. OK?

[Demonstrate the contrast of shorter vs. longer spatial paths]
For example, say that a chore was to push in the chairs around this table. The shortest path to the table is to walk straight to it, like this [walk straight toward the table].
A longer path to the table could look like this. [walk around the child and to the table].
Remember, the shortest way is best.

Now you can practice by trying out different plans until you are ready to show me the best plan you can think of [hand in the map copies].

It is very important that you think out loud all the time you work on this activity.
Tell me everything you think about as you are working on this, like if you are making decisions about what to do in your plan.
Remember, it is good that all of the chores are done.

After you finish the best plan, write what order you would do the tasks first, second, and so on, on your chore list by putting number in the blank spaces next to each task description. Also, when

you draw your best plan on the map, draw a line from one place to the next place you would go. You can start from the door.
Do you have any questions before you start?

B. Mother-Child Interaction Session

Instructions:
Here is a MAP of a town that we would like the two of you to look at. We would like you to use this map and this list of "Things To Do" to plan a trip around town.

We would like for the two of you to work together to plan the shortest route that uses each street the least number of times.
We would also like you to talk out loud to each other about what you are doing while you are working. OK?

You can practice as many times as you like before you decide on the BEST (shortest) route to take. After you have decided on the best route, we would like you to number the tasks in the order you would do them in the spaces provided on this list. You can start from home.

You can pretend you have all day Saturday to do these errands, but you need to do them all in one trip. OK?

After you work together to plan the shortest route for completing eight errands, your mother, Ms. X, will be asked to leave the room while you [child's name] work on a list on your own.
Does anyone have any questions?

C. Child's Solitary Post-test Session

Instructions:
Now, I have another activity I'd like you to do.
This is a map of a house. Pretend it is the afternoon just after school is over.
Your parents want you to help out around the house, and your job is to make a plan to do the chores I will tell you about. OK?
Here are the chores your parents would like you do:

- You have to make the **BED** [point] in your room [point].

- You have to turn off both **LAMPS** [point] in your room [point] and your parents' room [point].
- Please feed the cat. The **BOWL** [point] is in the kitchen and the **FOOD** [point] is in the refrigerator.
- You have to dust the **TELEVISION** [point] with the **FEATHER DDUSTER** [point] on the table.
- You must pick up your dirty **SOCKS** [point] and put them in the **LAUNDRY BASKET** [point].
- You have to gather the **SILVERWARE AND PLATES** [point] sitting on the kitchen table and put them in the **SINK** [point].

There are a lot of chores to do here.
Take your time in thinking about which chore to do first, second, and so on [point to the child's list of chores]. You can do them in any order you want. Remember, some ways of doing the chores are better than others. For example, one way of planning how to do the chores may make you have to walk farther to do them.

Just like before, you want to find the shortest way of doing the chores. The shortest way is the best way. OK?

Now you can practice by trying out different plans until you are ready to show me the best plan you can think of.

It is really important that you think out loud during the whole time you work on this activity. Tell me everything you think about while you are working on this, like if you are making decisions about what to do in your plan. And remember, you need to do ALL of the chores.

After you find the best plan, write what order you would do the tasks first, second, and so on, on your list by putting numbers in the blank spaces next to each task description. Also, when you draw your best plan on the map, draw a line from one place to the next place you would go.
You can start from the door.

Do you have any questions before you start?

Appendix C. Demographic Questionnaires

A. English Version

FAMILY BACKGROUND INFORMATION

Instruction: Please provide responses that apply to you and your child participating in the study.

YOUR CHILD:

1. What is your child's name? _____
2. What is your child's gender? male ___ female ___
3. When is your child's birthdate? _____ /_____ /_____ (Month / Day / Year)
4. Is your child in school now (2017-2018 year)? Yes ____ No ____
   If YES, what grade is your child in? _____
5. Will your child attend school in the upcoming school year (2018-2019)? Yes __ No__
   If YES, what grade will your child be in? _____
6. What is a zip-code where child lives? _____
7. What is child's ethnicity? _____
8. Was your child born in the United States? Yes _____ No _____
   8a. If your child was not born in the U.S., how old was your child when s/he first moved to the U.S.? _____
   8b. If your child was not born in the U.S., in what country was your child born?__

YOUR FAMILY INFORMATION: MOTHER

9. What is your name? _____
10. What is your relationship to child?
_____Mother ____Father ____Other (please specify) _____
11. What is your age? _____
12. What is your occupation? _____
13. What is your marital status?
    Married ____ Single ____ Separated ____ Divorced ____ Widowed____
14. What is your employment status?
    Fulltime ____ Not employed ____ Decline to answer ____
    Part-time ____ Student ____ Other_____
    Retired ____ Homemaker ____
15. What is the highest education you completed?
    8^{th} grade ____
    Some High School ____

High School ____
Some College ____
Associates Degree ____
Bachelor's Degree ____
Master's Degree ____
Doctoral or Professional ____
Other_____

16. What is your ethnicity? _____

17. Were you born in the United States? Yes_____ No_____

17a. If you were not born in the U.S., how old were you when you first moved to the U.S.? _____

17b. If you were not born in the U.S., in what country were you born? _____

YOUR FAMILY INFORMATION: FATHER

18. What is the father's age? _____
19. What is the father's occupation? _____
20. What is the father's employment status?

Fulltime ____	Not employed ____	Decline to answer ____
Part-time ____	Student ____	Other_____
Retired ____	Homemaker ____	

21. What is the father's highest education level?

8th grade ____
Some High School
High School ____
Some College ____
Associates Degree ____
Bachelor's Degree ____
Master's Degree ____
Doctoral or Professional ____
Other_____

22. What is the father's ethnicity? _____
23. Was the father born in the United States? Yes_____ No_____

23a. If the father was not born in the U.S., how old was he when he first moved to the U.S.? _____

23b. If the father was not born in the U.S., in what country was he born?_____

YOUR FAMILY INFORMATION: HOUSEHOLD

24. Household (in which the child lives) yearly income, before taxes:

Below $30, 000 ____

$30,000 - $50,000____
$50,000-$100,000____
$100,000 - $150,000 ____
Above $150,000 ____

B. Korean Version

가족 사항 설문지

이 연구에 참여하는 본인과 자녀의 해당하는 답을 작성해 주십시오.

자녀:

1. 자녀의 이름은? _____
2. 자녀의 성별은? 남 ___ 여 ___
3. 자녀의 생일은? _____ /_____ /_____ (월 / 일 / 년도)
4. 자녀가 현재 학교에 재학 중 입니까 (2017-2018 학기)? 예 ____ 아니오 ____
   '예'일 경우, 자녀가 몇 학년입니까? _____
5. 자녀가 다음 학기에 학교를 다닐 것 입니까 (2018-2019)? 예 ____ 아니오 ____
   '예'일 경우, 자녀가 몇 학년으로 들어 갑니까? _____
6. 자녀가 거주하는 우편번호 (zip-code) 는? _____
7. 자녀의 민족성은? _____
8. 자녀가 미국에서 태어 났습니까? 예 _____ 아니오 _____
   8a. 만약 자녀가 미국에서 태어 나지 않았다면, 미국으로 처음 왔을 때 자녀의 나이는? _____
   8b. 만약 자녀가 미국에서 태어 나지 않았다면, 자녀가 태어난 국가는? _____

가정 정보: 유아의 어머니

9. 귀하의 이름은? _____
10. 유아와의 관계는?
    ___어머니 ___아버지 ___기타 (자세한 관계에 대해 명시해 주세요:)_____
11. 귀하의 나이는? _____
12. 귀하의 직업은? _____
13. 귀하의 혼인 여부는?
    기혼 ____ 싱글 ____ 별거중 ____ 이혼 ____ 과부 ____
14. 귀하의 근무상태는?
    풀타임____ 무직 ____ 응답 거부____
    임시직 ____ 학생 ____ 기타_____
    은퇴 ____ 주부 ____
15. 귀하의 최종학력은?
    8 학년 또는 중 2 ____

고등학교 일부 ____
고등학교 졸업____
대학교 일부____
준학사 학위____
학사 학위____
석사 학위_____
박사 학위 또는 전문학위 ____
기타_____

16. 귀하의 민족성은? _____
17. 귀하께서는 미국에서 태어났습니까? 예_____ 아니오_____
    17a. 미국에서 태어나지 않았다면, 처음 미국에 왔을 때에 나이는? _____
    17b. 미국에서 태어나지 않았다면, 태어난 국가는? _____

가정 정보: 유아의 아버지

18. 아버지의 나이는? _____
19. 아버지의 직업은? _____
20. 아버지의 근무상태는?

풀타임 ____	무직 ____	응답 거부 ____
임시직 ____	학생 ____	기타_____
은퇴 ____	주부 ____	

21. 아버지의 최종학력은?
    8 학년 또는 중 2 ____
    고등학교 일부 ____
    고등학교 졸업____
    대학교 일부____
    준학사 학위____
    학사 학위____
    석사 학위_____
    박사 학위 또는 전문학위 ____
    기타_____
22. 아버지의 민족성은? _____
23. 아버지께서 미국에서 태어나셨습니까? 예_____ 아니오_____
    23a. 아버지께서 미국에서 태어나지 않았을 경우, 처음 미국으로 왔을 때에 나이는? _____
    23b. 아버지께서 미국에서 태어나지 않았을 경우, 태어난 국가는? _____

가정 정보: 가정

24. (유아가 살고있는) 세금을 빼기 전 가정의 연간 소득은: $_____
    $30,000 이하____

$30,000 - $50,000____
$50,000 - $100,000____
$100,000 - $150,000 ____
$150,000 이상 ___

Appendix D. Parental Beliefs about the Average Child Questionnaire

(PBAAC;Savage & Gauvain, 1998)

A. English Version

At what age do you think <u>most children</u> are able to do the following?

Activity	*Age*
1. Play outside in the neighborhood with friends	
2. Walk to a neighborhood store alone during the daytime hours	
3. Have regular chores around the house	
4. Be responsible for keeping his/her own room clean	
5. Clean up after meals or snacks [a]	
6. Pick up dirty clothes after changing clothes [a]	
7. Get a regular allowance	
8. Walk or ride bike to school	
9. Complete homework independently [a]	
10. Baby-sit for a younger siblings or child	
11. Get a paid job outside the home	
12. Stay home alone while a parent goes on an errand	
13. Plan his/her own birthday party	
14. Plan for family activities or events [a]	
15. Decide to take music or dance lessons	
16. Decide to be on a sports team	
17. Decide to participate in a club or organization (e.g., scouts)	
18. Decide what chores he/she will do around the home	
19. Decide what to wear to school	
20. Decide what to eat for breakfast and lunch	
21. Decide how to spend his/her allowance	
22. Decide what to watch on TV	
23. Decide what to do after school	
24. Decide what to do in the evening before bedtime	
25. Decide when to go to bed	

[a] Four items were added from items about children's routines (*Child Routines Questionnaires*; Sytsma et al., 2001) in order to cover child's everyday behaviors relative to the task that were not covered in the current measure.

B. Korean Version

몇 살때 <u>대부분의 아이들이</u> 아래의 활동들을 할 수 있다고 생각하십니까?

활동	*나이*
1. 나가서 친구들과 동네에서 놀기	
2. 낮 시간에 혼자서 동네 가게로 걸어가기	
3. 규칙적인 집안일 맡기	
4. 자신의 방을 깨끗하게 유지하는 책임감 갖기	
5. 밥 또는 간식먹은 후에 치우기	
6. 옷 갈아입은 후에 더러운 옷 치우기	
7. 일정한 용돈 받기	
8. 자전거를 타거나 걸어서 등교하기	
9. 혼자서 숙제 끝내기	
10. 동생 또는 어린아이 돌봐주기	
11. 집 밖에서 아르바이트 하기	
12. 부모님이 외출할 동안 집에서 혼자 있기	
13. 자신의 생일파티 계획하기	
14. 가족활동이나 이벤트 계획하기	
15. 음악이나 댄스 레슨을 들을지 결정하기	
16. 스포츠 팀에 들어갈지 결정하기	
17. 학교 동아리 또는 단체에 참여할지 결정하기 (예. 스카우트)	
18. 어떤 집안일을 할 지 결정하기	
19. 학교에 무엇을 입고갈 지 결정하기	
20. 아침과 점심으로 무엇을 먹을지 결정하기	
21. 용돈을 어떻게 쓸 것인지 결정하기	
22. 티비에서 무엇을 볼 지 결정하기	
23. 방과 후 무엇을 할 지 결정하기	
24. 취침 전 저녁시간에 무엇을 할 지 결정하기	
25. 언제 잠자리에 들지 결정하기	

Appendix E. Parent's Report of Own Child's Participation Questionnaire

(PROCP; Savage & Gauvain, 1998)

A. English Version

At what age was <u>your child</u> (or will your child be) able to do the following?

Activity	*Age*
1. Play outside in the neighborhood with friends	
2. Walk to a neighborhood store alone during the daytime hours	
3. Have regular chores around the house	
4. Be responsible for keeping his/her own room clean	
5. Clean up after meals or snacks [a]	
6. Pick up dirty clothes after changing clothes [a]	
7. Get a regular allowance	
8. Walk or ride bike to school	
9. Complete homework independently [a]	
10. Baby-sit for a younger siblings or child	
11. Get a paid job outside the home	
12. Stay home alone while a parent goes on an errand	
13. Plan his/her own birthday party	
14. Plan for family activities or events [a]	
15. Decide to take music or dance lessons	
16. Decide to be on a sports team	
17. Decide to participate in a club or organization (e.g., scouts)	
18. Decide what chores he/she will do around the home	
19. Decide what to wear to school	
20. Decide what to eat for breakfast and lunch	
21. Decide how to spend his/her allowance	
22. Decide what to watch on TV	
23. Decide what to do after school	
24. Decide what to do in the evening before bedtime	
25. Decide when to go to bed	

[a] Four items were added from items about children's routines (*Child Routines Questionnaires*; Sytsma et al., 2001) in order to cover child's everyday behaviors relative to the task that were not covered in the current measure.

B. Korean Version

몇 살때 귀하의 자녀가 아래의 활동들을 할 수 있었습니까? (또는 할 수 있을 거라고 생각하십니까?)

활동	*나이*
1. 나가서 친구들과 동네에서 놀기	
2. 낮 시간에 혼자서 동네 가게로 걸어가기	
3. 규칙적인 집안일 맡기	
4. 자신의 방을 깨끗하게 유지하는 책임감 갖기	
5. 밥 또는 간식먹은 후에 치우기	
6. 옷 갈아입은 후에 더러운 옷 치우기	
7. 일정한 용돈 받기	
8. 자전거를 타거나 걸어서 등교하기	
9. 혼자서 숙제 끝내기	
10. 동생 또는 어린아이 돌봐주기	
11. 집 밖에서 아르바이트 하기	
12. 부모님이 외출할 동안 집에서 혼자 있기	
13. 자신의 생일파티 계획하기	
14. 가족활동이나 이벤트 계획하기	
15. 음악이나 댄스 레슨을 들을지 결정하기	
16. 스포츠 팀에 들어갈지 결정하기	
17. 학교 동아리 또는 단체에 참여할지 결정하기 (예. 스카우트)	
18. 어떤 집안일을 할 지 결정하기	
19. 학교에 무엇을 입고갈 지 결정하기	
20. 아침과 점심으로 무엇을 먹을지 결정하기	
21. 용돈을 어떻게 쓸 것인지 결정하기	
22. 티비에서 무엇을 볼 지 결정하기	
23. 방과 후 무엇을 할 지 결정하기	
24. 취침 전 저녁시간에 무엇을 할 지 결정하기	
25. 언제 잠자리에 들지 결정하기	

Appendix F. Guan Questionnaire

(Chao, 1994)

A. English Version

Instruction: Indicate how much you agree with the following view below.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1. Parents must begin training children as soon as they are ready.	1	2	3	4	5
2. For children to learn, parents should continuously monitor and correct their behavior.	1	2	3	4	5
3. Parents must train children to work very hard and be disciplined.	1	2	3	4	5
4. A parent's most important concern involves taking care of the children.	1	2	3	4	5
5. Children should be in the constant care of their mothers or other family members.	1	2	3	4	5
6. Parents need to do everything for the child's education and make many sacrifices.	1	2	3	4	5

B. Korean Version

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1. 아이들이 잘 되게 하기 위해서는 부모가 가르치고 방향을 잡아줘야만 한다.	1	2	3	4	5
2. 아이들이 배울 수 있도록, 부모는 끊입없이 아이들의 행동을 살피고 고쳐줘야 한다.	1	2	3	4	5
3. 부모는 아이가 자기가 맡은 일을 열심히 하고 자신의 행동을 잘 절제할 수 있도록 가르쳐야 한다.	1	2	3	4	5
4. 부모에게 가장 중요한 관심사는 아이를 돌보는 것이다.	1	2	3	4	5
5. 아이들은 엄마 등 가족들의 끊임없는 보살핌을 받아야 한다.	1	2	3	4	5
6. 부모는 아이의 교육을 위해서는 최선을 다하고 많은 희생을 각오해야 한다.	1	2	3	4	5

Note. Translated measure was acquired through Choi et al. (2014).

Appendix G. Socialization Goals Questionnaire

A. English Version

Instructions: Now think of characteristics that you would like to foster in all your children. How much do you want your children to have the following characteristics or qualities?

a. Confucian Goals

	Not at all desired	Only slightly desired	Somewhat desired	Desired	Strongly desired
1. To respect their elders.	1	2	3	4	5
2. To always put their schoolwork/education first.	1	2	3	4	5
3. To be the top student. [a]	1	2	3	4	5
4. To honor the family and succeed for the family. [a]	1	2	3	4	5
5. To be obedient.	1	2	3	4	5
6. To put their family first.	1	2	3	4	5
7. To consider your wishes and expectations in their decision-making and behaviors.	1	2	3	4	5
8. To be very hard-working and diligent.	1	2	3	4	5
9. To be humble.	1	2	3	4	5
10. To always try to improve themselves through hard work and effort.	1	2	3	4	5
11. To do well in school for the family. [a]	1	2	3	4	5

12. To honor the family by doing well in school. [a]	1	2	3	4	5
13. To get all A's on his or her report card. [a]	1	2	3	4	5

Note. These thirteen items will be combined and mixed along with child-centered goals items during the study. They were divided for the purpose of presenting different types of goals.
[a]Five items that have previously been identified as capturing Confucian goals (Padmawidjaja & Chao, 2010).

b. Child-Centered Goals

	Not at all desired	Only slightly desired	Somewhat desired	Desired	Strongly desired
1. To be unique and their own individual.	1	2	3	4	5
2. To be self-expressive and verbal.	1	2	3	4	5
3. To be very explorative and adventurous.	1	2	3	4	5
4. To have a high self-esteem.	1	2	3	4	5
5. To be very sociable and get along with others.	1	2	3	4	5
6. To be very confident about their abilities.	1	2	3	4	5
7. To establish their own independence from their parents. [a]	1	2	3	4	5
8. To be able to speak up to you and other authority figures. [a]	1	2	3	4	5

9. To do what they think is right for themselves. [a]	1	2	3	4	5
10. To trust their own judgment. [a]	1	2	3	4	5
11. To spend a lot of time with friends.	1	2	3	4	5
12. To be strong-willed and independent. [a]	1	2	3	4	5
13. To think for themselves.	1	2	3	4	5

Note. These thirteen items will be combined and mixed along with Confucian goals items during the study. They were divided for the purpose of presenting different types of goals.

[a]Five items that have previously been identified as capturing child-centered goals (Padmawidjaja & Chao, 2010).

B. Korean Version

이제는 귀하의 모든 자녀들에게 길러주고 싶은 특성을 생각해 보십시요. 어느정도로 자녀가 다음에 적혀진 특성이나 자질을 가졌으면 합니까?

a. Confucian Goals

	전혀 안그랬으면 좋겠다	아주 조금 그랬으면 좋겠다	어느정도 그랬으면 좋겠다	그랬으면 좋겠다	매우 그랬으면 좋겠다
1. 웃어른을 공경하기.	1	2	3	4	5
2. 항상 학업/교육을 우선시 하기.	1	2	3	4	5
3. 우등생이 되기. [a]	1	2	3	4	5
4. 가문을 빛내고 가문을 위해 성공하기. [a]	1	2	3	4	5
5. 높은 자존감 갖기.	1	2	3	4	5
6. 가족을 우선시 하기.	1	2	3	4	5
7. 어떤 결정과 행동을 할때 부모의 바램과 기대를 고려하기.	1	2	3	4	5
8. 부지런히 일하고 성실하기.	1	2	3	4	5
9. 겸손하기.	1	2	3	4	5
10. 항상 근면과 노력함으로써 스스로를 발전시키려 하기.	1	2	3	4	5
11. 가족을 위해 학교에서 공부 잘 하기.. [a]	1	2	3	4	5
12. 공부 잘해서 가문을 빛내기. [a]	1	2	3	4	5
13. 성적표에 모두 A 학점 받기. [a]	1	2	3	4	5

b. Child-centered Goals

	Not at all desired	Only slightly desired	Somewhat desired	Desired	Strongly desired
1. 독특하고 각자의 개성있는 사람이 되기.	1	2	3	4	5
2. 자기 표현력이 있고 의사표현 하기.	1	2	3	4	5
3. 매우 탐구적이고 모험적이기.	1	2	3	4	5
4. 높은 자존감 갖기.	1	2	3	4	5
5. 사회성이 뛰어나고 사람들과 잘 어울리기.	1	2	3	4	5
6. 자신의 능력에 대한 자심감 갖기.	1	2	3	4	5
7. 부모에게서 독립하기. [a]	1	2	3	4	5
8. 부모와 권위있는 사람에게 자기주장 말할 수 있기. [a]	1	2	3	4	5
9. 자신들이 옳다고 생각하는 것을 하기. [a]	1	2	3	4	5
10. 자신들의 판단을 믿기. [a]	1	2	3	4	5
11. 친구들과 많은 시간을 보내기.	1	2	3	4	5
12. 의지가 강하고 독립적이기. [a]	1	2	3	4	5
13. 자기들 스스로 생각하기.	1	2	3	4	5

Appendix H. Freedom to Learn Questionnaire

(Vinden, 2001)

A. English Version

Instructions: Indicate how much you agree with the following statement below.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1. "It's okay if my child tries something and fails."	1	2	3	4	5
2. "I think you have to let a child take many chances and try new things as he grows up."	1	2	3	4	5
3. "It's okay if my child tries to do new things on his own."	1	2	3	4	5

Note. A subscale drawn from *Parenting Attitudes Inventory*

B. Korean Version

아래의 문장에 대해 어느정도 동의하는지 표기해주십시오.

	전혀 동의하지 않는다.	별로 동의하지 않는다.	동의하지 않거나 동의하지 않는다.	약간 동의한다.	매우 동의한다.
7."내 아이가 어떤 시도를 해보고 실패하는 것이면 괜찮다."	1	2	3	4	5
8."내 아이가 크면서 무엇이든 여럿 해보고 새로운 것을 시도해 보도록 해야 한다고 생각한다."	1	2	3	4	5
9. "내 아이가 혼자서 새로운 것을 시도해도 괜찮다."	1	2	3	4	5

Appendix I. Cultural Orientation Questionnaire

(Cote, Kwak, Putnick, Chung, & Bornstein, 2015) – For Korean American Mothers Only

A. English Version

Instructions: The statements below ask about your historical background as well as more recent behaviors which may be related to your cultural identity. For each statement, circle one number which best describes you.

	Not at all		Moderately		Extremely often or almost always
1. I speak Korean. [a]	1	2	3	4	5
2. I speak English. [b]	1	2	3	4	5
3. I enjoy speaking Korean. [a]	1	2	3	4	5
4. I associate with European Americans. [b]	1	2	3	4	5
5. I associate with Koreans and/or Korean Americans. [a]	1	2	3	4	5
6. I enjoy listening to Korean language music. [a]	1	2	3	4	5
7. I enjoy listening to English language music. [b]	1	2	3	4	5
8. I enjoy Korean language TV. [a]	1	2	3	4	5
9. I enjoy English language TV. [b]	1	2	3	4	5
10. I enjoy English language movies. [b]	1	2	3	4	5
11. I enjoy Korean language movies. [a]	1	2	3	4	5
12. I enjoy reading (books, newspapers, magazines) in Korean. [a]	1	2	3	4	5
13. I enjoy reading (books, newspapers, magazines) in English. [b]	1	2	3	4	5
14. I write (letters and other correspondence) in Korean. [a]	1	2	3	4	5

15. I write (letters and other correspondence) in English. [b]	1	2	3	4	5
16. My thinking is done in the English language. [b]	1	2	3	4	5
17. My thinking is done in the Korean language. [a]	1	2	3	4	5
18. How much contact have you had with Korea? [a]	1	2	3	4	5
19. How much contact have you had with U.S.A.? [b]	1	2	3	4	5
20. My father identifies or identified (if he passed away) himself as Korean. [a]	1	2	3	4	5
21. My mother identifies/identified herself as Korean. [a]	1	2	3	4	5
22. My friends, while I was growing up, were of Korean origin. [a]	1	2	3	4	5
23. My friends, while I was growing up, were of European American origin. [b]	1	2	3	4	5
24. My family cooks Korean foods. [a]	1	2	3	4	5
25. My friends now are of European American origin. [b]	1	2	3	4	5
26. My friends now are of Korean origin. [a]	1	2	3	4	5
27. I like to identify myself as European American. [b]	1	2	3	4	5
28. I like to identify myself as Korean American. [a]	1	2	3	4	5
29. I like to identify myself as Korean. [a]	1	2	3	4	5
30. I like to identify myself as American. [b]	1	2	3	4	5

[a]Seventeen items in this KAAS-2 measure pertain to Enculturation (i.e., identification with Korean culture).
[b]Thirteen items pertain to Acculturation (i.e., identification with American culture).

B. Korean Version

아래는 당신의 문화적 정체성과 관련될 수 있는, 당신의 최근 행동들과 당신의 과거 배경에 관한 질문들입니다. 각 질문에 대해, 당신과 가장 가깝거나 당신을 가장 잘 설명하는 **하나에만 표시**해 주십시오.

	전혀		보통		거의 항상
1. 내가 한국말을 하는 정도는 [a]	1	2	3	4	5
2. 내가 영어를 하는 정도는 [b]	1	2	3	4	5
3. 내가 한국말로 말하는 것을 좋아하는 정도는 [a]	1	2	3	4	5
4. 내가 유럽계 미국인 (백인)들과 함께 어울려 뭔 가를 같이 하는 정도는 [b]	1	2	3	4	5
5. 내가 한국인들이나 한국계 미국인들과 함께 어울려 뭔 가를 같이 하는 정도는 [a]	1	2	3	4	5
6. 내가 한국말로 된 노래를 즐겨 듣는 정도는 [a]	1	2	3	4	5
7. 내가 영어로 된 노래를 즐겨 듣는 정도는 [b]	1	2	3	4	5
8. 내가 한국말로 된 TV 를 즐겨 보는 정도는 [a]	1	2	3	4	5
9. 내가 영어로 된 TV 를 즐겨 보는 정도는 [b]	1	2	3	4	5
10. 내가 영어로 된 영화를 즐겨 보는 정도는 [b]	1	2	3	4	5
11. 내가 한국말로 된 영화를 즐겨 보는 정도는 [a]	1	2	3	4	5

12. 내가 한국말로 된 것 (책, 신문, 잡지등) 을 즐겨 읽는 정도는 [a]	1	2	3	4	5
13. 내가 영어로 된 것 (책, 신문, 잡지등) 을 즐겨 읽는 정도는 [b]	1	2	3	4	5
14. 내가 (편지나 다른 서신교환등을 위해) 한국말로 쓰거나, 적거나, 타이핑하는 정도는 [a]	1	2	3	4	5
15. 내가 (편지나 다를 소신교환등을 위해) 영어로 쓰거나, 적거나, 타이핑하는 정도는 [b]	1	2	3	4	5
16. 내각 영어로 생각하는 정도는 [b]	1	2	3	4	5
17. 내가 한국말로 생각하는 정도는 [a]	1	2	3	4	5
18. 내가 그동안 한국과 얼마나 많은 접촉을 해왔는지 [a]	1	2	3	4	5
19. 내가 그동안 미국과 얼마나 많은 접촉을 해왔는지 [b]	1	2	3	4	5
20. 나의 아버지가 스스로를 한국인이라고 여기시는 정도는 (돌아가셨을 경우, 과거에 어떠하셨는 지) [a]	1	2	3	4	5
21. 나의 어머니가 스스로를 한국인이라고 여기시는 정도는 (돌아가셨을 경우, 과거에 어떠하셨는 지) [b]	1	2	3	4	5
22. 내가 자랄 때 나의 친구들이 한국인이거나 한국계였던 정도는 [a]	1	2	3	4	5
23. 내가 자랄 때 나의 친구들이 유럽계 미국인 (백인)이었던 정도는 [b]	1	2	3	4	5

24. 나의 가족이 한국 음식을 만드는 정도는 [a]	1	2	3	4	5
25. 지금 현재 나의 친구들이 유럽계 미국인 (백인)인 정도는 [b]	1	2	3	4	5
26. 지금 현재 나의 친구들이 한국인이거나 한국계인 정도는 [a]	1	2	3	4	5
27. 내가 나 자신을 유럽계 미국인 (백인) 이라고 여기고 싶은 정도는 [b]	1	2	3	4	5
28. 내가 나 자신을 한국계 미국인이라고 여기고 싶은 정도는 [a]	1	2	3	4	5
29. 내가 나 자신을 한국인이라고 여기고 싶은 정도는 [a]	1	2	3	4	5
30. 내가 나 자신을 미국인이라고 여기고 싶은 정도는 [b]	1	2	3	4	5

Note. The KAAS-2 translated version was acquired through Cote et al. (2015).
[a]Seventeen items in this KAAS-2 measure pertain to Enculturation (i.e., identification with Korean culture).
[b]Thirteen items pertain to Acculturation (i.e., identification with American culture).

Appendix J. Enculturation Questionnaire – For Korean American Mothers Only

Enculturation of Familial and Cultural Values & Important Korean Traditional Etiquettes (Choi et al., 2015)

A. English Version

The following set of questions is about values regarding families and what you want to see in your child when s/he is grown up.

	Not at all	Not much	Moderately	Much	Very much
1. Support/help siblings when they need help	1	2	3	4	5
2. Support/help relatives when they need help	1	2	3	4	5
3. Thinks of family as a source of trust and dependence	1	2	3	4	5
4. Do things to please parents	1	2	3	4	5
5. Seriously consider parents' wishes/advices (e.g., on career or marriage matters)	1	2	3	4	5
6. Take care of parents when they get older.	1	2	3	4	5
7. Maintain close contacts with family no matter where s/he lives.	1	2	3	4	5

How important are the following to you?

	Not at all	Not much	Moderately	Much	Very much
1. My child properly greets adults (e.g., bowing to	1	2	3	4	5

adults with proper greeting words).					
2. My child uses formal speech to adults.	1	2	3	4	5
3. My child keeps Korean social norms and public etiquettes in the presence of other adults (e.g., passing things with two hands to adults)	1	2	3	4	5
4. My child uses correct addressing terms (e.g., calling family members with Korean addressing terms instead of using their first names (unni, oppa, eemo, komo, etc.)	1	2	3	4	5
5. My child waits until other adults start eating at mealtimes.	1	2	3	4	5
6. My child avoids eye contact when adults reprimand him/her.	1	2	3	4	5

B. Korean Version

아래 항복들은 가족과 관련된 가치관으로써, 자녀가 자랐을 때 이런 사람이었으면 하는지 말해주십시요.

	정말 안 그랬으면 좋겠다	안 그랬으면 좋겠다	상관 없다	그랬으면 좋겠다	아주 많이 그랬으면 좋겠다
1. 형제, 자매가 도움이 필요할 때 돕는다.	1	2	3	4	5
2. 친척이 도움이 필요할 때 돕는다.	1	2	3	4	5

3. 가족을 신뢰와 의지의 원천이자 기반이라고 생각한다.	1	2	3	4	5
4. 부모님을 기쁘게 하기 위한 일들을 한다.	1	2	3	4	5
5. 중요한 문제에 대해서 (예를 들어, 직업 결정 문제나 결혼 문제 등) 부모님의 희망이나 충고를 진지하게 고려 한다.	1	2	3	4	5
6. 나이가 드신 부모님을 돌본다.	1	2	3	4	5
7. 어디에 살든지 상관없이, 가족과 친밀한 관계를 유지한다.	1	2	3	4	5

Part B. 자녀분이 아래의 행동을 따라주는 것이 얼마나 중요합니까?

	정말 중요하지 않다	중요하지 않다	중간 정도	중요하다	매우 중요하다
8. 어른들에게 예의바르게 인사하는것 (고개 숙이면서 '안녕하세요').	1	2	3	4	5
9. 어른들에게 존댓말을 사용하는것.	1	2	3	4	5
10. 어른들에게 예의바르게 행동하는 것 (두 손으로 물건을 건네는 것 등).	1	2	3	4	5
11. 존칭과 호칭을 사용하는 것 (가족들의 이름을 바로 부르는 것이 아니라 적절한 존칭(언니, 오빠, 이모, 고모 등)으로 불러주는 것).	1	2	3	4	5
12. 다른 어른들이 식사를 시작하기 전까지 기다리는 것.	1	2	3	4	5
13. 어른이 혼낼 때 어른을 두 눈을 똑바로 뜨고 쳐다보지 않는 것.	1	2	3	4	5