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Familial Contributions to Chinese American Children's Self-Regulated Learning During the Early School Years

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ABSTRACT OF THE DISSERTATION

Familial Contributions to Chinese American Children's Self-Regulated Learning During the Early School Years

by

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This dissertation examined how Chinese American children's everyday family experiences contributed to their self-regulated learning during the early school years. A total of 154 immigrant Chinese parents participated in this study and completed nine sets of multi-point rating questionnaires on a secured website. A series of analysis of covariance and hierarchical regressions was performed. Results provided the first empirical evidence that children's participation in family rituals and routines had significant positive influences on children's self-regulated learning strategies, over and above the influences of parental expectations of children's school attainment and self-regulated learning. Children's competence in self-regulated learning strategies, in turn, was positively related to their academic achievement. Results also indicated that parental self-efficacy in helping children succeed in school positively influenced Chinese

American children's opportunities to participate in family rituals and routines. Nevertheless, unexpected results demonstrated that Chinese American first and fourth graders did not differ significantly in self-regulated learning strategies and in participation in family rituals and routines. One possible explanation is that Chinese American children may have already developed self-regulated learning strategies, and started to participate in family rituals and routines before they enter first grade. The dissertation concludes with a discussion of the implications and limitations of this research.

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CHAPTER 1

Introduction

This study examines how familial experiences of early school-age Chinese American children contribute to their self-regulated learning, particularly in the academic domain. Immigrant Chinese parents of first and fourth graders were surveyed in order to answer these research questions: 1) How do children's self-regulated learning strategies relate to grade level and academic achievement?; 2) How does children's participation in family rituals and routines relate to grade level and self-regulated learning strategies?; 3) How does parental self-efficacy in helping children succeed in school influence children's participation in family rituals and routines, and does this influence vary across the two grade levels?; and 4) What are the relative contributions of parental self-efficacy in helping children succeed in school and children's participation in family rituals and routines to children's self-regulated learning? Examining these issues will provide insight into how everyday family opportunities promote children's self-regulated learning, and in turn, benefit children's academic performance.

Chinese Americans as Model Minorities

To understand the mechanisms or processes underlying academic achievement, it is critical to investigate academically successful children. This section discusses the usefulness of the *model minority* stereotype in examining early school-age Chinese American children.

Since the 1960s, Asian Americans have been labeled as *model minorities*. They are characterized as being successful through hard work and determination, in spite of the

hardships they face as immigrants (Lee & Joo, 2005). The high level of achievement of Asian American children in the academic domain has been well-documented (Kao & Thompson, 2003; National Center for Education Statistics, 2007). For example, Asian American children have exhibited better scores on mathematics and science tests, maintained higher grade-point-averages, and performed better on standardized tests than children from other ethnic groups. Because Asian Americans consist of people coming from 30 different Asian countries and speaking more than 300 languages (Chan & Chen, 2011), much variation in academic achievement likely exists. In fact, significant disparities have been found between Southeast Asian Americans (e.g., Cambodians, Hmongs, Laos, and Vietnamese) and East Asian Americans (e.g., Chinese, Korean, and Japanese) in academic achievement, educational attainment, problem behaviors, and occupational status (Lee, Wong, & Alvarez, 2009; Ngo & Lee, 2007).To explain the mixed findings, Tran and Birman (2010) suggested that the high achievement of East Asian American children might mask the underachievement of Southeast Asian American children. Therefore fine-grained distinctions within the Asian American population are needed in order to capture the important factors that facilitate children's academic achievement in these groups.

To address these disparities, this dissertation examined variables contributing to Chinese American children's academic achievement. This group was selected for two reasons. First, most school-age Asian American students were immigrants or children of immigrants in the year 2000 (Rong & Preissle, 2009), and past research found that being part of an immigrant family greatly benefitted Chinese American children's achievement

in school (Vartanian, Karen, Buck, & Cadge, 2007). Secondly, because the Chinese American community is the largest Asian subgroup in the United States (Chan & Chen, 2011), it is likely that Chinese American children's academic performance may be responsible for the perception of high achievement for the entire Asian-American population. Therefore, it is critical to examine potential mechanisms or processes that underlie the academic achievements of Chinese American children.

Researchers have long been interested in why and how Chinese American children achieve academically, and three lines of research have examined this topic. The first focused on the impacts of Chinese cultural values and ethnotheories on children's academic achievement. For example, recent studies suggested that parents of high-achieving Chinese American children held high expectations for their children, including earning good grades in school, maintaining high scores on standard tests, and attending graduate school in the future (Costigan, Hua, & Su, 2010; Yamamoto & Holloway, 2010). The second line of research focused on how parental involvement in children's academic learning influenced school success. This line of research found that the involvement of Asian American parents in home-based education (e.g., helping with homework, assigning extra workbooks, and setting limits on TV viewing) had positive influences on children's academic achievement (Chao, 2000). The third line of research focused on the influences of acculturation and ethnic identity on children's academic achievement. To illustrate, a recent study found that Chinese American adolescents who were rated higher in Chinese ethnic identity were more likely to achieve academically than those rated lower (Fuligni, Witkow, & Garcia, 2005).

One limitation of this body of research is that each process tended to be examined in isolation from others. Past studies overlooked how family members influenced each other's behaviors through sharing family responsibilities, communicating feelings and thoughts, and considering each other's perspectives. Study of Chinese American children's experiences within the everyday family context will provide insight about how families as integrated systems support children's academic learning, and may explain Chinese American children's academic achievement.

In order to address the issues raised above, this dissertation focuses on three dimensions of family life that may support academic learning: 1) the availability of and participation by children in *family rituals and routines* (FRR), or observable and repetitive family activities involving more than two family members (Fiese, 2002; Spagnola & Fiese, 2007); 2) children's household responsibilities; and 3) parental self-efficacy in relation with academic achievement. Of course, children's opportunities for participation in FRR may vary as a function of age. Moreover, such participation in family life may shape the development of *self-regulated learning* (SRL), or the ability to control one's own thoughts, feelings, and actions in order to achieve a learning goal (Zimmerman, 2000). In turn, children's competence in SRL likely leads to academic achievement. Children's participation in FRR may also be influenced by *parental self-efficacy* (PSE), or the parents' beliefs about their effectiveness in helping children succeed in school (Hoover-Dempsey, Bassler, & Brissie, 1992).

Another limitation of previous studies is that they focused primarily on late school-age children and adolescents, and thus overlooked the role of families in

supporting younger children's academic learning. To address this age gap, this dissertation examines early school-age children's opportunities to develop self-regulated learning skills across two grade levels, first grade and fourth grade. The motivation for examining the two groups is two-fold. First, academic learning in the American educational system is cumulative (Bossaert, Doumen, Buyse, & Verschueren, 2011). In particular, children's academic achievement at an early age predicts their academic achievement at a later age (Entwisle & Alexander, 2002; Rimm-Kaufman, Pianta, & Cox, 2000). Secondly, both Chinese and Chinese American parents emphasize the importance of early education in order to help their children get ahead of the competition (Peng & Richey, 2007; Vaughan, 1993). For example, Schneider and Lee (1990) have found that 60 percent of Asian American parents (including Chinese) taught their preschoolers basic reading, writing, and mathematics, hoping to invest them with perseverance, concentration, and diligence. So the examination of early grade levels allows a comparison of opportunities to develop learning skills (e.g. SRL strategies) between Chinese American first graders and fourth graders. This comparison may advance our knowledge of the mechanisms used by immigrant Chinese parents to promote early childhood academic learning within the context of the family.

Understanding familial contributions to young Chinese American children's development of SRL benefits not only our understanding of family processes underlying children's academic achievement, but also helps to inform educators and policy-makers about the role played by the family processes in children's academic achievement. Accordingly, this knowledge may encourage the design of intervention programs

targeting families with young children who are at risk of falling behind academically. Research has showed that Southeast Asian students have lower rates of school attainment, lower levels of academic achievement, and higher rates of school dropout than East Asian students (Lee et al., 2009). Given that SRL predicts academic achievement (Nota, Soresi, & Zimmerman, 2004; Veenman, Wilhelm, & Beishuizen, 2004), examining variables that shape the development of SRL can be used to help parents of Southeast Asian American children to further their children's academic achievement.

Self-Regulated Learning in Family Context: Theoretical Foundations

This section presents the theoretical foundations needed to investigate Chinese American children's opportunities to develop SRL in everyday family settings. Below, I discuss why it is important to examine the grade-related differences in children's SRL and participation in FRR, as well as the relationships between PSE, children's participation in FRR, and children's SRL in the context of family.

This dissertation is built on three theoretical foundations - Vygotsky's (1978) sociocultural theory, Rogoff et al.'s (2007) view that development occurs when children participate in everyday routines and practices organized by culture, and Super and Harkness's (1986) developmental niche framework. These views emphasize how parent-child interactions, parental beliefs, everyday family settings, and children's participation in routines and organized activities contribute to their cognitive development, particularly the development of culturally-valued, higher-order, complex cognitive skills such as SRL. In the following sections I will discuss each theoretical perspective separately.

Sociocultural theory. Sociocultural theory plays an important role in understanding children's cognitive development in the context of family. Traditionally, cognitive development has been conceptualized as a result of biological maturation and individual learning experiences. Some researchers, however, have argued for the importance of recognizing cultural and social influences on cognitive growth (Gauvain, 2001; Rogoff, 2003; Vygotsky, 1978). According to Vygotsky's sociocultural theory, children's cognitive development is guided by the opportunities they have to take part in culturally-valued cognitive activities. For Vygotsky, children's development occurs within what he called *the Zone of Proximal Development* (ZPD). The ZPD is defined as the distance between what a child can do without help, and what the child can do with help. Within that gap, more skilled social partners support the child's learning through various means including the process called *scaffolding* (Wood, Bruner, & Ross, 1976). Scaffolding is defined as the support or assistance of a skilled partner, which changes as children's competence increases during a problem-solving task. When the child is given a cognitive task that is just slightly beyond his or her ability, the skilled partner takes more responsibility for the challenging aspects of the task by providing much assistance at the beginning. As the child's competence in solving the task increases, the skilled partner will eventually withdraw his or her assistance to allow the child to carry out the task independently (Wood et al., 1976). Through interacting with the skilled partner, the child may internalize his or her partner's thinking and problem-solving strategies and come to practice these problem-solving skills. Consequently the child may develop specific cognitive skills by taking more responsibility in anticipating and carrying out these

cognitive activities. Given that the family is an important setting where many opportunities for scaffolding take place, it is critical to examine children's development within the context of family.

Vygotsky (1978) took the idea that children develop through interacting with a more experienced social member one step further. He posited that the way parents support their children's cognitive development is influenced by the cultural community in which they live. Because Chinese culture places a heavy emphasis on self-improvement through study, effort, and discipline (Chan & Chen, 2011; Li, 2003, 2005), this emphasis is reflected in Chinese immigrant and American parents' high expectations for their children's academic performance (Yamamoto & Holloway, 2010). Moreover, such high expectations have been found to be associated with positive parenting, where parents provide autonomous, affective, and cognitive support that promotes children's academic learning (Chao & Tseng, 2002; d'Ailly, 2003). Chinese children may thus develop effective learning skills that are important for school success. More importantly, this theory illustrates how the influences of cultural values contribute to children's development of specific cognitive skills.

This dissertation applies a sociocultural approach to the study of SRL. SRL is a multi-dimensional construct that consists of higher-order metacognitive skills (e.g., self-monitoring, self-evaluation, and self-reflection), learning-regulated processes (e.g., self-motivation, emotion regulation, and behavior regulation), and learning strategies (e.g., planning, rehearsal, and organization). These processes jointly support and direct children's learning in various domains (Bronson, 2000; Whitebread et al., 2005;

Zimmerman, 2008). Because SRL involves multiple cognitive demands, children's development of SRL is likely to benefit from adult assistance (Vygotsky, 1978). For example, children's interaction with their mothers on a cognitive task can promote their self-regulated learning skills, including attention to instruction, monitoring the learning process, and help-seeking (Neitzel & Stright, 2003; Stright, Neitzel, Sears, & Hoke-Sinex, 2001). This dissertation investigates Chinese American first graders' and fourth graders' SRL within a family context. Such investigation may help to understand grade-related differences in children's SRL during the early school years.

Examination of children's SRL across grade levels does not capture the role of family in supporting children's development of SRL. In next section, I discuss family opportunities for facilitating children's SRL.

Cultural repertoires through participation in everyday routines and practices. Extending Vygotsky's (1978) ideas on the role of cultural influences in children's cognitive development, Rogoff et al. (2007) argued that an understanding of children's cognitive development is inseparable from the organization of children's participation or involvement in routines and activities in the culture where they live. This view suggests that routines and activities may serve as important opportunities for children to develop culturally-valued cognitive skills. Participation can be organized in relation to both broad range socialization (e.g., family rituals and routines such as celebrating important family holidays) and narrow range socialization (e.g., specific interactions such as discussing the day at dinner time). Additionally, the parents' organization of their children's participation in activities usually contains specific *formats*

that are routinized within the activities or moment-to-moment interactions (Rogoff et al., 2007). For example, participation in Christmas preparations is likely to require a specific sequence of behaviors: buying gifts; wrapping gifts; decorating the Christmas tree; making a special dinner; and opening gifts on the holiday. In this way, organized participation reveals the joint contribution of cultural, individual, and interpersonal relations to children's development. Finally, Rogoff et al. use the term *repertoire of practices* to refer to a group of practices that are integrated in a format for developing particular cognitive skills.

The development of reading skills is one example. On a typical weekday, a child may start to play a spelling game during breakfast. After lunch, the child's mother may take him or her to the library and participate in a joint story-time activity. Everyone in the group may get a chance to discuss the stories he or she has read. Later in the afternoon, the mother may involve the child in a reading game on a computer. By playing the reading game, the child practices academic skills in spelling, writing, and learning new words. At bedtime, the mother and child may share a bedtime story. The child in the example takes part in various forms of reading activities and learns various ways of reading. Over time the child is likely to develop an interest in reading and attain competency in applying different reading skills to distinct situations. In summary, individuals develop cognitive skills through participating in organized and routinized activities, and by practicing emerging cognitive skills within these routines and activities. Through this process, individuals eventually develop complex cognitive skills adaptable to different situations. Therefore, as children's participation in culturally-valued routines

and activities increases, their competence in culturally-valued cognitive skills also increases.

Children's increased participation is also likely to be reflected in a shift in children's roles and responsibilities within the family (Denham, 2003; Rogoff, 2003). As children grow older and become more competent in participating in routines and activities, they are likely to play different and more complex roles in these routines and activities. For example, young children may depend more on their parents to help them participate in routines and activities, whereas older children may take more initiative and responsibility by participating in these family activities without help. Eventually they are capable of carrying out family activities independently. Thus, children's participation in routines and activities is likely to vary as a function of age. This developmental change can be explained in part by the concept of scaffolding. Specifically, parents adjust their levels of involvement in initiating and creating routines and activities based on their children's competence in participating in them.

This dissertation focuses on two types of family activities: 1) family rituals; and 2) family routines. Specifically, it aims to investigate Chinese American first and fourth graders' participation in FRR within a family context. Such investigation aids our understanding of how children's opportunities to participate in FRR differ across the two grade levels.

As discussed earlier, participation in family activities promotes children's cognitive development. However, less is known about the types of FRR that are beneficial to cognitive skills. A recent review found that children who participate in

activities involving components of self-regulation are likely to develop good self-regulation skills (Diamond, 2012). For example, children who participated in an activity designing to teach them self-control were found to have better self-control skill than children who did not participate in the same activity. This finding suggests that the development of specific cognitive competence depends on whether the activity requires the use of that cognitive skill. Moreover, the types of family activities children take part in may be limited by individual culture (Weisner, 2002). Weisner (2002) explains that each culture provides unique developmental pathways for children to acquire skills that are important for becoming a competent member of that culture. These pathways reflect "everyday routines of life, cultural activities, including bedtime, homework, mealtime, TV viewing, visiting relatives and so forth" (p. 276). Therefore cultures that emphasize self-regulated skills likely organize family activities differently from cultures that do not emphasize these skills. Because Chinese culture values education as a way to cultivate virtue (Li, 2005), Chinese immigrant parents are likely to organize and manage their children's everyday lives in a way that supports the development of their learning skills. As Chinese American children engage in learning-related activities, they are likely to use and practice SRL skills. Thus, this dissertation also examines the relationship between children's participation in FRR and their SRL skills. This examination reveals how children's experiences in the family contribute to children's SRL in everyday settings.

The developmental niche framework. Children's experiences in the family do not exist in isolation. Instead, these experiences happen within a sociocultural context. The developmental niche framework (Super & Harkness, 1986) explains the role of

parental beliefs in influencing children's everyday experiences in the family and their cognitive development. According to the developmental niche framework, children develop and learn within a developmental niche that has three key features. The first feature is the organization of everyday life, referring to physical and social settings as well as the daily routines within which children live and grow. The second feature is parental practices in regard to culturally-valued routines of childcare. The third feature is *parental ethnotheories*, or cultural belief systems that parents hold regarding their children, their family, and themselves as parents. Parents draw upon these beliefs when raising their children. According to Super and Harkness, through organization of family activities and practices, parental beliefs guide and shape the familial context within which children develop the cognitive skills valued by their culture. An examination of parental beliefs and the family organization of activities and practices will provide a better understanding of the way in which these beliefs shape families activities and practices, such as rituals and routines.

One type of belief is *self-efficacy*, the "belief in one's capabilities to organize and execute the course of action required to produce a given attainment" (Bandura, 1997, p.3). By applying Bandura's self-efficacy theory to parenting, Hoover-Dempsey et al. (1992) defined *parental self-efficacy* (PSE) as parental beliefs about their abilities to improve children's learning and academic performance. These beliefs may in part reflect cultural belief systems about the role of parents in children's academic learning (Hoover-Dempsey & Sandler, 1997). Past studies not only supported the relationship between PSE and children's academic achievement, but also found that PSE exerted its positive

influence on children's academic achievement through parental involvement in home-based education (Ardelt & Eccles, 2001; Hoover-Dempsey et al., 2001; Okagaki & Frensch, 1998). Given that parental involvement in children's schoolwork at home has been found to be positively associated with children's SRL (Martinez-Pons, 1996; Xu, Benson, Mudrey-Camino, & Steiner, 2010), it is likely that PSE exerts a positive influence on children's SRL through parental involvement at home.

Parental support of children's academic learning, however, is not limited to parental involvement in home-based education. Other types of parental support may include the organization of children's responsibilities and activities, including engaging children in FRR. Past research has suggested that parents may engage children in homework routines and thereby support their development SRL skills (Hoover-Dempsey, et al., 2001; Xu & Corno, 1998). Parents may also engage children in dinnertime rituals to convey a message about emotional regulation (Wang, Wiley, & Zhou, 2007), and in turn, the children's competency in regulating their own emotions enhances their general self-regulating skills (Perez & Gauvain, 2009). Given the positive link between PSE and parental support of children's academic learning, it is likely that PSE has a positive influence on the family organization of rituals and routines. The current dissertation examines this relationship to provide insight into sociocultural variables that may influence children's experiences in everyday family settings.

Summary. In summary, each of these theories contributes to the rationale for examining how immigrant Chinese families support their children's SRL in the context of family rituals and routines during the early school years. The sociocultural theory

provides a theoretical approach to examining children's SRL in the context of family. The cultural repertoire framework, through its focus on participation in everyday routines and practices, provides a theoretical framework for understanding the contributions of family rituals and routines to children's SRL. Finally, the developmental niche framework provides a mechanism for understanding how parental beliefs about their abilities to help children succeed in school contribute to family organization of rituals and routines, which in turn, support the development of children's SRL. The next few sections present literature that establishes these relationships in greater detail.

Literature Review

Self-Regulated Learning

Self-regulated learning (SRL). SRL plays an important role in school-age children's learning experiences and academic achievement. The literature review in this section addresses the first research question and discusses children's SRL across grade levels and its relation to academic achievement. This section begins with a discussion of the meaning of SRL.

Psychologists have long been interested in factors that improve children's educational outcomes. Barry Zimmerman, one of the pioneers in this area of study, has identified SRL as a key element in academic learning. According to Zimmerman (2000), SRL involves a "feedback loop" or cycle of self-regulated processes that help children achieve a learning goal. These processes include action planning (e.g., goal setting, task analysis, and motivational beliefs), attention to learning progress (e.g., self-monitoring and self-control), and self-reflection (e.g., self-evaluation, self-direction, and self-

adjustment). For Zimmerman, self-regulated learners actively approach learning activities, make plans to reach the learning goal, anticipate problems, persist in difficult tasks, monitor learning progress, adjust plans and strategies accordingly, and seek help as needed. Therefore, SRL is a multidimensional construct involving not only self-regulated processes but also learning strategies.

This dissertation investigates Chinese American first and fourth graders' SRL strategies. There are two lines of research in the literature on SRL. The first line is concerned with intervention programs designed to teach kindergarteners self-regulated skills in the classroom in order to improve their educational performances (Diamond, Barnett, Thomas, & Munro, 2007; Perels, Dignath, & Schmitz, 2009; Perels, Gurtler, & Schmitz, 2005). The second line of research is concerned with adolescents' and college students' use of SRL strategies, and the relationship between SRL strategies and academic achievement (Pintrich & De Groot, 1990; Zimmerman & Schunk, 2001). Less is known about young children's use of SRL strategies. Examination of SRL strategies in early school-age children fills this gap in the literature and contributes a better understanding of the development of SRL.

In addition, past research has suggested that aspects of SRL may be related to children's cultural memberships (Olaussen & Ivar, 1999). Cross-cultural studies have found differences in children's use of SRL strategies between Western countries and Asian countries (Purdie & Hattie, 1996). Specifically, Purdie and Hattie (1996) found that memorization was valued by Japanese students as the most important learning strategy. The Japanese students even maintained this strategy when they immigrated to

Australia where memorization was discouraged. Given that Western and Asian cultures differ in child-rearing practices, educational ideologies, values, and social customs (Chen & Wang, 2010; Tamis-LeMonda & McFadden, 2010), SRL strategies used by successful students from Western countries may not necessarily help students from Asian countries. Moreover, only a few studies have examined Chinese school-age children's SRL strategies (Law, Chan, & Sachs, 2008; Rao, Moely, & Sachs, 2000), and one limitation with these studies is that they focused on pre-adolescents' and adolescents. Examination of early school-age Chinese American children's SRL strategies will advance our understanding of cultural influences on young children's SRL strategies.

Development of self-regulated learning. Findings on the development of SRL in European American children have been mixed. Some researchers suggest SRL emerges between the ages of 8 and 10 (Veenman, Van Hout-Wolters, & Afflerbach, 2006). This suggestion, however, has been contested by a recent study that proposes SRL emerges as early as 3 years of age (Whitebread et al., 2005). By observing kindergarteners' use of SRL strategies while they completed a self-directed learning task, Hwang (1999) also found that successful kindergarteners were able to display the use of planning, monitoring, and self-evaluation. Not only are young children able to demonstrate their SRL skills, but they can also be trained utilize SRL skills (Perels, et al., 2005; Perels, et al., 2009). As a result, even preschoolers can set goals, plan, and self-reflect after training. Between ages 5 and 7, children's competence to initiate, control, and monitor their own learning increases (Bronson, 2000). This may partly reflect their adaptation to changes from a child-centered environment to a teacher-directed environment. The teacher-

directed environment requires children to follow instructions, pay attention to what teachers say, and sit still in the classroom (La Paro, Rimm-Kaufman, & Pianta, 2006). As children move to third grade and above, they develop more systematic, sophisticated, and strategic SRL (Demetriou, 2000), including memory strategies, planning, and self-reflection (Fuchs et al., 2003). They can also complete short assignments independently (Demetriou, 2000).

The literature reviewed above suggests a clear developmental trend in the SRL of European American school-age children. That is, as these children age, they are better at regulating their own learning. Although no study has examined Chinese American young children's development of SRL, it was found that preschoolers in China outperformed preschoolers in the United States in tasks that assessed components of executive functions, including inhibitory control and working memory (Lan, Legare, Cameron Ponitz, Li, & Morrison, 2011; Sabbagh, Xu, Carlson, Moses, & Lee, 2006). Given that executive functions are found to be closely related to self-regulated skills (Lajoie, 2008), it is likely that early school-age Chinese American children may have already acquire self-regulation skills associated with SRL. This dissertation examines the differences in Chinese American first and fourth graders' SRL strategies to promote a better understanding of their development of SRL during the early school years.

Self-regulated learning and academic achievement. The impact of SRL on academic achievement has been well-established in American students (Zimmerman, 2000), with evidence from correlational studies showing that successful students more often use SRL strategies (e.g., elaboration, organization, planning, monitoring, and

evaluation) to comprehend information and evaluate their own learning progress (Garcia & Pintrich, 1994; Zimmerman & Martinez-Pons, 1990). Evidence from experimental studies shows that curricula designed to promote SRL help students to achieve academically (Diamond, et al., 2007; Perels, et al., 2009). Most studies, however, have been conducted with middle-school, high school, and college students in a Western context (Nota et al., 2004; Veenman et al., 2004). The youngest group studied was third graders (Fuchs et al., 2003). A few studies examined Chinese middle-school and high school students' use of SRL strategies and their relation to academic achievement (Law et al., 2008; Rao et al., 2000). But early school-age children's SRL strategies and their relation to academic achievement have received less attention. Only one study examined the relation between SRL and the academic achievement of elementary school children (Howse, Lange, Farran, & Boyles, 2003). They found that children with better SRL had higher achievement scores from kindergarten to first grade and from second to third grade. One limitation with this study is that findings were limited to economically at-risk children. The current dissertation extends the previous work by examining the SRL strategies of early school age, Chinese American children, and their relationship to academic achievement. Such an examination will not only contribute to our understanding of metacognitive learning among early school-age children but will also reveal the role of SRL strategies in the academic achievement of these children.

Family Organization of Children's Responsibilities and Activities

The studies discussed in the previous section mainly focused on the SRL of school-age children in the classroom. Less is known about how the family may support

the development of SRL in children in everyday settings. Literature reviewed in this section addresses the second research question, discussing the participation of children in family rituals across the two grade levels and its relation to SRL. This section begins with a discussion of the meaning of family rituals and routines.

Concepts of family rituals and routines. In general children are eager to participate in the daily, weekly, and annual activities of family life as they age. These family activities, often in the form of family routines and rituals, guide children's behaviors and support their development in the everyday family context (Fiese, 2006). *Family rituals* are defined as family activities that carry both cultural and symbolic meanings shared by family members (Fiese et al., 2002). These rituals are closely tied to extraordinary events associated with culture, religion, traditions, ethnicity, and social customs (Denham, 2003), reflecting family identities and the roles of family members (Spagnola & Fiese, 2007). For example, in families who celebrate the Moon Festival every September, the mother makes the moon cakes and prepares a special dinner for every family member. This shows the Chinese heritage in which the family may be rooted, and the role mothers play within the ritual. On this occasion, family members are given opportunities to get together, to be open with one another, to discuss their feelings and to communicate family values and beliefs.

Rituals typically include performing goal-directed ritualized actions, always in the same order (Boyer & Lienard, 2006). Fiese and Kline (1993) identified family rituals in six settings: *dinnertime; weekends; vacations; yearly celebrations; religious holidays; and cultural traditions*. *Family routines,* on the other hand, are defined as observable,

repetitive patterns of behavior involving more than two family members and occurring regularly in ongoing family life (Fiese, 2002). These routines are closely tied to ordinary family activities and events (Denham, 2003). Sytsma, Kelley, and Wymer (2001) identified four types of children's routines, including *homework routines, discipline routines, household chores, and daily life routines*. These routines involve children doing homework at a specific time and place each day, monitoring misbehaviors, helping with household responsibilities, and carrying out personal care tasks, respectively. Apparently, both family rituals and family routines reflect how families organize, structure, and manage the lives of their members, including the children. Therefore children's engagement in culturally-valued FRR may serve as family opportunities for supporting children's cognitive development.

As culturally-valued family activities, both family rituals and family routines share some important similarities. Both activities involve multiple family members, occur repeatedly over time, provide information about everyday family life, reveal interactions between family members, and organize individual and family behaviors (Fiese et al., 2002). Despite these similarities, both activities differ in three respects: communication, commitment, and continuity (Fiese et al., 2002). For example, family rituals convey messages about "who we are," involve long-term commitment, and require effort to continue over time. In contrast, family routines convey messages about "what needs to be done," and these routines do not structure individual's lives and activities outside of the routine. Denham (2003) has also suggested that whereas disruption of family routines may cause a hassle, disruption of family rituals may threaten family harmony. These

differences, however, do not suggest that family rituals and routines are two completely different constructs. In fact, Spagnola and Fiese (2007) suggest that family routines may serve as a foundation for the development of rituals. By providing opportunities for emotional exchanges, routines can create the conditions necessary to form the core features of rituals. Thus, this dissertation also examines FRR in Chinese immigrant families. These include homework routines, discipline routines, household responsibilities, daily life routines, dinnertime, weekend, vacation, yearly celebration, religious holidays, and cultural traditions. Examining FRR is important because they show family processes as a whole within the sociocultural context of families' everyday lives (Fiese et al., 2002). This examination will also provide information about the types of FRR in which Chinese American children participate.

Children's participation in family rituals and routines (FRR). Children's participation in FRR may differ across ages. Children's abilities to participate in FRR increase as they get older (Spagnola & Fiese, 2007). Boyer and Lienard (2006) posited that young children start to engage in ritualized behaviors at age 2, and this engagement peaks in middle childhood. Children's involvement in family rituals is most frequent during middle childhood, and as children move from early childhood to school age, their participation in family routines becomes more frequent (Fiese et al., 2002). For example, Fiese (1993) examined whether or not the family organization of rituals and routines differed according to the child's age. She found that parents with preschool children reported having more rituals and routines at home than parents with infants. As children get older, they begin to strive for autonomy and negotiate with their parents about

routines activities. As a result, parents are likely to provide older children with more opportunities to practice decision-making in food choices, personal care, and school activities than they give younger children (Gauvain & Perez, 2005; Nucci & Smetana, 1996). As these examples show, children are more likely to participate in FRR as they become more competent. The competence with which first graders, however, participate in FRR may differ from that of fourth graders.

Understanding of children's participation in FRR is mainly limited to European and African American children during the early childhood and adolescent years (Seaton & Taylor, 2003; Spagnola & Fiese, 2007; Taylor & Lopez, 2005). Less is known about the development of children's participation in FRR during middle childhood. This dissertation examines Chinese American first graders' and fourth graders' participation in rituals and routines, in order to shed light on differences in the types of FRR that Chinese American children participate in across the two grade levels.

Relation of children's participation in family rituals and routines to self-regulated learning. Traditionally, studies examining children's participation in FRR have focused on children's health. Only recently has research focused on connections between FRR and academic achievement (see Spagnola & Fiese, 2007, for a review). These studies primarily examined the correlation between participation and achievement. Little is known about the underlying processes that may explain the relationship. Given that the SRL of children predicts their academic achievement (Zimmerman & Schunk, 2001), SRL may be the process that mediates the connection between children's participation in FRR and academic achievement. Therefore examining the relationship

between children's participation in FRR and their SRL will provide a better understanding of the role that everyday family activities play in children's SRL.

Although no study has examined the impact of children's participation in family activities on SRL, a connection can be inferred from existing literature. A recent study examining at-risk African American adolescents found that parents who foster FRR at home are more likely to be involved in their adolescents' education (Taylor & Lopez, 2005). In turn, the family organization of rituals and routines may, through parental involvement, convey a message about the importance of education (Annunziata, Hogue, Faw, & Liddle, 2006). Given that school engagement is strongly related to SRL (Brock, Rimm-Kaufman, Nathanson, & Grimm, 2009), the participation of children in FRR is likely to have a positive influence on children's SRL.

In addition, past research has demonstrated positive connections between participation in specific family routines and SRL. For example, doing homework has been found to promote both SRL and academic achievement (Martinez-Pons, 2002; Xu & Corno, 1998; Zimmerman & Kitsantas, 2005). During homework activities, parents are more likely to get involved. For example, they might establish schedules for the use of time, help the children to cope with distractions, or assist the children to regulate their emotions in response to frustrations and difficult tasks (Hoover-Dempsey et al., 2001). Parents may also provide children with multiple opportunities: 1) to observe and learn from parents' attitudes and skills pertinent to learning; 2) to receive reinforcement and feedback on their learning progress; and 3) to collaborate on solutions to homework

problems. Consequently, children may develop effective learning habits (Xu & Corno, 1998), and strategic SRL (Hoover-Dempsey et al., 2001).

It appears that FRR provide a context in which children can practice emerging academic skills, because such rituals and routines present parents with opportunities to "scaffold" children. Pino-Pasternak and Whitebread (2010) identified several key elements that influenced the development of children's SRL, including adult-child shifts in responsibilities, metacognitive talk, and instructional scaffolds. Although these elements have been examined mainly within a problem-solving context, they may also apply in everyday family settings given that participation in family rituals and routines provides natural opportunities for exercising these elements. Children's participation in FRR is expected to be positively related to children's SRL.

As mentioned earlier, the literature has focused primarily on European American and at-risk African American children. Less is known about how children's engagement in FRR influences SRL in other ethnic groups, especially in immigrant Chinese families. The motivation to focus on immigrant Chinese families is two-fold. First, as an ethnic minority in the United States, immigrant Chinese families face many difficulties in raising their children successfully (Turney & Kao, 2009). Because organization of FRR have helped economically disadvantaged African American families promote the academic achievement of their at-risk adolescents (Taylor, 1996; Seaton & Taylor, 2003; Taylor & Lopez, 2005), it is likely that FRR may serve a similar function for immigrant Chinese families. Secondly, FRR provide natural opportunities for parents to communicate emotions, family beliefs, and cultural values to their children (Fiese, 2006).

These rituals and routines are likely to convey important messages about Chinese cultural values and parental expectations. In turn, these values and expectations increase children's intrinsic motivation to do well in school (Chao & Tseng, 2002; Phillipson & Phillipson, 2007). Thus, it is important to examine the participation of Chinese American children in FRR insofar as it influences SRL. The current dissertation examines the relationship between Chinese American children's participation in FRR and their SRL strategies. This research will provide insight into the opportunities for Chinese American children to develop emerging learning skills in their everyday family settings.

Parental Self-Efficacy

Although past research has found children's participation in FRR to play a significant role in learning (Spagnola & Fiese, 2007), little is known about the factors that promote children's participation in family rituals and routines, and how these factors may contribute to children's SRL. The literature reviewed in this section addresses the last two research questions and discusses the role of PSE in enhancing children's participation in FRR, as well as the relationship between PSE and child's SRL. This section begins with a discussion of the meaning of PSE.

Parental self-efficacy (PSE) defined. Self-efficacy refers to parental beliefs about their personal effectiveness in affecting their children's academic outcomes (Hoover-Dempsey et al., 1992). Hoover-Dempsey and colleagues (Hoover-Dempsey & Sandler, 1997; Walker, Wikins, Dallaire, Sandler, & Hoover-Dempsey, 2005) proposed that PSE serves as an important motivational factor for parents to help their children's academic learning. Because the degree of parental involvement is guided in part by the

outcomes they expect from their actions (Bandura, 1997), parents are more likely to get involved in their children's academic learning if they believe they have the skills and knowledge that will make a positive difference to the children's academic outcomes.

According to Bandura's (1997) self-efficacy theory, an individual sense of self-efficacy is influenced by multiple factors. Among them, mastery experiences are the most effective way to generate a strong sense of self-efficacy, because successful experiences in producing desired outcomes builds confidence in one's capability to influence events and achieve one's goals. Thus, PSE is likely to increase as parents gain experiences in successfully aiding their children's academic learning. This relationship may, however, work both ways. As children achieve more academically, parents may feel a stronger sense of efficacy. Furthermore, the extent of the link between PSE and children's academic learning may be more salient in some communities and cultures than in others (Hoover-Dempsey & Sandler, 1997). For example, one study examined PSE cross-culturally and found that Asian American parents were less confident about their ability to help with their children's schoolwork than European American parents (Okagaki & Frensch, 1998). This association may have been because these Asian American parents were less familiar with the American educational system and did not know how to help with their children's schoolwork. Past investigations have also found that Asian American parents, especially Chinese American parents, were more likely to be involved in children's schoolwork indirectly (e.g., providing extra homework for children to complete and setting time limits for playing) than European American parents (Chao, 2000). Perhaps Chinese American parents feel less efficacious about helping with

children's schoolwork directly, but more efficacious about helping it indirectly. Overall, little is known about the relationship between the efficacy beliefs of Chinese immigrant parents and their children's success in school. This makes research in this area warranted.

Relation of parental self-efficacy to children's participation in family rituals and routines. Studies examining PSE and its influence on parenting practices have suggested that PSE is a strong positive predictor of parental involvement in children's home-based learning (Anderson & Minke, 2007; Deslandes & Bertrand, 2005; Green, Walker, Hoover-Dempsey, & Sandler, 2007). Specifically, the more confidence parents have about their effectiveness in helping children improve academically, the more they persist in their involvement (Hoover-Dempsey et al., 2001). Nevertheless, these studies have mainly focused on parental involvement in children's home-based learning and in children's school-related activities. There are different ways that parents can support children's academic learning at home, other than through direct involvement. For example, parents may help their children to develop good learning habits through children's engagement in family routines (Xu & Corno, 1998). Moreover, parental encouragement to children to do homework at a regular time may also be a way to promote children's SRL skills (Hoover-Dempsey et al., 2001).

More importantly, Spagnola and Fiese (2007) have proposed that parental efficacy in organizing FRR is one mechanism underscoring the creation of predictable routines and meaningful rituals. As parents feel efficacious in creating such rituals and routines, they are likely to create more rituals and routines for their children. As a result, children's participation in rituals and routines increases. Although Spagnola and Fiese's

notion of parental efficacy differs from PSE in the cognitive domain, both reflect parental beliefs about whether their actions will support their children's development. It is reasonable to assume that PSE exerts a positive influence on children's participation in FRR in much the same way as parental efficacy. This dissertation examines the relationship between PSE and the participation of Chinese American children in FRR. This examination provides insight into how parental efficacy beliefs direct and guide family organization of Chinese American children's responsibilities and activities in the context of family rituals and routines.

Relation of parental self-efficacy to children's self-regulated learning. The relationship between PSE and children's SRL found in inner-city African American families (Ardelt & Eccles, 2001) was meditated by promotive parenting practices (e.g., parental encouragement, parent-child collaboration, and parental involvement in out-of-school activities). For Ardelt and Eccles, efficacious parents were likely to exhibit the type of parenting practices that engaged children in activities to develop their cognitive skills and interests. In turn, these practices increased the children's chances of academic success. In addition to the indirect influence of PSE on children's cognitive skills, PSE may exert direct influences as well. For example, parents with a high sense of efficacy were likely to serve as role models for their children, who would then adopt their parents' attitudes, strategies, and thinking (Eccles, et al., 1993). Taken as a whole, the studies reviewed above suggest that PSE has a positive influence on children's SRL. The current dissertation examines this connection in immigrant Chinese families. This examination allows us to compare the influences of children's participation in family rituals and

routines on their SRL and shed light on the relative contributions of PSE and children's participation.

The Conceptual Model

The literature reviewed above suggests that both PSE and children's participation in FRR play an important role in children's development of SRL. In turn, children's development of SRL may predict their future academic achievement. The hypothesized path model for this dissertation is displayed in Figure 1. As shown in Figure 1, the model depicts the relationship between PSE, children's participation in FRR, and SRL strategies. The model also depicts the relationship between children's SRL strategies and academic achievement in five domains. According to this model, the child's grade level, the PSE, the six family ritual variables, and the four family routine variables are the exogenous (independent) variables. Academic achievement is the endogenous (dependent) variable. Children's SRL strategies serve as both an exogenous and an endogenous variable. The boxes and circles in Figure1 are connected by either double-headed arrows or single-headed arrows. The double-headed arrow represents correlations or covariance between variables; each single-headed arrow represents a unidirectional path. Circles represent latent variables. The model in Figure 1 shows that children's participation in FRR is hypothesized to have direct effects on children's SRL strategies. PSE is hypothesized to have both direct and indirect effects on children's SRL strategies. The indirect effect is mediated by the children's participation in FRR. Children's SRL strategies are hypothesized to have direct effects on their academic achievement. In addition, a

correlation is included in the path model: PSE and children's participation in FRR are hypothesized to be correlated.

Aims and Hypotheses

In order to understand how immigrant Chinese families structure, manage, and organize their children's everyday life in ways that support their development of SRL during the early school years, four main questions were investigated: 1) How do children's SRL strategies relate to their grade level and academic achievement?; 2) How does children's participation in family rituals and routines relate to their grade level and SRL strategies?; 3) How does parents' self-efficacy influence their children's participation in family rituals and routines, and does this influence differ across the two grades levels?; and 4) What are the relative contributions of parental self-efficacy and children's participation in family rituals and routines to children's SRL strategies?

Hypothesis 1: Chinese American Children's Self-Regulated Learning Strategies and the Relationship of Learning Strategies to Grade Level and Academic Achievement

Grade-related differences in Chinese American children's self-regulated learning strategies. In order to understand early school-age Chinese American children's SRL skills, the first step is to examine the differences in these children's SRL skills between first grade and fourth grade. Children's SRL emerges at age 3 or 4 (Whitebread et al., 2005). Between ages 5 and 7, children show an increasing ability to use some SRL skills, such as self-control, self-evaluation, and decision-making (Bronson, 2000). Beginning in third grade, children's SRL become more systematic, strategic, and advanced, as reflected in their ability to complete short assignments independently

(Demetriou, 2000). Although no research has examined young Chinese children's SRL strategies, recent studies have found that Chinese adolescents became better at utilizing SRL strategies as they age (Law et al., 2008). Thus, Chinese American young children are likely to become more adept at utilizing SRL strategies as they get older.

Hypothesis 1a: Chinese American fourth graders are expected to utilize more SRL strategies than Chinese American first graders.

Chinese American children's self-regulated learning strategies and academic achievement. In order to understand the role of Chinese American children's SRL strategies in explaining their achievement, the relation between these children's SRL strategies and academic achievement must be examined. The relationship between SRL strategies and academic achievement has been well-documented in past research. Adolescents who utilize more SRL strategies (e.g., organization, memorization, self-reflection, planning, monitoring, and help seeking) are more likely to have higher scores on their academic performances (Nota et al., 2004; Veenman, et al., 2004; Wang & Pomerantz, 2009). This positive relationship was found in pre-adolescents (Fuchs et al., 2003), and in Chinese adolescents (Law et al., 2008). Moreover, one study examining the role of SRL in economically at-risk children found that children with better SRL have more gains in achievement scores from kindergarten to first grade and from second grade to third grade (Howse et al., 2003). Although there is no direct evidence regarding the influence of SRL strategies on normal children's academic achievement during the early school years, the discussion above suggests a positive relationship.

Hypothesis 1b: Chinese American children who are better at SRL strategies are more likely to achieve academically. As Hypothesis 1a postulates, this positive relation between SRL strategies and academic achievement is expected to increase as Chinese American children advance to a higher grade level.

Hypothesis 2: Chinese American Children's Participation in Family Rituals and Routines and the Relationship of Participation to Grade Level and Self-Regulated Learning Strategies

Grade-related differences in Chinese American children's participation in family rituals and routines. In order to understand how everyday family opportunities may contribute to young Chinese American children's SRL, it is necessary to investigate whether these family opportunities differ across grade levels. Preschoolers have been found to be better than infants and toddlers at participating in FRR, and in turn, parents initiate and organize more FRR for these preschoolers (Fiese, 1993). As children move from the preschool to elementary school, their participation in FRR becomes more frequent (Fiese et al., 2002). Although there is no direct evidence of age-related differences in Chinese American children's participation in FRR, past studies found that Chinese immigrant and American parents tended to involve their children in more academic-related activities, such as joining afterschool programs, provision of extra workbooks, and visiting bookstores and libraries regularly as the children get older (Hustinger, Jose, Larson, Krieg, & Shaligram, 2000). Therefore, it is likely that Chinese American children will take part in more FRR as they get older.

Hypothesis 2a: Chinese American fourth graders' participation in family rituals and routines is expected to be more frequent than Chinese American first graders' participation.

In addition to developmental differences in children's participation across grade levels, their participation in the types of family rituals and routines may also differ. Given that the Chinese culture emphasizes self-discipline, effort, and study (Li, 2003, 2005) along with family harmony within the social hierarchical structure (e.g., obedience to parents or authority figures) (Chan & Chen, 2011), immigrant Chinese families may initiate and organize certain types of family rituals and routines that reflect these values, such as homework and discipline routines, and culturally-valued rituals. Parmar, Harkness, and Super's (2008) study partly supported this view. Specifically, they found that Chinese American children between the ages of 3 and 6 participated less in household chores, and spent more time in academic-related activities (e.g., learning letters, playing with math games, and working with computers) than European-American children. Moreover, East Asian adolescents were found to spend more daily time studying than European-American adolescents (Larson &Verma, 1999). Thus, Chinese American children may be more likely to participate in certain types of rituals and routines than other types of rituals and routines.

Hypothesis 2b: The participation of Chinese American children in homework is expected to be the most frequent, whereas the participation of Chinese American children in household chores is expected to the least frequent, regardless of their grade levels.

The relationship of Chinese American children's participation in family rituals and routines to self-regulated learning strategies. In order to understand familial contributions to young Chinese American children's SRL, the relationship between children's participation in FRR and their SRL strategies must be examined. According to Rogoff et al.'s (2007) view that cognitive development occurs as children participate in everyday routines and practices organized by culture members, children with more opportunities to participate in activities and routines involving academic learning are more likely to develop various academic-related skills (e.g., reading skills, SRL strategies) that they can adapt to different circumstances. For example, past research found that children's participation in joint book reading was positively associated with literacy development (Fiese, Eckert, & Spagnola, 2005; Serpell, Sonnenschein, Baker, & Ganapathy, 2002). Moreover, the participation of economically at-risk children in mealtime and bedtime routines was found to be positively associated with their attendance in a Head Start program (Keltner, 1990). In addition to examining the influence of children's participation in family routines on academic achievement, Fiese (2002) found that families with a long-term commitment to rituals had children earning high scores in standard academic tests. Although there is no study examining the relationship between children's participation in family rituals and routines and SRL strategies, it is known that both children's participation and SRL strategies are positively associated with academic achievement. Given that children's participation in FRR may promote self-regulated skills (Sytsma et al., 2001), it is expected that children's

participation in FRR will exert a positive influence on their SRL strategies. Moreover, as Hypothesis 2a postulates, this positive influence may also increase as children age.

> ***Hypothesis 2c:*** Chinese American children's increased participation in family routines and rituals is expected to have a positive influence on their SRL strategies. This positive influence is expected to be greater in fourth graders than in first graders.

In addition, the types of family rituals and routines that Chinese American children take part in may exert different influences on their SRL. Because Chinese culture is rooted in Confucianism which emphasizes the values of education, self-improvement, self-control, and discipline (Chan & Chen, 2011), participation of Chinese American children in particular types of rituals and routines may exert more influence on their SRL strategies than their participation in other types of rituals and routines. For example, Chinese American immigrant parents were found to provide more educational materials for their children than European American parents (Hustinger et al., 2000), and a recent study found that following a homework routine could promote adolescents' SRL strategies (Zimmerman & Kitsantas, 2005). Moreover, Chinese American adolescents with strong feelings of belonging to a Chinese group were found to place a strong value on academic success, suggesting that these adolescents were more motivated to learn (Costigan et al., 2010). Consequently, these motivated adolescents were found to have an increased capacity to utilize SRL strategies as they grew older (Zhong, Chen, & Zhou, 2010). Given that participation in family rituals creates stronger bonds between family members (Fiese,

2006), children's participation in cultural traditions may enhance children's feeling of belonging, and later promote SRL strategies.

> ***Hypothesis 2d:*** As Hypothesis 2b postulates, the link between children's participation in homework routines and SRL strategies is expected to be the strongest whereas the link between children's participation in household chores and SRL is expected to be the weakest.

Hypothesis 3: The Influence of Parental Self-Efficacy on Children's Participation in Family Rituals and Routines

In order to understand how everyday opportunities experienced by Chinese American children at home may contribute to their SRL, it is critical to understand the factors that may influence these opportunities. Fiese and colleagues (Spagnola & Fiese, 2007) have proposed that parental efficacy in organizing FRR has a positive influence on children's participation in rituals and routines. Parents who feel more efficacious are more likely to engage their children in FRR. As a result, children's participation increases. As discussed earlier, PSE and parental efficacy in organizing FRR may exert similar influences on children's participation in FRR. Given that parents with a strong sense of efficacy are more likely to be involved in children's home-based learning (e.g., helping children study for a test, helping children with their homework, and helping children practice spelling) (Hoover-Dempsey et al., 2001), it is likely that parents who feel more efficacious in helping their children succeed in school will be more likely to engage these children in FRR that promote academic learning. As a result, children's participation in these rituals and routines increases.

Additionally, Spagnola and Fiese (2007) have suggested that the relationship between parental efficacy in organizing FRR and their children's participation in these rituals and routines is transactional. That is, as a child's competence in participating in FRR increases, parental efficacy in organizing them increases. This transactional relationship is also likely for the link between PSE and children's participation in FRR. Given that children's participation in FRR increases as they move from preschool to elementary school (Boyer & Lienard, 2006; Fiese et al., 2002), the relationship between PSE and children's participation is likely to increase as well, as they move to a higher grade level.

> ***Hypothesis 3:*** PSE is expected to exert a positive influence on the children's participation in family rituals and routines. Parents who feel more efficacious are more likely to have their children participating in family rituals and routines. Moreover, these positive influences are expected to increase between the two grade levels.

Hypothesis 4: The Relative Contributions of Parental Self-Efficacy and Children's Participation in Family Rituals and Routines to Children's Self-Regulated Learning Strategies

In order to understand familial contributions to early school-age Chinese American children's SRL, it is important to compare factors that play a role in promoting children's SRL. Chinese immigrant parents place a high value on their children's education (Chao & Tseng, 2002). For Chinese immigrant parents, a primary goal in rearing their children is to help them succeed in school, because children's academic

success is closely tied to family honor and good parenting (Chao, 1995). Not surprisingly, Chinese immigrant parents invest a lot of time, effort, and money in their children's educations (Li, 2004). Moreover, Chinese parents are likely to support early learning in literacy and mathematics in order to give their children a head start in the competition for academic success (Peng & Richey, 2007; Vaughan, 1993), even before the children start formal schooling. Thus, Chinese immigrant parents are likely to center their children's lives on academic learning (Okagaki, 2001). As discussed earlier, one way that parents engage in their children's academic learning is through the organization of FRR. As children participate in these rituals and routines, they develop various academic skills (e.g., SRL strategies) and practice these skills within the context of FRR. Given that older children have more opportunities than younger children to participate in various types of FRR (Fiese, 1993), older children are likely to have more opportunities to practice SRL strategies than younger ones.

In addition to the contribution of children's participation in FRR, PSE may also contribute to children's SRL strategies. As Hypothesis 3 postulates, PSE may exert an indirect influence on children's SRL strategies through the children's participation in FRR. Moreover, PSE may exert another type of indirect influence on the children's SRL strategies because efficacious parents are more sensitive to their children's learning needs (Hoover-Dempsey & Sandler, 1997), and thus these parents are more likely to provide support tailored to their children's needs. For example, when working with children to complete a cognitive task, parents may teach these children SRL strategies by presenting them opportunities to practice emerging SRL strategies (Neitzel & Stright, 2003; Stright

et al., 2001). Because PSE may exert an indirect influence on children's SRL strategies, PSE is likely to contribute less to the SRL strategies than does children's participation in FRR.

Hypothesis 4: PSE is expected to contribute less to children's SRL strategies than children's participation in family rituals and routines, regardless of children's grade level.

CHAPTER 2

Research Methods

Participants

Participants in this study were 154 Immigrant Chinese parents of first- or second-generation children between the ages of 6 and 10. Seventy-six participants were parents of first graders (M = 6.48, SD = .44), including 38 girls and 38 boys, and 78 participants were parents of fourth graders (M = 9.46, SD =.43), including 37 girls and 41 boys. A random linear regression power analysis conducted in G*power using a suggested moderate effect size of .30, α = .05, two-tailed test, and power of .80 concluded that a sample size of 76 participants would be sufficient in each age group (Cohen, 1988). Participants were recruited through snowball sampling in Southern California and advertisements posted on a Chinese online community. All participants were self-identified as ethnic Chinese. Among the participating immigrant Chinese parents, 11.7% of parents identified their children as Chinese immigrants, 70.8 % of parents identified their children as Chinese Americans, and 17.5 % of parents identified their children as Americans. Of the 154 participants, 132 were mothers and 22 were fathers.

Procedure

An online recruitment flyer (see Appendix A) was posted on the Chinese online community: www.mitbbs.com. The same recruitment flyer was also distributed to Chinese parents at Chinese Saturday and Sunday schools, Chinese churches, and through snowball sampling. This flyer was used to invite immigrant Chinese parents to participate in this study, to provide the information these parents needed to understand the study, and

to provide the investigator's contact information. After contacting the investigator, parents were asked whether they were ethnic Chinese who were born outside the United States, and if they had a child attending either first grade or fourth grade through email. Only parents who answered "Yes" to both questions were eligible to participate in this study. Qualified parents were given an online link that directed them to an informed consent, and then led to nine sets of multi-point rating questionnaires on a secured website. Questionnaires took an average of 20 - 30 minutes to complete. A $10 check was mailed to parents who completed all questionnaires as compensation for their participation. All aspects of the research and procedure were approved by the Institutional Review Board for human subjects participation at the sponsoring university.

Measures

All measures in this study were based on parental reports. Table 1 lists the questionnaire items, constructs contained within each measure, and the Cronbach Alphas of each construct. All measures (see Appendix B – J) were originally developed in English. These measures were translated into Chinese, and then back to English by the author and her research assistant who are fluent in both English and Chinese. This back-to-English translation method was used to examine whether the original English version and the translated English version were equivalent. Any inconsistencies between the two versions were discussed and addressed by revising the translated Chinese version to assure that the translated Chinese version measured the same constructs as the English version.

Participating parents were asked to complete questionnaires about family background, parental expectations of school attainment and children's SRL, parental level of acculturation, parental self-efficacy in helping children achieve in school, children's participation in family rituals and routines, children's effortful control, SRL strategies, and academic performances in mathematics, writing, reading, social science, overall performance.

Family demographics (Appendix B). This measure consisted of 17 questions. Of the 17, 16 questions were developed for this study to assess the participating families' demographic information. The last question was adopted for this study from prior research to assess participating parents' cultural identification by asking them to rate the strength of Chinese and American culture as well as the language they speak most at home (Benet-Martínez, Leu, Lee, & Morris, 2002). Parents reported on each child's grade level (first grade or fourth grade), age, gender (male or female), generation status (born in the United States or born outside the United States), school attendance in the United States, learning disability, attendance in Individualized Education Plan (IEP), older siblings, and ethnic identity (Chinese immigrant, Chinese American, or American). When a child is identified as having a learning disability, an IEP is developed for the child to help him or her reach learning goals. Parents also provided information about their gender (male or female), their relationship to the child, marital status (married, single, divorced, separated, or widowed), years of formal education (junior high or middle school, high school diploma, associate's degree, bachelor's degree, or master's degree or doctorate degree), employment status for both the participating parents and

their spouse (full-time, part-time, or not applicable), annual household income (less than $30,000, between $30,000 and $50,000, between $50,000 and $100,000, or more than $100,000), and cultural identification.

Parental expectations (Appendix C). Recent research suggests that parental expectations of school attainment are the most important predictor of Asian American children's academic achievement (e.g., Costigan, et al., 2010; Yamamoto & Holloway, 2010). Given the significant positive relation between children's SRL and academic achievement (Zimmerman & Schunk, 2001), parental expectations of school attainment may exert similar positive effects on children's development of SRL. Moreover, parental expectations of children's development also play a significant role in their children's opportunities to develop self-regulated skills (e.g., Gauvain & Perez, 2005; Hoover-Dempsey & Sandler, 1997).

This measure consisted of three questions. One question was adopted for this study to assess parental expectations of their children's school attainment (U.S. Department of Education, 2001). Two other questions were developed for this study to assess parental expectations of children's development of SRL. A sample question is "How far in school do you realistically expect your child to go, not how far do you hope the child will go?" Participants responded to this question using a 6-point rating scale (1 = *to receive less than a high school diploma*, 6 = *to finish a PhD, MD or other advanced degree*). Other sample questions include "At what age you expect your child to become a self-regulated learner?" and "Do you expect your child to be a self-regulated learner now?"

Parental level of acculturation (Appendix D). Acculturation refers to the extent to which individuals negotiate between the host-culture and the culture of origin, and adapt host-culture values, customs, and attitudes (Gim Chung, Kim, & Abreu, 2004). Past research has found that Mexican parents who were more acculturated to values of the United States were more likely to expect their children to participate in planning-related activities at younger ages than parents who were less acculturated (Savage & Gauvain, 1998). Similarly, the acculturation level of Chinese immigrant parents may also influence expectations of their children's development of SRL, and thus influence the children's opportunities to develop SRL.

The parents' level of acculturation was assessed by using *the Asian American Multidimensional Acculturation Scale-European Americans Subscale* (AAMAS-EA; Gim Chung et al., 2004). This subscale consists of 15 items and uses a 6-point, Likert-type scale ranging from 1 (*not very much*) to 6 (*very much*). It assesses four dimensions of acculturation: cultural identity, language usage, cultural knowledge, and food consumption. Sample items include "How knowledgeable are you about the culture and traditions of European American mainstream groups?" and "How much do you feel you have in common with people from European American mainstream groups?" Parents were asked to indicate their choice of answer referencing European American as the reference group. For each parent, his or her responses to all 15 items were summed. A total score was given to each parent. This total score was used in subsequent data analysis. The total score was then divided by the total number of items (15) to give each parent an average score for the Tables. Low total scores indicated a high level of adherence to

Asian values, and high total scores indicated a high level of acculturation to European American mainstream. This scale was normed on a large Asian American sample with strong validity and reliability (Gim Chung et al., 2004), and demonstrated acceptable internal consistency (Cronbach's α = .81). The test-retest reliability over a 2-week period was .78 (Gim Chung et al., 2004). The subscale in this study has demonstrated excellent internal consistency (Cronbach's α = .92).

Parental self-efficacy (Appendix E). Parents' self-efficacy in helping children succeed in school was assessed with a scale developed by Hoover-Dempsey et al. (1992). This scale consisted of seven items that asked about parents' sense of effectiveness in improving their children's school performances. Sample items included "I know how to help my child do well in school," and "I feel successful about my efforts to help my child learn." Parents responded to each item using a 6-point, Likert-type scale ranging from 1 (*disagree very strongly*) to 6 (*agree very strongly*). The scores of negatively worded items were reversed. For each parent, his or her responses to all seven items were summed. A total score was given to each parent. This total score was used in subsequent data analysis. The total score was then divided by the total number of items (7) to give each parent an average score for the Tables. High total scores indicated perceived high efficacy in helping children perform in school. Low total scores indicated perceived low efficacy in helping their children perform in school. This scale demonstrated good reliability (Cronbach's α = .81).

Children's participation in family rituals (Appendix F). Family rituals were assessed by using a modified version of *Family Ritual Questionnaires* (FRQ; Fiese &

Kline, 1993). This scale consisted of 36 items that asked parents about family rituals occurring in six different settings: dinnertime; weekends; vacation; annual celebrations (e.g., birthdays, and anniversaries); religious holidays (e.g., Christmas, Easter, or Thanksgiving); and cultural and ethnic traditions (e.g., naming ceremonies, marriage ceremonies, and funerals). The scale also assessed six dimensions of family rituals: occurrence; roles; routines; expectations; deliberateness; and affect. The dimensions of affect and continuation from the original version of the FRQ were not included in this study. The dimension of "Occurrence" asked about the frequency of an activity. The dimension of "Roles" asked about participants' assigned roles and duties during an activity. The dimension of "Routines" measured how regularly an activity was conducted. The dimension of "Expectations" assessed participants' expected attendance in an activity. The dimension of "Deliberateness" measured participants' preparation and planning associated with an activity. Finally, the dimension of "Symbolic significance" asked about the meaning of an activity. Sample items included, "Our family regularly eats dinner together;" "In our family, we feel that it is important to spend time together on the weekends;" "In our family, we do little planning before our vacation;" "Our family has few yearly celebrations;" "In our family, everyone is expected to be there during religious holidays;" and "Our family observes cultural traditions." Parents rated each item on a 3-point, Likert-type scale ranging from 1 (*not at all true*) to 3 (*very true*). The scores of negatively worded items were be reversed. For each parent, his or her responses to all 36 items were summed. A total score was given to each parent. This total score was used in subsequent data analysis. The total score was then divided by the total number of items

(36) to give each parent an average score for the Tables. Moreover, each parent's responses were summed for each setting. A total score for each setting was given to each parent. These total scores were also used in subsequent data analysis. High total scores reflected more frequent rituals. For example, if the total score of Child A in participating in the dinnertime ritual is 15, and the total score of Child B in participating in the dinnertime ritual is 9, Child A's participation in dinnertime ritual is more frequent than that of Child B. This scale demonstrated acceptable internal consistency (Cronbach's α = .52 to .90), and the test-retest reliability over a 4-week period was .88 (Fiese & Kline, 1993). This scale has also indicated acceptable internal consistency (Cronbach's α = .62 to .75) with Asian American adolescents (Baxter & Clark, 1996). In this study, the scale displayed acceptable internal consistency (Cronbach's α = .52 to .87).

Children's participation in family routines (Appendix G). Family routines were assessed by using the *Children Routine Questionnaire* (CRQ; Sytsma et al., 2001). This scale consists of 35 items and measures four dimensions of children's daily routines: daily living routines; household responsibilities; discipline routines; and homework routines. Sample items included, "My child picks up dirty clothes after changing;" "My child knows what will happen if he or she doesn't follow parent instructions or rules;" and "My child studies for tests (e.g., weekly spelling test)." Parents responded to each item using a 5-point, Likert-type scale ranging from 0 (*never*) to 4 (*nearly always*). For each parent, his or her responses to all 36 items were summed. A total score was given to each parent. The total score was used in later data analyses. The total score was then divided by the total number of items (36) to give each parent an average score for the

Tables. Moreover, each parent's responses were summed for each type of routine. A total score for each type of routine was given to each parent. This total score was also used in subsequent data analysis. High total scores indicated more frequent routines. For example, if the total score of Child A in participating in homework routines is 12, and the total score of Child B in participating in homework routines is 18, Child B's participation in homework routines was more frequent than that of Child A. This scale has demonstrated good psychometric properties with good internal consistency (Cronbach's α = .79 - .83), and adequate construct validity. This scale was also strongly correlated with measures of family routines and child behavior problems (Sytsma et al., 2001; Bridley, & Sara Sytsma, 2012). The test-retest reliability over a 4-week period was .86 (Sytsma, et al., 2001). The scale in this study also demonstrated acceptable internal consistency (Cronbach's α = .65 - .91).

Children's effortful control (Appendix H). Past research has documented that a child's personal competencies play an important role in their academic achievement. For example, the ability to focus and to inhibit inappropriate behaviors has helped children function competently within the classroom (Blair, 2002). It is likely that children's attention and inhibitory control may contribute to their SRL and academic achievement in this study as well.

Children's attention and inhibitory control were assessed by measuring their effortful control. *Effortful control* refers to the ability to control or regulate one's responses to external stimuli (Capaldi & Rothbart, 1992). Children's effortful control was assessed by *the Early Adolescent Temperament Questionnaire-Parent Report* (EATQ-P;

Capaldi & Rothbart, 1992). This scale consists of 62 items and measures 10 dimensions of temperament related to the self-regulation in adolescents (e.g., activation control, affiliation, attention, fear, frustration, high intensity pleasure, inhibitory control, and shyness) and two dimensions of behavior (e.g., aggression and depressed mood). Although this measure was designed to assess children's temperament between the ages of 9 and 15, Valiente and colleagues (Valiente, Lemery-Chalfant, Swanson, & Reiser, 2008) used the same scale in children from aged 7 to 12, and formed a single composite of effortful control by combining three subscales: Attention, Activation Control, and Inhibitory Control. The composite showed good internal consistency (Cronbach's α = .89). Accordingly, the current study only used the Attention, Activation Control, and Inhibitory Control subscales of the EATQ. Additionally, the EATQ has been translated into Chinese and it has been used with Chinese adolescents that range in age from 11 to 15 years (Zhang, Shen, & Gao, 2008). The Chinese version of EATQ demonstrated acceptable internal consistency (Cronbach's α = .61 - .78). Parents responded to items on a 5-point, Likert-type scale (1 = *almost always untrue*, 5 = *almost always true*). Sample questions include: "Has a hard time finishing things on time;" "When interrupted or distracted, forgets what s/he was about to say;" and "Is good at keeping track of several different things that are happening around her/him." The scores of negatively worded items were be reversed. For each parent, his or her responses to all 18 items were summed. A total score was given to each parent. The total score was then divided by the total number of items (18) to give each parent an average score. This average score was used for both subsequent data analysis and the Tables. Children with higher mean scores

have a better effortful control. The subscale in this study demonstrated good internal consistency (Cronbach's α = .86).

Children's self-regulated learning strategies (Appendix I). Children's self-regulated learning strategies were measured by the *Motivated Strategies for Learning Questionnaires -Chinese Version* (MSLQ-CV; Rao & Sachs, 1999). This scale was developed to measure junior high school students' self-regulated learning strategies (Pintrich & De Groot, 1990). It consists of 44 items and taps three motivational components (self-efficacy, intrinsic value, and test anxiety) and two self-regulated learning strategies (cognitive strategy use and self-regulated behaviors). This scale has been used in Chinese children as young as fourth grade (Mok, Fan, & Pang, 2007). The MSLQ is a reliable, valid, and efficient measure with strong consistency (Cronbach's α = .62 - .93 for the motivational subscales, and Cronbach's α = .52 - .80 for the self-regulated learning strategies subscales) (Duncan & McKeachie, 2005). Rao and Sachs (1999) translated the MLSQ into Chinese and used it to examine 477 secondary school students. Using a confirmatory factor analysis, they suggested a modified five-factor model that differs in the number of self-regulation factors from the original MLSQ. The MSLQ-CV has resulted in one self-regulation factor, instead of having two self-regulation factors as indicated in the origin MLSQ. A correlation of .97 was found between the Cognitive Strategy Use and Self-Regulated Behaviors subscales in Rao and Sachs' (1999) study. Thus, the two self-regulation subscales of the MLSQ-CV were combined into one factor - Strategy Use. The Strategy Use subscale consists of 18 items and measures SRL strategies including rehearsal, elaboration, organization, planning,

monitoring, persistence at a difficult task, and help seeking. The MLSQ-CV demonstrated acceptable internal consistency for the motivational subscales (Cronbach's α = .71 - .77) and for the self-regulated learning strategies subscales (Cronbach's α = .62 - .80). Because the current study was interested in the relation of children's participation in family rituals and routines to their self-regulated learning, only the Strategy Use subscale of the MLSQ-CV was used in this study. Participants responded to each item on a 7-point, Likert-type scale ranging from 1 (*not at all true*) to 7 (*very true*). For each parent, his or her responses to all 18 items were summed. A total score was given to each parent. This total score was used in subsequent data analyses. The total score was then divided by the total number of items (18) to give each parent an average score for the Tables. Children with higher mean scores have a better effortful control. Children with higher total scores on the Strategy Use subscale are better at self-regulated learning than children with lower total scores. Sample questions included " My child asks himself or herself questions to make sure he or she knows the materials being studied," " Even when study materials are dull and uninteresting, my child keeps working until he or she finishes," and "My child outlines the chapters in the textbook to help him or her study." For the purpose of the current study, the language was slightly modified on the MSLQ-CV to be more appropriate for parents of first graders and fourth graders. For example, "My child," "he or she," or "himself or herself," was replaced by "I" or "my." The word "class" was also replaced by the word "course." Additionally, the use of "My child," "he or she," and "himself or herself" was minimized by modifying the first independent clause to a subordinate clause in some items. For example, "When I study for a test, I try

to put together the information from class and from the textbook" was changed to "When studying for a test, my child tries to put together the information from class and from the textbook." The scale in this study showed excellent internal consistency (Cronbach's α = .94).

Children's academic achievement (Appendix J). Gilger (1992) examined the validity of parental reports on children's school performance from the first through the twelfth grades. He found that the overall accuracy of parental reports was moderate in effect size, suggesting an adequate validity in these parental reports. Because Chinese immigrant parents were recruited through different places in Southern California, it is likely that children may come from different schools that use different grading systems. In order to ensure that all the students were graded using the same scale in all the subjects, a 5-item questionnaire was developed for this study to assess children's school performances in five areas (mathematics, reading, writing, social science, and global achievement). Parents responded to each item on a 5-point, Likert-type scale ranged from 1 (*not very well at all*) to 5 (*very well*). The scale in this study demonstrated good internal consistency (Cronbach's α = .83).

CHAPTER 3

Results

The results section consists of six subsections. The first section discusses the overall data analysis plan. The second section presents the results of preliminary data analysis. The main purpose of the preliminary data analysis was to identify covariates, or additional factors, which might affect the expected relationships between the independent and dependent variables (see Figure 1). The independent variables included parental self-efficacy in helping children succeed in school (PSE), and children's participation in family rituals and routines (FRR). The dependent variables included children's self-regulated learning (SRL) strategies and academic achievement. The third section reports grade-related differences in children's SRL strategies, as well as the relationship between children's SRL strategies and their academic achievement. The fourth section reports grade-related differences in children's participation in FRR, as well as the relationship between children's participation and their SRL strategies. The fifth section analyzes the relationship between PSE and children's participation in FRR. The final section investigates the relative contributions of PSE and children's participation in FRR to their SRL strategies.

Data Analysis Overview

The goals of this dissertation were three-fold. The first goal was to determine whether Chinese American first graders and fourth graders differed significantly in: SRL strategies and participation in FRR. The second goal was to examine the relationship of children's SRL strategies to academic achievement. The third goal was to investigate

variables influencing children's SRL strategies and to compare the relative contributions of these variables to SRL strategies. To accomplish these goals, a preliminary data analysis was conducted first to identify possible covariates. Following the preliminary data analysis, an analysis of covariance (ANCOVA) was conducted to examine the influence of grade level on children's SRL strategies. Another ANCOVA was conducted separately to examine the influence of grade level on children's participation in FRR. To understand the ability of the independent variables to predict the dependent variables, a series of multiple hierarchical regressions was performed. These examined the relationships between PSE, children's participation in FRR, children's SRL strategies, and academic achievement with controlling for the effects of the covariates of the independent and dependent variables. To further understand the nature of these relationships, both Fisher's *z* tests and Hotelling's *t-squared* tests were conducted to compare these relationships across grade levels and to compare these relationships with one another. Finally, a Hotelling's *t-squared* test was performed to investigate the relative contributions of PSE and children's participation in FRR to children's SRL strategies.

Preliminary Data Analysis

The main goal of the preliminary data analysis was to identify possible covariates through examining the effects of demographic variables, social-cultural variables (e.g., parental cultural identification, parental level of acculturation, parental expectations of children's school attainment, and parental expectations of children's SRL), and children's effortful control on the independent and dependent variables as discussed in the first paragraph of the results section.

Before the preliminary data analysis was conducted, a principle-component analysis (PCA) with verimax rotation was performed on the four items (e.g., mathematics, reading, writing, and social sciences) comprising children's academic achievement. Because the overall performances may share the same variance with the academic achievement component, it was dropped out of the PCA analysis. Five empirical indices drawn from the sample's correlation matrix indicated that it was suitable for factor analysis: 1) the inter-correlations of all four items were .3 or higher; 2) the diagonals of the anti-image correlation matrix were all greater than .5; 3) the communalities were all above .3 (see Table 2); 4) the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .71, which met the commonly recommended criteria of .6 or above; and 5) Bartlett's test of sphericity was significant, X^2 (6) = 134.59, $p < .001$. The PCA suggested a one-factor solution with eigenvalues greater than 1.0, and this one-factor accounted for 55.90% of the variance in the academic achievement item scores. The one-factor component for Academic Achievement Scale was used in subsequent data analysis. Table 3 displays Pearson correlations and descriptive statistics associated with the Academic Performance Scale.

Because the participation of children in FRR was measured by two different questionnaires (with the FRQ (Family Ritual Questionnaire) assessing children's participation in family rituals and the CRQ (Child Routines Questionnaire) assessing children's participation in family routines), it was important to identify and compute composite scores for the factors underlying both the FRQ and CRQ. For this reason, the two questionnaires were combined into one questionnaire. A reliability test was

performed to examine the internal consistency of the combined questionnaire. Results indicated excellent reliability (72 items; $\alpha = .93$). One assumption that PCA requires is that the sample size, as indicated by the ratio of cases to variables, should be no lower than 5 (Bryant & Yarnold, 1995). The combined questionnaire, however, had a subjects-to-variables ratio equal to 2.12, suggesting that PCA was not suitable for extracting factors underlying the combined questionnaire. An alternative approach was undertaken. To compute composite scores for the combined questionnaire, parents' responses regarding each child's participation in family rituals and in family routines were converted to *z* scores. For each child, all *z* scores were added together, and were then divided by the total number of question items. As a result, an average *z* score was obtained for each child. In order to eliminate negative values, all average *z* scores were transformed to *t* scores. Levene's test (Levene, 1960) for equality of variances indicated equal variances across those *t* scores, F (1, 152) = 2.69, p = n.s. A Pearson correlation analysis revealed a strong positive relationship between the combined questionnaire and the FRQ, r (154) = .85, $p < .001$, and a strong positive relationship between the combined questionnaire and the CRQ, r (154) = .90, $p < .001$. These correlations indicate that these composite scores are reasonable indicators of the FRQ and of the CRQ.

The preliminary data analysis involved two steps. The first step used multivariate analysis of variance (MANOVA) to examine the effects of demographic variable on the independent and dependent variables. The second step employed a Pearson correlation analysis to examine the relationships of the sociocultural factors and children's effortful control to the independent and dependent variables.

Prior to the first step, the assumptions of MANOVA were tested. A series of Pearson correlation analyses was performed to examine the relationships between the independent and dependent variables. Results displayed in Table 4 revealed a moderate range of correlations (i.e., .25 - .85), suggesting the appropriateness of MANOVA for the first step of the preliminary data analysis. Although a total of 16 demographic variables were measured in this dissertation, this part of preliminary data analysis only investigated the contributions of children's gender, children's participation in Individualized Education Plan (IEP), presence of older siblings, parental education level, parents' gender, annual household income, parents' employment status, and parents' cultural identification to the independent and dependent variables. In particular, these variables are likely to interfere with our understanding of the hypothesized relationships between the independent and dependent variables. Examination of these variables allows us to identify the covariates that need to be controlled in subsequent analyses. Table 5 presents the percentages for the demographic variables. Table 6 presents the means, standard deviations, and ranges of the social-cultural variables, and children's effortful control. As mentioned in method section, the total scores of the independent and dependent variables were used in subsequent analyses, the average scores of the independent and dependent variables are presented in Table 7 to provide full report of the data. Further examination revealed that using the sum scores in the analyses did not produce different results from using the average scores.

A series of one-way MANOVAs was conducted to examine the effect of each demographic variable on the independent and dependent variables. Findings indicated no

main effects of children's gender, presence of older siblings, parents' gender, parents' level of education, or annual household income on the independent and dependent variables (see Table 8 for results of MANOVAs). For children's participation in IEP and parents' employment status, Box's Test of Equality indicated that variances across groups were not considered equal, and thus violated this assumption of MANOVA. Follow-up Pearson correlation analyses only revealed that children's participation in IEP was positively correlated with children's academic achievement, r (154) = .23, $p < .005$. Further exploratory analyses were also conducted to examine whether the sample of parents with IEP children differed from the sample of parents with non-IEP children on all the data. Results indicated that the two group differed significantly in parent gender, F (1, 152) = 4.34, $p < .05$, in parental employment status, F (1, 152) = 4.68, $p < .05$, in children's effortful control, F (1, 152) = 4.51, $p < .05$, and in children's academic achievement, F (1, 152) = 0.02, $p < .005$. Because neither parent gender nor parental employment status had significant contributions to the independent and dependent variables, and children's effortful control was neither an exogenous nor an endogenous variable, parents with IEP children were included in the full data set for all subsequent analyses except the analyses involving academic achievement. Because IEP is also a unique reflection of academic performance, and academic performance is served as an endogenous variable in this study, parents with IEP children were dropped from the analyses involving academic achievement.

The second step was to examine the relationships of the social-cultural variables and children's effortful control to the independent and dependent variables. A series of

Pearson correlation analyses was conducted. Results revealed that: 1) there was no significant relationship between parents' cultural identification and the independent and dependent variables; 2) parental expectations of children's school attainment were positively related to children's SRL strategies, r (154) = .23, $p < .005$, and academic achievement, r (154) = .18, $p < .05$; 3) parental expectations of children's SRL were negatively related to children's SRL strategies, r (154) = -.22, $p < .005$, and academic achievement, r (154) = -.18, $p < .05$; 4) parental level of acculturation was positively related to PSE, r (154) = .24, $p < .005$, children's SRL strategies, r (154) = .24, $p < .005$, academic achievement, r (154) = .26, $p < .001$, and participation in FRR, r (154) = .26, $p < .001$; and 5) children's effortful control was positively related to PSE, r (154) = .51, $p < .001$, children's SRL strategies, r (154) = .57, $p < .001$, academic achievement, r (154) = .54, $p < .001$, and participation in FRR, r (154) = .53, $p < .001$. Table 9 presents these correlations.

Pearson correlation analyses above suggest that parental expectations of children's school attainment, parental expectations of children's SRL, and parental level of acculturation are likely to influence our interpretation of the hypothesized relationships between the independent and dependent variables. As results, these variables were examined further. Descriptive statistics, presented in Table 6 showed that immigrant Chinese parents were not well acculturated to European American mainstream. The average parental acculturation level was 3.4 out of 6, with higher scores reflecting more acculturation to European American mainstream. About 80.5% immigrant Chinese parents also reported a strong Chinese affiliation, as presented in Table 5. Moreover, later

hierarchal regression analyses indicated that, when these variables were examined with children's effortful control, each of them had a rather insignificant or small contribution to the independent and dependent variables. Although these variables had small contributions, these variables were included in the full data set for all subsequent analyses to avoid possible confounds.

Given the findings from both the MANOVAs and Pearson correlation analyses, five covariates were identified: children's participation in IEP, parental expectations of children's school attainment, parental expectations of children's SRL, parental level of acculturation, and children's effortful control. These covariates were maintained in subsequent data analyses.

Chinese American Children's Self-Regulated Learning Strategies and the Relationship of Learning Strategies to Grade Level and Academic Achievement

Grade-related differences in Chinese American children's self-regulated learning strategies. A one-way analysis of covariance (ANCOVA) was conducted to test the hypothesis that there would be grade-related differences in Chinese American children's SRL strategies between first and fourth grades, after controlling for the effects of covariates. Levene's test of equality of error variances indicated the error variances of children's SRL strategies did not differ significantly as a function of grade level, F (1, 152) = .06, ns. Results of the ANCOVA indicated that there was no main effect of grade level on children's SRL strategies, F (1, 147) = .89, p = n.s. (see Table 10). Two of the covariates, parental expectations of children's school attainment and children's effortful control, significantly influenced children's SRL strategies, F (1, 147) = 5.53, $p < .05$, η^2

= .04, and F (1, 147) = 58.88, $p < .001$, $\eta^2 = .29$, respectively. That is, parental expectations explained 4% of variance in children's SRL strategies, and children's effortful control explained 29% of variance in children's SRL strategies. These results indicate that Chinese American children's SRL strategies were not significantly different between first grade and fourth grade.

The relationship of Chinese American children's self-regulated learning strategies to academic achievement. A series of hierarchical regressions was conducted to test the hypothesis that there would be a significant, positive relationship between children's SRL strategies and academic achievement, and this relationship would be stronger in fourth graders than in first graders. A preliminary analysis was performed to evaluate the co-linearity of the covariates, independent, and dependent variables. Results revealed that variance inflation factors (VIF) were all less than 2.0, suggesting that the estimated βs were well-established.

The first part of this research question addressed whether children's SRL strategies accounted for a significant amount of variability in their academic achievement, over and above that accounted for by covariates. A partial correlation analysis was performed and revealed a significant positive relationship between children's SRL strategies and academic achievement, r (147) = .23, $p < .005$. This was followed by a hierarchical regression analysis predicting academic achievement from the covariates and SRL strategies (see Table 11 for results). The results of step one indicated that the variance accounted for (R^2) by the first four covariates (e.g., parental expectations of children's school attainment, parental expectations of children' SRL, parental level of

acculturation, and children's effortful control) equaled .33 (adjusted $R^2 = .31$), which was significantly different from zero, F (3, 145) = 18.65, $p < .001$. Next, children's SRL strategies were entered into the regression equation on the second step. The change in variance accounted for (ΔR^2) was .03, which represented a statistically significant increase in variance accounted for over the step one model ($\Delta F = 6.99$, $p < .005$). One of the covariates, children's effortful control, were statistically significantly, $\beta = .37$, $p < .001$. Children's SRL strategy was also significant, $\beta = .22$, $p < .005$.

The second part of this research question addresses whether the predictive strength of children's SRL strategies to academic achievement differed across the two grade levels after controlling for the effects of covariates. In order to investigate this question, dummy variables were created for children's grade levels (1 = first grade and 0 = fourth grade), and then the product of Grade Level × SRL strategies was computed. A hierarchical regression was performed with the covariates entered into the regression equation on the first step. Children's dummy-coded grade levels, children's SRL strategies, and the product of the two were entered into the regression equation on the second step. Results are reported in Table 12. The results of step one indicated that the variance accounted for (R^2) by the first four covariates equaled .33 (adjusted $R^2 = .31$), which was significantly different from zero, F (3, 145) = 18.65, $p < .001$. Step two indicated a .04 change in variance for ΔR^2, which was a statistically significant increase in variance accounted for over the step one model ($\Delta F = 2.94$, $p < .05$). One of the covariates, children's effortful control, were statistically significant, $\beta = .36$, $p < .001$. The product of Grade Level × SRL strategies, however, was not statistically significant, β

= .12, p = n.s. This suggests that there was no grade-related difference in the relationship of children's SRL strategies and academic achievement. In summary, results of hierarchical regressions indicated that Chinese American children's SRL strategies predicted their academic achievement, over and above children's effortful controls. Further analyses revealed that the predictive strength of Chinese American first graders' SRL strategies to academic achievement did not differ from that of Chinese American fourth graders.

Chinese American Children's Participation in Family Rituals and Routines and the Relationship of Participation to Grade Level and Self-Regulated Learning Strategies

Grade-related differences in Chinese American children's participation in family rituals and routines. An ANCOVA was conducted to test the hypothesis that there would be grade-related differences in children's participation in FRR between first and fourth grades, after controlling for the effects of covariates. Levene's test of equality of error variances indicated that the error variances of children's participation in FRR differed significantly as a function of grade level, F (1, 152) = 9.79, $p < .005$, suggesting a violation of ANCOVA assumptions. To solve the issue of unequal variances, weighted least square analysis (WLS) was performed. The Levene's test of equality of error variances revealed equal variances in children's participation in FRR across the two grade levels, F (1, 78) = .91, p = n.s. Results (as reported in Table 13) indicated that there were no grade-related differences in children's participation in FRR, F (1, 73) = 2.28, p = n.s.

To understand the effects of grade level on children's participation in organized activities, an additional ANCOVA was conducted to examine the effects of grade level on children's participation in family rituals and in family routines. Results indicated that there was no main effect of grade level on children's participation in family routines, F (1, 147) = .004, p = n.s. Levene's test of equality of error variances, however, showed that the error variances of children's participation in family rituals differed significantly as a function of grade level, F (1, 152) = 6.89, p = .01, suggesting a violation of ANCOVA assumptions. Therefore, a WLS analysis was conducted. The Levene's test of equality of error variances indicated equal variances in children's participation in family rituals across the two grade levels, F (1, 70) = 2.40, p = n.s. The WLS analysis indicated that Chinese American first graders' participation in family rituals (M = 86.59, SD = 2.94) was significantly more frequent than Chinese American fourth graders' participation (M = 84.90, SD = 3.26), F (1, 70) = 4.13, $p < .05$, $\eta^2 = .06$. In other words, Chinese American children's grade level explained 6% of variance in their participation in family rituals. Results of ANCOVAs indicated that Chinese American first graders' participation in FRR was not significantly different from Chinese American fourth graders' participation. Follow-up analyses revealed that Chinese American first graders' participation in family routines was not significantly different from Chinese American fourth graders' participation, but the first graders' participation in family rituals was less frequent than the fourth graders' participation.

To examine the hypothesis that Chinese American children's participation in homework routines would be most frequent and their participation in household chores

would be the least frequent, paired samples *t*-tests were conducted to compare children's participation in different types of family routines. Results (as reported in Table 14) indicated that children's participation in homework routines occurred at a significantly higher frequency than their participation in household chores and discipline routines, t (153) = 9.37, $p < .001$, $d = .75$, and t (153) = 8.86, $p < .001$, $d = .71$, respectively. Children's participation in homework routines, however, did not differ significantly from their participation in daily life routines, t (153) = -1.41, p = n.s. Children's participation in household chores occurred at a significantly lower frequency than their participation in daily life routines, t (153) = -13.87, $p < .001$, $d = 1.12$. Children's participation in household chores, however, did not differ significantly from their participation in discipline routines, t (153) = .59, p = n.s. In addition, exploratory paired samples *t*-tests were conducted to examine children's participation in different types of family rituals. Results (as reported in Table 15) indicated that children's participation in dinner time rituals occurred at a significantly higher frequency than participation in vacation rituals, t (153) = 4.61, $p < .001$, $d = .37$, yearly celebrations, t (153) = 4.13, $p < .001$, $d = .33$, religious holidays, t (153) = 11.26, $p < .001$, $d = .90$, and cultural and ethnic traditions, t (153) = 7.02, $p < .001$, $d = .56$. Results of paired sample *t*-tests indicated that, for both Chinese American first graders and fourth graders, children's participation in homework routines was more frequent than their participation in either household chores or in discipline routines. Children's participation in household chores was less frequent than their participation in daily life routines. Further analyses revealed that children's

participation in dinner time rituals was more frequent than their participation in vacation rituals, yearly celebration rituals, religious holidays, or culture and ethnic traditions.

The relationship of Chinese American children's participation in family rituals and routines to self-regulated learning strategies. A series of hierarchical regressions was conducted to test the hypothesis that there would be a significant positive relationship between children's participation in FRR and their SRL strategies. A preliminary analysis evaluating the co-linearity of the covariates, independent, and dependent variables indicated that variance inflation factors (VIF) were all less than 2.0, suggesting that the estimate βs were well established.

The first part of the research question investigated whether children's participation in family FRR accounted for a significant amount of variability in their SRL strategies, over and above that accounted for by covariates. A partial correlation analysis resulted in a significant positive relationship between children's participation in FRR and their SRL strategies, r (147) = .30, $p < .001$. A hierarchical regression analysis predicting SRL strategies from the covariates and children's participation is reported in Table 16. The result of step one indicated that the variance accounted for (R^2) by the first five covariates equaled .39 (adjusted $R^2 = .37$), which was significantly different from zero, F (5, 148) = 18.68, $p < .001$. Next, children's participation in FRR was entered into the regression equation on the second step. The change in variance accounted for (ΔR^2) was equal to .05, which represented a statistically significant increase in variance accounted for over the step one model ($\Delta F = 13.65$, $p < .001$). Two of the covariates, parental expectations of children's school attainment and children's effortful control, were

statistically significant, $\beta = .15$, $p < .05$, and $\beta = .38$, $p < .001$, respectively. Children's participation in FRR was also statistically significant, $\beta = .27$, $p < .001$.

To understand the relationships between children's participation in different family activities and SRL strategies, hierarchical regressions were conducted. The first hierarchical regression examined the relationship between children's participation in family routines and SRL strategies. Results are presented in Table 17. Step one indicated that the variance accounted for (R^2) by the first five covariates equaled .39 (adjusted $R^2 = .37$), which was significantly different from zero, F (5, 148) = 18.68, $p < .001$. Next, for the second step, children's participation in family routines was entered into the regression equation. The change in variance accounted for (ΔR^2) was equal to .07, which was a statistically significant increase in variance accounted for over the step one model ($\Delta F = 18.85$, $p < .001$). Two of the covariates, parental expectations of children's school attainment and children's effortful control, was statistically significant, $\beta = .13$, $p < .05$, and $\beta = .37$, $p < .001$, respectively. Children's participation in family routines was also significant, $\beta = .31$, $p < .001$.

The second hierarchical regression examined the relationship between children's participation in family rituals and their SRL strategies. Results were presented in Table 18. Step one indicated that the variance accounted for (R^2) by the first five covariates equaled .39 (adjusted $R^2 = .37$), which was significantly different from zero, F (5, 148) = 18.68, $p < .001$. Next, children's participation in family rituals was entered into the regression equation on the second step. The change in variance accounted for (ΔR^2) was equal to .02, which was a statistically significant increase in variance accounted for over

the step one model ($\Delta F = 4.35$, $p < .05$). Two of the covariates, parental expectations of children's school attainment and children's effortful control, was statistically significant as well, $\beta = .15$, $p < .05$, and $\beta = .46$, $p < .001$. Children's participation in family rituals was also significant, $\beta = .15$, $p < .05$.

The third hierarchical regression compared the relative contributions of children's participation in family routines and in family rituals to SRL strategies. Results (as reported in Table 19) indicated that the change in variance accounted for (ΔR^2) by children's participation in family rituals was equal to 0, which was an insignificant increase in variance accounted for over children's participation in family routines ($\Delta F = .2$, p = n.s.).

In summary, results of hierarchical regressions indicated that children's participation in FRR predicted their SRL strategies, over and above the effects of parental expectations of children's school attainment and children's effortful control. Follow-up analyses revealed that children's participation in family rituals and in routines made unique contributions to their SRL strategies. Children's participation in family rituals, however, did not make any significant contribution to SRL strategies, over and above the contributions of children's participation in family routines.

The second part of the research question addressed whether the relationship between children's participation and SRL strategies increased as a function of grade level, after controlling for the effects of covariates. In order to investigate this question, the dummy-coded grade level variable, child's participation in FRR, and the product of Grade Level × Children's Participation were entered into the regression equation on the

second step. Results were reported in Table 20. Step one indicated that the variance accounted for (R^2) by the first five covariates equaled .39 (adjusted $R^2 = .37$), which was significantly different from zero F (5, 148) = 18.68, $p < .001$. Step two indicated the change in variance accounted for (ΔR^2) was equal to .06, which was a statistically significant increase in variance accounted for over the step one model ($\Delta F = 5.22$, $p < .005$). Two of the covariates, parental expectations of school attainment and children's effortful control, were statistically significant, $\beta = .15$, $p < .05$, and $\beta = .39$, $p < .001$, respectively. Children's participation was marginally significant, $\beta = .20$, $p = .07$. The product was statistically insignificant, $\beta = .69$, p = n.s., suggesting there were no grade-related differences in the relationship between children's participation in FRR and SRL strategies. This result indicated that the relationship between Chinese American children's participation in FRR and SRL strategies was not significantly different between first grade and fourth grade.

To understand the relationships between children's SRL strategies and their participation in different types of family rituals and routines, a series of linear regressions and Hotelling's *t-square* tests were performed (see Table 21 for correlations among these variables). A linear regression was first used to obtain the predicted participation for each type of FRR. A Pearson correlation analysis was then conducted to obtain the correlations between the predicted participation and children's SRL strategies. Finally, the calculated correlations were used in a Hotelling's *t-square* test to examine if these correlations differed from one another. Results indicated that none of these correlations significantly differed from one another.

The Influence of Parental Self-Efficacy to Children's Participation in Family Rituals and Routines

A hierarchical regression analysis was conducted to test the hypothesis that there would be a significant positive relationship between PSE and children's participation in FRR. A preliminary analysis evaluating the co-linearity of the dependent variables indicated variance inflation factors (VIF) which were all less than 2.0, suggesting that the estimate βs were well established.

The first part of the research question addressed whether PSE accounted for a significant amount of variability in children's participation in FRR over and above that accounted for by the covariates. Results are reported in Table 22. Step one indicated that the variance accounted for (R^2) by the first five covariates equaled .31 (adjusted R^2 = .28), which was significantly different from zero, F (5, 148) = 13.18, $p < .001$. Next, PSE was entered into the regression equation on the second step. The change in variance accounted for (ΔR^2) was equal to .06, which represented a statistically significant increase in variance accounted for over the step one model (ΔF = 15.22, $p < .001$). One of the covariates, children's effortful control, was statistically significant, β = .34, $p < .001$. PSE was statistically significant as well, β = .31, $p < .001$.

A series of follow-up hierarchical regression analyses was conducted to examine the influence of PSE to either children's participation in family rituals or children's participation in family routines, after controlling for the effects of the covariates. The hierarchical regression predicting children's participation in family rituals indicated that the variance (R^2) accounted for by the first five covariates equaled .20 (adjusted R^2 = .17),

a significant difference from zero, F (5, 148) = 7.28, $p < .001$. Next, PSE was entered into the regression equation on the second step. The change in variance accounted for (ΔR^2) was equal to .09, which represented a statistically significant increase in variance accounted for over the step one model (ΔF = 18.37, $p < .001$). One of the covariates, children's effortful control, was statistically significant, $\beta = .19$, $p < .05$. PSE was also statistically significant, $\beta = .39$, $p < .001$. Results are presented in Table 23.

The hierarchical regression predicting children's participation in family routines indicated that the variance (R^2) accounted for by the first set of covariates equaled .27 (adjusted $R^2 = .25$), which was significantly different from zero, F (5, 148) = 11.15, $p < .001$. Next, PSE was entered into the regression equation on the second step. The change in variance accounted for (ΔR^2) was equal to .02, which was a statistically insignificant increase in variance accounted for over the step one model (ΔF = 3.47, p = n.s.). One of the covariates, children's effortful control, was significant, $\beta = .39$, $p < .001$. PSE was marginally significant, $\beta = .16$, $p < .1$. Results of hierarchical regressions indicated that PSE predicted children's participation in FRR. Follow-up analyses revealed that PSE predicted children's participation in family rituals, but not children's participation in family routines. The differences in predictive strength of PSE to different types of family activities, however, do not mean PSE predicted one better than another. Results are presented in Table 24.

The second part of the research question addressed whether the predictive strength of PSE to children's participation in FRR increased as a function of grade level, after controlling for the effects of covariates. In order to investigate this question, the

dummy-code grade level variable, PSE, and the product of Grade Level × PSE were entered into the equation as the second step (after the covariates were entered into the equation as the first step). The results are reported in Table 25. Step one indicated that the variance accounted for (R^2) by the first five covariates equaled .31 (adjusted R^2 = .28), which was significantly different from zero, F (5, 148) = 13.18, p < .001. Step two indicated the change in variance accounted for (ΔR^2) was equal to .07, which was a statistically significant increase in variance accounted for over the step one model (ΔF = 5.32, p < .001). One of the covariates, children's effortful control, was statistically significant, β = .34, p < .001. PSE was also statistically significant, β = .37, p < .001. The product, however, was not statistically significant, β = -.31, p = n.s., suggesting there were no grade-related differences in the predictive ability of PSE on their participation in family rituals and routines. Results of hierarchical regressions indicated that the relationship between PSE and children's participation in FRR was not significantly different between first grade and fourth grade.

The Relative Contributions of Parental Self-Efficacy and Children's Participation in Family Rituals and Routines to Children's Self-Regulated Learning Strategies

A series of hierarchical regression analyses was conducted to examine the hypothesis that children's participation in FRR would contribute more to children's SRL strategies than PSE, after controlling the covariates. The hierarchical regression predicting children's SRL strategies indicated that the variance (R^2) accounted for by the first covariates equaled .39 (adjusted R^2 = .37), a statistically significant difference from zero, F (5, 148) = 18.68, p < .001. Next, PSE and children's participation in FRR were

entered into the regression equation on the second step. The change in variance accounted for (ΔR^2) was equal to .07, which represented a statistically significant increase in variance accounted for over the step one model ($\Delta F = 8.92$, $p < .001$.). Two of the covariates, parental expectations of school attainment and children's effortful control, were significant, $\beta = .16$, $p < .05$, and $\beta = .44$, $p < .001$, respectively. Both PSE and Children's participation in FRR had significant regression weights, $\beta = -.16$, $p < .05$, and $\beta = .32$, $p < .001$, respectively. Results were presented in Table 26.

The first research hypothesis was that the model including PSE would perform as well as the full model. After controlling for the covariates, the reduced model had $\Delta R^2 = .002$, which was a statistically insignificant increase in variance accounted for over the covariates ($\Delta F = .49$, p = n.s.). Two of the covariates, parental expectations of school attainment and children's effortful control, were significant, $\beta = .16$, $p < .05$, and $\beta = .55$, $p < .001$, respectively. The PSE had an insignificant regression weight, $\beta = -.06$, p = n.s.

The second hypothesis was that a model including children's participation in FRR would perform as well as the full model. After controlling for the covariates, the reduced model had $\Delta R^2 = .05$, which was a statistically insignificant increase in variance accounted for over the covariates ($\Delta F = 13.65$, $p < .001$). Two of the covariates, parental expectations of school attainment and children's effortful control, were significant, $\beta = .15$, $p < .05$, and $\beta = .38$, $p < .001$, respectively. Children's participation in FRR had a significant regression weight, $\beta = .27$, $p < .001$.

Finally, the predictive utility of the two reduced models was compared, using the Hotelling's *t*-test for non-independent correlations. The correlation between the two

models was r (154) = .53, $p < .001$. The model including children's participation in FRR accounted for significantly more variance than the model including PSE, t (151) = 2.88, $p < .001$. These results indicated that although children's participation in FRR and PSE made unique contribution to SRL strategies, children's participation in FRR made more contribution to their SRL strategies than PSE.

CHAPTER 4

Discussion

The overall goal of this dissertation was to investigate Chinese American children's everyday family experiences and how these experiences might support the development of learning skills in the academic domain. This dissertation also examined whether children's everyday family experiences differed across two grade levels: first grade and fourth grade. In order to examine the hypothesized relationships between the two grade levels, parental self-efficacy (PSE) in helping children succeed in school, children's self-regulated learning (SRL) strategies, children's participation in family rituals and routines (FRR), and academic achievement, covariates of these variables were identified. The covariates, which were reported by parents, included children's participation in an Individualized Education Plan (IEP), parental expectations of children's school attainment, parental expectations of children's SRL, parents' level of acculturation, and children's effortful control. After controlling the effects of covariates, results of this dissertation revealed the followings. First, parental reports of children's participation in FRR predicted parental reports of children's SRL strategies. Second, these learning strategies predicted parental reports of children's academic achievement. Finally, parental reports of PSE predicted children's participation in FRR. Nevertheless, the current study failed to identify any grade-related differences either in children's SRL strategies or in children's participation in FRR. The current study also failed to reveal any grade-related difference in the relationships between PSE, children's SRL strategies,

participation in FRR, and academic achievement. This section will discuss these results in greater detail.

Chinese American Children's Self-Regulated Learning Strategies and the Relationship of Learning Strategies to Grade Level and Academic Achievement

The test of Hypothesis 1a indicated that there were no grade-related differences in parental reports of Chinese American children's SRL strategies across the two grade levels. Two possible explanations are suggested. The first explanation discusses the role of Chinese culture values in promoting children's SRL strategies. The second explanation compares the role of children's participation in FRR with the role of SRL strategies in children's academic learning. The test of Hypothesis 1b indicated that parental reports of children's SRL strategies predicted parental reports of children's academic achievement, although the predictive strength of children's SRL strategies to academic achievement did not differ across the two grade levels. This section focuses on the significance of the results and on explaining these unexpected results.

Grade-related differences in Chinese American children's self-regulated learning strategies. Hypothesis 1a predicted that fourth graders would have better SRL strategies than first graders. Results indicated that SRL strategies were not significantly different between Chinese American first and fourth graders. Hypothesis 1a was not supported. One possible explanation for this unexpected finding may be the differences in the beliefs about learning between American and Chinese cultures. According to Li (2003), both cultures have distinct learning beliefs. In American culture, learning often involves one's thinking and acquisition of facts within a particular social context. In

Chinese culture, however, accumulating facts is not the only goal of learning. Learning is also connected to one's social and moral character, and it serves as an essential pathway to cultivating oneself as a whole person towards "self-perfection." Thus, learning in Chinese culture is not only about achieving breadth and depth of knowledge, but also about personal morals, attitudes, and purpose. To achieve the goal of self-perfection, Chinese culture emphasizes self-regulatory skills in individual learning. This contention is supported by two lines of evidence. The first is that Chinese preschoolers have better self-regulatory skills (e.g., inhibitory control and working memory) than American preschoolers (Lan, et al., 2011; Sabbagh, et al., 2006). The second is that the SRL strategies of Chinese American first graders in this dissertation had mean scores (M = 80.69) that were comparable with the SRL strategies of Chinese fourth graders' mean scores (M = 80.28) in Mok et al.'s (2007) study. Therefore, the failure to find evidence supporting Hypothesis 1a may be due to the fact that by first grade, Chinese American children have already developed many skills associated with SRL.

Another explanation for this unexpected finding may be that SRL strategies play a less important role for older children's academic learning than they do for younger children. As children advance to higher grades, they face increasing demands from school. Because participation in family rituals and routines can help children reduce daily stresses (Bridley & Jordan, 2012) and can provide natural opportunities for them to communicate their frustration and difficulties (Spagnola & Fiese, 2007), it is reasonable to argue that engaging children in family rituals and routines is more beneficial to their academic learning than SRL strategies. To test this argument, an exploratory analysis was

conducted and revealed that SRL strategies were found to contribute more to Chinese American children's academic achievement than their participation in FRR. This was true for both first and fourth graders. Therefore, the argument was not supported.

Although Hypothesis 1a was rejected, results from this dissertation nonetheless contribute to the existing literature in important ways. For example, they revealed a decrease in mean scores for Chinese American children's SRL strategies between first (M = 80.56) and fourth grade (M = 78.05). This is consistent with previous findings that Chinese children's SRL strategies decreased between the ages of 9 and 17 (Mok et al., 2007). Because the decreases were insignificant, two possibilities are suggested. First, the decrease may indicate that Chinese American children's SRL is relatively stable between the ages of 6 and 17. Second, the decrease may be evidence that Chinese American children have already developed SRL strategies even before first grade. This is consistent with De Luca and colleagues' research findings on the development of executive functions (De Luca et al., 2003). They found that by age 7, children displayed a major increase in goal-directed behaviors, strategic planning, and organizational skills. Future research might examine this argument by investigating the SRL strategies of Chinese American preschoolers or kindergarteners.

The relationship of Chinese American children's self-regulated learning strategies to academic achievements. The first goal of Hypothesis 1b was to understand whether SRL strategies predicted academic achievement in early school-age Chinese American children, after controlling for the effects of the covariates. Results indicated that children's SRL strategies predicted their academic achievement, and thus supported

the first part of Hypothesis 1b. This finding is consistent with previous research that found European American pre-adolescents' and adolescents' SRL strategies predicted academic achievement (Veenman et al., 2004; Xu et al., 2010). The results of this dissertation extend these findings to young Chinese American children, thus providing insight on the relationship between young children's SRL strategies and academic achievement. More importantly, this dissertation demonstrated that Chinese American first graders are able to use SRL strategies to benefit their academic outcomes. These results persist even after controlling for the effects of children's executive functions and parental expectations of children's school attainment. Both factors were found to significantly predict academic achievement in young children in previous research (Valiente et al., 2008; Xu et al., 2010).

The second goal of Hypothesis 1b was to examine grade-related differences in the relationships between Chinese American children's SRL strategies and academic achievement. Results indicated that although the relationship was weaker for Chinese American fourth graders than for Chinese American first graders, the strength of the relationship did not differ significantly across the two grade levels. Thus, the second part of Hypothesis 1b, that the relationship between SRL strategies and academic achievement would be stronger in fourth graders than in first graders, was not supported. This finding suggests that SRL strategies play an equally important role in first and fourth graders' academic achievement. One possible explanation may be the lack of variance in children's SRL strategies across the two grade levels.

In summary, this dissertation demonstrated that both Chinese American first and fourth graders displayed similar patterns of SRL strategies. SRL strategies positively contributed to children's academic achievement, over and above the effects of parental expectations of children's school attainment and children's executive functions. These findings suggest that Chinese American first graders may already use SRL strategies to help them learn and to promote academic success.

Chinese American Children's Participation in Family Rituals and Routines and the Relationship of Participation to Grade Level and Self-Regulated Learning Strategies

The test of Hypothesis 2a indicated that there was no grade-related difference in parental reports of children's participation in FRR across the two grade levels. Two possible explanations are suggested. The first explanation discusses the content of the questionnaires that assessed children's participation in FRR. The second explanation analyzes the characteristics of the immigrant Chinese sample in this dissertation. The test of Hypothesis 2b revealed that parental reports of children's participation in homework routines indicated more frequent homework participation than parental reports of children's participation in household chores or in discipline routines. Parental reports of children's participation in household chores reported less frequent rates than parental reports of children's participation in daily life routines did. More importantly, the test of Hypothesis 2c indicated that parental reports of children's participation in FRR predicted SRL strategies, although the predictive strength of participation to SRL strategies did not differ significantly across the two grade levels. The test of Hypothesis 2d revealed that

the relationship of each type of family ritual and routine to SRL strategies was not significantly different from one another. This section focuses on the significance of the results and on explaining these unexpected results.

Grade-related differences in Chinese American children's participation in family rituals and routines. Hypothesis 2a predicted that participation in FRR would be more frequent among fourth graders than among first graders. Results indicated that fourth and first graders did not differ significantly on participation in FRR. Thus, Hypothesis 2a was not supported. To understand the grade-related differences in children's participation in each type of family activity, exploratory analyses were performed. Results revealed that Chinese American fourth graders' participation in family routines was not significantly different from Chinese American first graders' participation. By contrast, fourth graders' participation in family rituals was significantly less frequent than first graders' participation. Children's grade level, however, only explained 6% of the variance in their participation in family rituals. Explanations for these unexpected findings are two-fold. The first concerns the lack of variance found in children's participation in FRR and in family routines. This may be explained by the specific types of FRR contained in the questionnaires. These questionnaires on rituals and routines were primarily developed and tested on European, Latino, and African American samples. Perhaps these questionnaires did not capture important aspects of family life that are unique to immigrant Chinese American families. For example, participation in language-based bedtime routines, which involves singing, storytelling, and shared-book reading, was beneficial to African American and Latino preschoolers' sleep duration and

cognitive development (Hale, LeBourgeois, Berger, & Brooks-Gunn, 2011). Participation in shared-book reading on a regular basis was also positively related to European American children's literacy development (Fiese et al., 2005; Serpell et al., 2002). Because Chinese culture places a heavy emphasis in children's academic learning (Chan & Chen, 2011), it is likely that language-based bedtime routines and shared-book reading routines are also highly valued in immigrant Chinese families. Of course, this contention needs to be tested. Without knowing about all the family routines that Chinese American children take part in, past questionnaires may have been less likely to include important family routines unique to this group. This lack of information may have negatively influenced our understanding of Chinese American children's developing competence in participating in family routines. Therefore, a FRR measure that includes a broader range of routines, including ones that are specifically directed at child development, like shared book reading, is needed. Or, given that family routines reflect family organization of children's everyday lives, perhaps these Chinese American children started to engage in family routines before first grade. Therefore, their participation was well established by the time they entered first grade.

Second, the unexpected decrease in Chinese American children's participation in family rituals may be explained by the characteristics of the immigrant Chinese sample used in this dissertation. Results indicated that participating parents were not well acculturated European American mainstream. The average rating for these parents was 3.4 out of 6, with higher ratings indicating more acculturation. Results also revealed that these parents showed a high affiliation with Chinese culture and a low affiliation with

American culture. The average rating for these parents was 5.2 out of 6 for Chinese culture, and 2.7 out of 6 for American culture, with higher ratings indicating more affiliation. More importantly, about 95% of immigrant Chinese families said Chinese was their primary language at home. These data suggest that the immigrant Chinese parents in this dissertation value Chinese culture highly. To teach their children important Chinese values, it is very likely that these parents engaged their children in family rituals relevant to this cultural focus early on. Because children's competence in participating in family rituals increases as they age, parental organization of children's participation in family rituals is also likely to increase as children age (Spagnola & Fiese, 2007). This increase peaks during middle childhood (Boyer & Lienard, 2006). Thus, after middle childhood, children's participation in family rituals may decrease as they age.

Although efforts were made to explain the unexpected decrease in children's participation in family rituals, these explanations may not be plausible. Indeed, interpreting the significant but unexpected decrease in children's participation in family rituals is difficult because the results generated by WLS conflicted with the results generated by ANCOVA. Specifically, the mean differences generated by WLS displayed a significant decrease, whereas the mean differences generated by ANCOVA resulted in an insignificant increase. Moreover, after using WLS to analyze grade-related differences in children's participation in family rituals, the degrees of freedom reduced to 77. Thus, the power of WLS may have also been reduced. These results may suggest a possible issue with the measurement of children's participation in family rituals. In summary, the

findings regarding Hypothesis 2a suggest that further research needs to be conducted to examine the measurement invariance across ethnic groups.

Although findings about grade-related differences in children's participation in FRR failed to support Hypothesis 2a, this research still extends the existing literature by filling the gap around developmental differences in children's participation during middle childhood. Specifically, these findings make two important contributions to the existing literature. First, they suggest that Chinese American children's participation in FRR is relatively stable during middle childhood. Second, these findings suggest the need for further research on the development of children's participation in FRR. Maybe immigrant Chinese parents have fewer expectations for children's involvement in rituals after they enter school to give their children more time to do their schoolwork, an accommodation that would increase with the child's age. It is plausible to examine children's participation in FRR at much earlier ages than in this research. This would allow us to investigate when and how participation in FRR develops in young children.

In order to understand the nature of Chinese American children's participation in different types of FRR, comparisons between children's participation in various rituals and routines were performed. Results indicated that children's participation in homework routines was more frequent than their participation in either household chores or discipline routines, and as frequent as their participation in daily life routines. Moreover, children's participation in household chores was less frequent than their participation in daily life routines, and as frequent as their participation in discipline routines. These findings partly supported Hypothesis 2b, that children's participation in homework

routines would be the most frequent, whereas their participation in household chores would be least frequent. These findings were consistent with previous studies indicating that immigrant Chinese parents provided many opportunities for children to participate in homework-related activities, but not in household chores (Chao, 2000; Parmar et al., 2008; Xu & Corno, 1998). The unexpected findings on children's participation in homework and daily life routines may be explained by the nature of these activities. Whereas homework and daily life routines likely occur every day, household chores and discipline routines may occur less frequently. Future research examining family rituals and routines in greater detail may help provide a better explanation for this unexpected finding. An alternative explanation for these findings may also be that Chinese culture places an emphasis on academic learning and self-regulation in order to achieve individual potential (Chan & Chen, 2011). For example, past research found that immigrant Chinese parents often provided extra workbooks and set time line for their children to study (Chao, 2000), and children's engagement in taking care of personal things in everyday life was positively related to their self-regulatory skills (e.g., planning) (Gauvain & Perez, 2005). Therefore, Chinese American children's participation in homework and daily life routines may reflect Chinese values of academic learning and self-regulation.

Relationship of children's participation in family rituals and routines to self-regulated learning strategies. The first goal of Hypothesis 2c was to understand whether participation in FRR in early school-age Chinese American children predicted their SRL strategies, after controlling for the effects of the covariates. Results indicated

that children's participation in FRR predicted their SRL strategies, and thus supported the first part of Hypothesis 2c. These results provided empirical evidence that children's participation in FRR predicted their SRL strategies, after controlling the effects of children's executive functions, which were significantly related to SRL (Lajoie, 2008). This finding suggests that children's everyday family experiences play an important role in promoting their learning skills. It also supports the idea that family is an important social context within which children's cognitive growth takes place (Gauvain & Perez, 2008) and the idea that children's participation in organized family routines and activities promotes cognitive skills that are valued by the community in which they live (Rogoff et al., 2007).

Expanding this result, exploratory analyses found that Chinese American children's participation in family rituals and in family routines contributed uniquely to SRL strategies when examined separately. However, the contribution of children's participation in family rituals to SRL strategies disappeared when the joint effects of these activities were examined, suggesting that the influences of children's participation in family rituals may be mediated by their participation in family routines. It was also found that children's participation in FRR explained about 5% of the variance in their SRL strategies, whereas children's participation in family routines explained about 7% of the variance in their SRL strategies. The general conclusion that can be drawn is that children's participation in family routines may be more beneficial to SRL than their participation in family rituals.

The second goal of Hypothesis 2c was to examine grade-related differences in the relationships between Chinese American children's participation in FRR and SRL strategies. Results indicated that although the relationship was weaker for the fourth graders than for the first graders, there were no significant grade-related differences in these relationships. This finding failed to support for the second part of Hypothesis 2c, that the relationship between children's participation in FRR and SRL strategies would be stronger in Chinese American fourth graders than in Chinese American first graders. To explore these relationships further, follow-up analyses were undertaken. These analyses revealed a similar pattern: there were no significant grade-related differences in the relationships between children's participation in family rituals and SRL strategies, nor in the relationships between children's participation in family routines and SRL strategies. These results suggest that children's participation in FRR may play an equally important role in contributing to Chinese American first and fourth graders' SRL strategies. One possible explanation of this unexpected finding may be the lack of variance in children's participation in FRR across the two grade levels.

To understand the relationship of each type of FRR to children's SRL strategies, these relationships were compared. Results indicated that these relationships did not differ from one another. Hypothesis 2d predicted that the relationship between children's participation in homework routines and SRL strategies would be strongest, whereas the relationship between children's participation in household chores and SRL strategies would be weakest. Therefore, Hypothesis 2d was not supported. These unexpected findings may be explained by the nature of children's participation in each type of family

ritual and routine. Follow-up exploratory analyses revealed that participation in each type of FRR did not differ as a function of grade level. Moreover, the current study examined only the frequency of children's participation, not the duration. The frequency and duration of children's participation may interact with one another to influence children's SRL strategies. For example, the contribution of children's participation in homework routines to SRL strategies likely differs if the child participates for 15 minutes rather than 45 minutes. Further research is needed to examine how the duration of children's participation in FRR influences SRL strategies. An alternative explanation may be the relatively small contribution of each type of FRR to children's SRL strategies. Follow-up exploratory analyses found that participation in each type of FRR contributed uniquely to children's SRL strategies. The variance explained by each type of family routine, however, ranged from 3 – 6%, and the variance explained by each type of family ritual ranged from 0.4 – 1.5%, suggesting that the contribution of each type of FRR to SRL strategies was similar in magnitude, and thus did no differ greatly from one another.

Relationship of children's participation in family routines to academic achievement. Given the positive relationship between children's participation in family routines and SRL strategies and the positive relationship between children's SRL strategies and academic achievement, it is plausible to explore how children's participation in everyday family activities may contribute to their academic achievement. Of particular, what type of family routines may be more beneficial to children's academic achievement? Linear regression analyses revealed that children's participation in family routines positively contributed to their academic achievement. Children's participation in

each type of family routine also positively contributed to their academic achievement. Later hierarchical regression analyses, however, revealed a rather opposite result. After controlling the effects of parental level of acculturation, parental expectations of children's school attainment and SRL, and children's effortful control, neither children's participation in family routines nor children's participation in each type of family routine significantly contributed to their academic achievement. Only children's effortful control significantly contributed to their academic achievement. These results suggest that children's self-regulated skills (e.g., effortful control and SRL strategies) may mediate the relationship between children's participation in family routines and academic achievement.

In summary, results showed that both Chinese American first and fourth graders displayed similar patterns of participation in FRR, in family rituals, in family routines, and in particular types of each. Although participation in these family activities made significant contributions to children's SRL strategies, participation in family routines seemed to be more beneficial to children's SRL strategies. Moreover, children's participation in FRR appeared to contribute equally to SRL strategies for both first and fourth graders. These findings suggest that Chinese American children's participation in these family activities is relatively stable during middle childhood. Furthermore, the positive relation between children's participation in FRR and academic achievement is mediated by their SRL skills.

The Influence of Parental Self-Efficacy to Chinese American Children's Participation in Family Rituals and Routines

The test of Hypothesis 3 indicated that parental reports of PSE predicted parental reports of children's participation in FRR, although the predictive strength of PSE to children's participation did not differ across the two grade levels. This section focuses on the significance of the results and on explaining these unexpected results.

The first goal of Hypothesis 3 was to understand whether PSE predicted children's participation in FRR in early school-age Chinese American children, after controlling the effects of covariates. Results indicated that PSE predicted children's participation in FRR, thus supporting the first part of Hypothesis 3. This finding also supports the idea that as parental efficacy becomes stronger, they are more likely to engage children in family rituals and routines (Spagnola & Fiese, 2007). More importantly, results demonstrated for the first time that parental self-efficacy in helping children succeed in school contributed positively to children's participation in FRR, and thus connected parental beliefs to children's participation in everyday family activities and their academic learning. That is, as parents felt more confident in promoting their children's academic success, they were more likely to involve their children in everyday family activities that supported children's academic learning. This finding demonstrated how parental beliefs may guide and shape children's opportunities to participate in FRR and supported Super and Harkness's (1986) developmental niche framework.

To understand the nature of this relationship, exploratory analyses found that PSE predicted children's participation in family rituals, but not children's participation in family routines. Further analyses revealed that PSE predicted children's participation in dinner time, weekend, vacation, yearly celebration, and cultural tradition rituals. PSE also

predicted homework and daily life routines. One possible explanation for the mixed findings may the content of family routines and rituals. As discussed in the Introduction, family rituals and routines provide a context where parents can teach important cultural values and communicate important cultural messages through parent-child interactions. In this case, immigrant Chinese parents may engage children in these rituals and routines in order convey their expectations regarding the value of academic learning. For example, immigrant Chinese parents may travel with their child to China every summer. This vacation ritual provides opportunities for parents to teach knowledge about China and to communicate important messages about Chinese values. Examination of parent-child interactions within each ritual and routine in greater detail is needed, because this examination will allow a better understanding of the mechanisms or processes underlying the relationship between PSE and children's participation.

The second goal of Hypothesis 3 was to examine grade-related differences in the relationship between PSE and children's participation in FRR. Results indicated that although the relationship was stronger for fourth graders than for first graders, the strength of the relationship did not differ significantly across the two grade levels. Therefore, the second part of Hypothesis 3, which the relationship between PSE and children's participation in FRR was expected to be stronger in Chinese American fourth graders than in first graders, was not supported. To explore this relationship further, follow-up analyses were conducted. These analyses indicated a similar pattern: there was no significant grade-related difference in the relationship between PSE and children's participation in family rituals, and there was no significant grade-related difference in the

relationship between PSE and children's participation in family routines. These findings suggest that PSE may play an equally important role in promoting children's participation in everyday family activities for both Chinese American first and fourth graders. One possible explanation for this unexpected finding may be the lack of variance in PSE and in children's participation in FRR across the two grade levels. Another explanation may be due to the role of parental expectations of children's SRL in older children. Past research has found that parents who expected their children to plan at an early age provided more opportunities for their children to plan in everyday activities than parents who expected their children to plan at a later age (Gauvain & Perez, 2005). Similarly, parents who expect their children to develop SRL at an early age may provide more opportunities for children to practice emerging SRL than parents who expect their children to develop SRL at a later age. Given the positive relationship between children's participation in FRR and SRL strategies, it is likely that parental expectations of children's SRL play a more important role in promoting children's participation in FRR than parental self-efficacy. Additional exploratory analyses found that parental expectations of children's SRL did not significantly contribute to children's participation in FRR, over and above the contribution of PSE to children's participation in FRR.

In summary, results indicated that PSE played an important role in promoting children's participation in FRR, and the contribution of PSE to children's participation was equally important for both Chinese American first and fourth graders.

The Relative Contributions of Parental Self-Efficacy and Chinese American Children's Participation in Family Rituals and Routines to Children's Self-Regulated Learning Strategies

Hypothesis 4 predicted that PSE would contribute less to Chinese American children's SRL than their participation in FRR. Results revealed that although both parental reports of PSE and children's participation contributed significantly to parental reports of children's SRL strategies, parental reports of children's participation in FRR contributed more to parental reports of children's SRL strategies than parental reports of PSE did. Therefore, Hypothesis 4 was supported. More importantly, follow-up analyses revealed that the contribution of PSE became insignificant after entering children's participation in FRR in the regression equation, suggesting the contribution of PSE might have been mediated by children's participation in FRR. These results also support Super and Harkness's (1986) developmental niche framework, which states that parental beliefs guide and shape children's cognitive development through the organization of family activities and practices. Results demonstrated that Chinese American children's participation in FRR was important for them to develop SRL strategies, over and above the influences of PSE, parental expectations of children's school attainment, parental expectations of children's SRL, and children's executive functions. In turn, children's competence in SRL strategies also supported their academic achievement.

Conclusions

This dissertation investigated how Chinese American first and fourth graders' everyday family experiences contributed to their SRL. In particular, it focused on how

Chinese American children's participation in FRR promoted SRL strategies and how parental beliefs guided children's opportunities to participate in FRR.

This study makes three important contributions to the existing literature. First, it represents a first effort to examine grade-related differences in Chinese American children's SRL strategies and participation in FRR during the early school years, thus extending previous research that focused primarily on pre-adolescents and adolescents. This study advances our understanding of the developmental differences in young Chinese American children's SRL strategies and opportunities to participate in FRR. Second, this dissertation investigated how early school-age Chinese American children's participation in FRR promoted their SRL strategies, and in turn, how children's competence in SRL strategies benefitted their academic achievement. This research fills the missing gap in our knowledge regarding the role of Chinese American children's everyday family experiences in their development of SRL strategies and academic achievement. It provides insights into Chinese American children's development of SRL within the family context during the early school years. Finally, this dissertation represented a test of Spagnola and Fiese's (2007) idea that PSE plays an important role in guiding children's opportunities to participate in FRR, and provides support for their ideas. This effort advances our understanding of the effects of parental beliefs in their competence in helping their children. These competence beliefs shaped Chinese American children's participation in FRR during the early school years.

Based on the previous discussion and results sections, four main conclusions are summarized below.

(1) The lack of variance in parental reports of Chinese American children's SRL strategies and participation in FRR across grade levels suggests that these children's SRL strategies and participation in FRR are relatively stable during middle childhood, and that these children may have already developed SRL strategies before they enter first grade.

(2) The significant positive relationships between parental reports of children's participation in FRR, SRL strategies, and academic achievement suggest that children's opportunities to participate in FRR support the development of SRL strategies. In turn, children's competence in SRL strategies plays an important role in their academic achievement.

(3) The significant positive relationship between parental reports of children's participation in FRR and parental reports of PSE suggests that parental sense of efficacy in helping children facilitate participation in FRR in those children. Thus, the idea that parental beliefs guide children's opportunities to participate in FRR is supported.

(4) The findings on the relative contributions of parental reports of PSE and children's participation in FRR on parental reports of children's SRL strategies demonstrate that the contributions of PSE may have been mediated by children's participation in FRR, suggesting that children's participation in FRR may be more beneficial to their development of SRL strategies than PSE.

Limitations

This dissertation has several limitations pertaining to the measurement methods utilized. One limitation is the use of a single research method. All data were based on parents' self-reports. Although parents' reports of themselves were likely reliable, their perceptions of themselves may have influenced how they viewed their children. For example, parents who felt less confidence in helping their children might have viewed their children as having less competence in self-regulatory skills. Past studies found that Chinese American parents reported feeling a low sense of self-efficacy, and were often involved indirectly in children's academic learning, such as setting time limits for TV viewing, for studying, and checking the completion of homework (Okagaki & Frensch, 1998). These examples of indirect involvement reflect how Chinese American parents use regulation strategies (e.g., monitoring) to promote children's academic learning. This may suggest that parents with a low sense of self-efficacy may be less confident about their children's self-regulatory skills. In addition, although past research has found that parents' reports of children's academic performances were valid and reliable (Gilger, 1992), these reports may contain bias. In this dissertation, children's academic performances were based on parent reports of children's performance in five subject areas. No information was available as to whether the child had repeated a grade level, or if the child was provided with extra learning opportunities (e.g., participation in academically focused after-school programs). Past research found that children's participation in extracurricular programs was positively related to their academic achievement (Feldman & Matjasko, 2005). Because teachers' reports of children's SRL

and academic performance were not accessible at the time the data were collected, only parental reports were obtained.

Another limitation of the current research is associated with missing information about children's motivational factors and metacognitive knowledge. Past studies found that children's motivations played a significant role in their SRL development (Zimmerman, 2008), and children's metacognitive knowledge, executive functions, and self-regulated learning are closely related (Lajoie, 2008). Although the relationships between PSE, children's participation in FRR, children's SRL strategies, and children's academic achievement were all significant and positive, the explained variances among these variables were less than 10% after controlling for the effects of the covariates. One of the covariates, children's effortful control, explained more than 25% of the variance in SRL strategies and in children's participation in FRR. These findings suggest a need for analyzing children's motivational factors and metacognitive knowledge, because these may explain more of the variance in children's SRL strategies and academic achievement.

A final limitation is associated with the recruitment and data collection procedures. As described in Methods section, participants were recruited online and were asked to complete multiple questionnaires online. Although online recruitment is an effective way of recruiting participants and collecting survey data, it has shortcomings. First, this recruitment method likely attracted parents who place a strong value on learning and wanted to learn about methods that could enhance their children's academic performances. This is evidenced through personal communications with these parents. About 30 out of 154 refused the $10 compensation because their goals were to learn

about this research and to discover methods to help their children learn more effectively. Second, this recruitment method attracted parents who were fluent with computers and who had time to fill out surveys online. Although the pen-and-paper option was offered to participating parents, all of them preferred to complete the surveys online. Third, participants recruited for this dissertation presented an unique sample because: 1) 99% of the families were two-parent families; 2) 68% of the parents had attended graduate programs in the United States or Canada; 3) 71% of the families earned more than $100,000 a year; and 4) 77 % of the parents had a Master's degree or above. This suggests the research included a sample of families with high educational levels and high SES. Therefore, generalization of these research findings to children from other ethnic groups or immigrant Chinese families that do not share these demographic characteristics should be approached with caution.

Implications

Despite the limitations discussed above, the results of this dissertation have important theoretical and practical implications. Drawing from Vygotsky 's (1978) sociocultural theory, Rogoff and colleagues' (2007) theoretical framework on family activities and cognitive development, and Super and Harkness's (1986) developmental niche framework, the role of children's everyday experiences in their cognitive development in the context of family is emphasized. Specifically, results support the view that children's cognitive development occurs as they participate in organized family routines and activities, and that this participation provides children with opportunities to learn and practice cognitive skills through interacting with their parents. At the same time,

children's opportunities to take part in these routines and activities are influenced by cultural values, such as parental beliefs. Results of this research supported all three theoretical ideas. Chinese American children's participation in FRR positively predicted their SRL strategies, and these SRL strategies positively predicted their academic performances. PSE also positively predicted children's participation in FRR.

These findings have three important implications. First, the positive role of children's SRL strategies in academic achievement may offer ideas when Chinese American children have difficulties in school. By informing schools and teachers that teaching SRL strategies (e.g., rehearsal, organization, elaboration, and planning) can promote children's academic performances, academically at-risk children can be assisted. Second, findings on the positive role of children's participation in FRR in their SRL strategies may inform parents that engaging children in family rituals and routines provides opportunities for their children to practice SRL strategies and communicate about their learning experiences. In turn, these opportunities may support children's development of SRL strategies and benefit their academic achievement. Finally, these findings may aid in the development of intervention and prevention programs that target academically at-risk children, especially during the transition to first grade. For example, keeping a regular schedule, perhaps daily, for these at-risk children is likely to improve their SRL skills, help them set a time for studying, and reduce their daily hassles. Moreover, teaching these children SRL skills may motivate them to study and thus earn better grades in school.

Future Directions

The findings of this research provide empirical support for the interrelations between PSE, children's participation in FRR, children's SRL strategies, and academic achievement, after controlling for the effects of children's participation in IEP, parental expectations of children's school attainment and SRL, parental level of acculturation, and children's effortful control. Due to the limitations involving measurement methods, lack of information on children's motivational factors and metacognitive knowledge, and the unique sample utilized here, caution should be used when generalizing these conclusions to other groups. Therefore, a longitudinal study which includes the measurement of motivational factors and metacognitive knowledge, and matches demographic backgrounds, should include both Chinese American and non-Chinese American children. This longitudinal study would help to: 1) identify the development of SRL across age and ethnic groups; 2) provide a better understanding of how cultural processes (e.g., cultural values, parental beliefs, culturally-valued family activities) contribute to children's development of SRL as they age; 3) identify the contributions of parental educational level and family socioeconomic status to children's development of SRL across ethnic groups; and 4) advance our understanding of the exact mechanisms and processes that underlie children's development of SRL and academic achievement.

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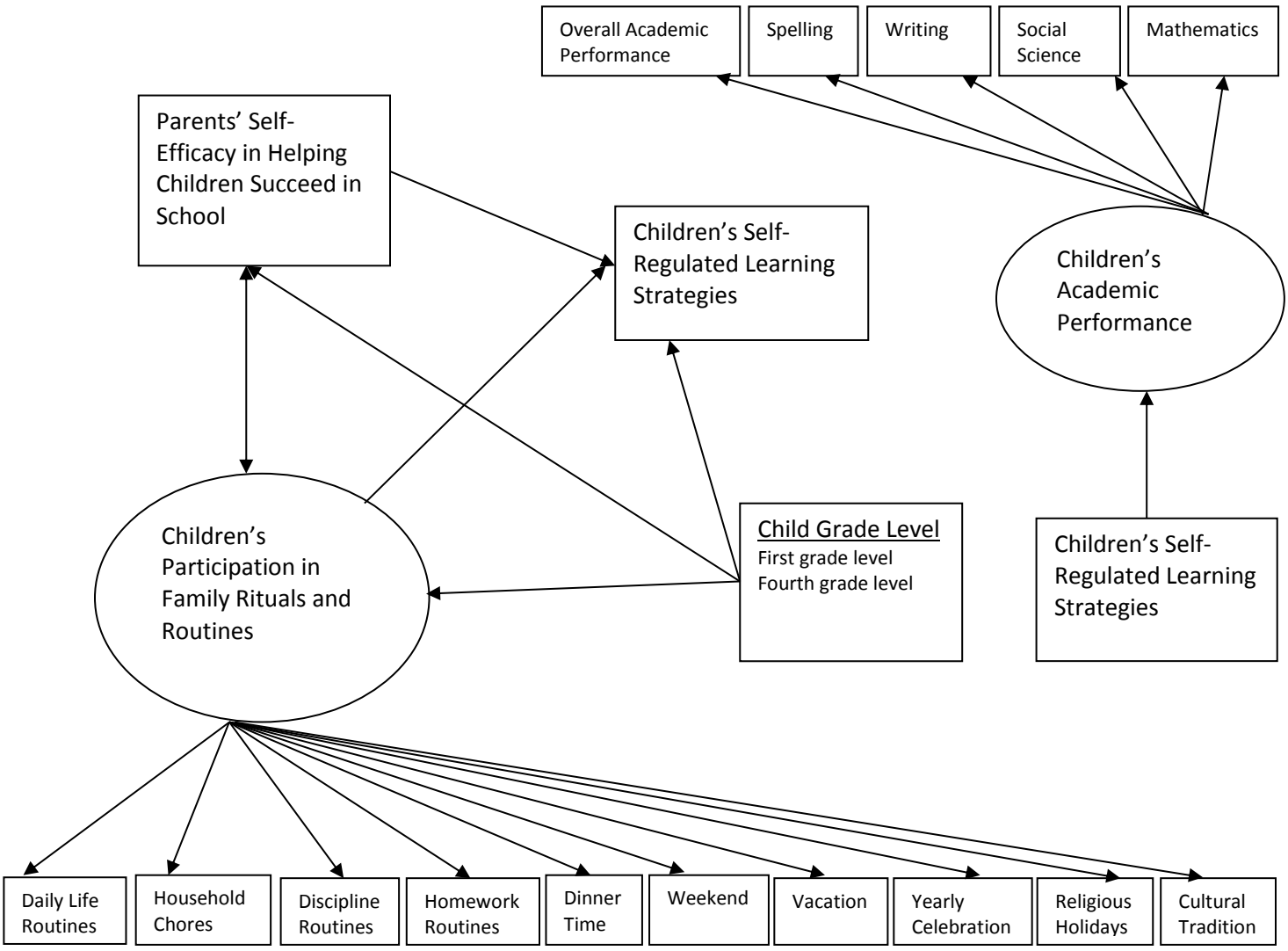
Figure Caption

Figure 1. Conceptual model of the relations among parental self-efficacy, family organization of children's activities and responsibilities, and children's self-regulated learning in the early school years in immigrant Chinese families.



Note. Preliminary analyses identified five covariates: children's participation in Individualized Education Plan, parents' level of acculturation, parents' expectations for children's school attainment, parents' expectations for children's self-regulated learning, and child's effortful control. These covariates had significant influences on both the independent and dependent variables, and thus were maintained in appropriate subsequent analyses.

Table 1

Cronbach Alphas for Constructs Contained within Each Parent Measure for Each Grade Level and the Total Sample

Measures and Constructs	Appendix Number (Items)	Cronbach Alphas (G1, G4, and G1& 4)
Parental Level of Acculturation	D (Item 1-15)	.92, .92, .92
Parental Self-Efficacy	E (Item 1-7)	.86, .75, .81
Children's Participation in Family Rituals	F (Item 1-36)	.89, .84, .87
Dinner Time	F (Item 1-6)	.81, .72, .77
Weekend	F (Item 7-12)	.69, .63, .67
Vacation	F (Item 13-18)	.54, .49, .52
Yearly Celebration	F (Item 19-24)	.82, .78, .80
Religious Holidays	F (Item 25-30)	.73, .79, .76
Cultural and Ethnic Tradition	F (Item 31-36)	.54, .54, .54

Table 1 (continued)

Measures and Constructs	Appendix Number (Items)	Cronbach Alphas (G1, G4, and G1& 4)
Children's Participation in Family Routines	G (Item 1-36)	.93, .89, .91
Homework Routines	G (Item 32-36)	.69, .61, .65
Daily Life Routines	G (Item 1, 3, 6, 7, 9, 10, 12, 15, 16, 19, 28)	.82, .81, .81
Household Chores	G (Item 2, 11, 13, 14, 21, 23-26, 29, 30)	.79, .70, .75
Discipline Routines	G (Item 4, 5, 8, 17, 18, 20, 22, 27, 31)	.80, .75, .78
Children's Effortful Control	H (Item 1-18)	.87, .85, .86
Children's SRL strategies	I (Item 1-18)	.94, .94, .94
Children's Academic Achievement	J (Item 1-5)	.85, .80, .83

Note. G1 represents the Chinese American first graders, G4 represents the Chinese American fourth graders, and G1& 4 represents all the Chinese American children in this study.

Table 2

Principle Component Analysis (PCA) of Parental Reports of Children's Academic Achievement for the Total Sample (N = 154)

Academic Achievement	Component Initial Values	Component Extraction Values
Mathematics	1.00	.43
Reading	1.00	.60
Writing	1.00	.62
Social Science	1.00	.59

Table 3

Pearson Correlations, Means, and Standard Deviations Associated with Parental Reports of Children's Academic Achievement for the Total Sample (N = 154)

Academic Achievement	1.	2.	3.	4.	5.	*M*	*SD*
1.Mathematics	1.00					4.53	.66
2. Reading	.30***	1.00				4.46	.71
3. Writing	.30***	.57***	1.00			3.95	.92
4. Social Science	.44***	.41***	.43***	1.00		4.30	.76
5. Overall Performance	.55***	.72***	.70***	.61***	1.00	4.37	.63

Note. Possible scores for each area of academic achievement ranged from 1 to 5, with 1 = *not very well at all* and 5 = *very well*.

***$p < .001$.

Table 4

Pearson Correlations between Parental Reports of Parental Self-Efficacy, Parental Reports of Children's Participation in Family Rituals and Routines (combined), in Family Rituals, in Family Routines, Self-Regulated Strategies, and Academic Achievement for the Total Sample (N = 154)

Independent and Dependent Variables	1.	2.	3.	4.	5.	6.
1. Parental Self-Efficacy	1.00					
2. Children's Participation in Family Rituals and Routines	.53***	1.00				
3. Children's Participation in Family Rituals	.49***	.85***	1.00			
4. Children's Participation in Family Routines	.41***	.90***	.54***	1.00		
5. Children's Self-Regulated Strategies	.31***	.51***	.37***	.53***	1.00	
6. Children's Academic Achievement	.44***	.37***	.25**	.37***	.47***	1.00

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

Table 5

Demographic Information on Immigrant Chinese Families for Each Grade Level and for the Total Sample (Percentages)

Demographic Variables	Families with G1	Families with G4	Total Sample
Child's Gender			
Male	50%	52.6%	51.3%
Female	50%	47.4%	48.7%
Children's Participation in Individual Education Plan	1.3%	3.8%	2.6%
Presence of Older Siblings	26.3%	32.1%	29.2%
Parental Educational Level			
Some College	7.9%	9.0%	8.4%
Bachelor's Degree	13.2%	16.7%	14.9%
Master's or Ph.D. Degree	78.9%	74.4%	76.6%

Table 5 (continued)

Demographic Variables	Families with G1	Families with G4	Total Sample
Parents' Gender			
Male	21.1%	7.7%	14.3%
Female	78.9%	92.3%	85.7%
Annual Household Income ($)			
Between 30,000 and 50,000	6.6%	2.6%	4.5%
Between 50,000 and 100,000	27.6%	21.8%	24.2%
Above 100,000	65.8%	75.6%	70.8%
Parents' Employment Status			
Two Full-Time	53.9%	62.8%	58.4%
One Full-Time	44.7%	34.6 %	39.6%
Other	1.3%	2.6%	1.9%

Table 5 (continues)

Demographic Variables	Families with G1	Families with G4	Total Sample
Parents' Cultural Identification			
Strong Chinese Identification	80%	82.1%	80.5%
Strong U.S. Identification	6.6%	14.1%	10.4%

Note. G1 represents the Chinese American first graders, and G4 represents the Chinese American fourth graders.

Table 6

Descriptive Statistics for Social-Cultural Variables and Children's Effortful Control for Each Grade Level and for the Total Sample

Social-Cultural Variables	First Grade				Fourth Grade				Total Sample			
	n	*M*	*SD*	Range	*n*	*M*	*SD*	Range	*N*	*M*	*SD*	Range
PLA	76	3.43	.87	1.00-5.07	78	3.39	.85	1.00-4.87	154	3.41	.86	1.00-5.07
PE-CSA	76	4.83	.74	4.00-6.00	78	4.87	.73	3.00-6.00	154	4.85	.73	3.00-6.00
PE-CSRL	76	9.39	2.18	5.00-15.00	78	10.46	2.02	6.00-18.00	154	9.94	2.16	5.00-18.00
PCI	76	9.63	1.79	5.00-12.00	78	9.31	1.80	4.00-12.00	154	9.47	1.80	4.00-12.00
CEC	76	3.45	.57	2.11-4.78	78	3.50	.52	2.06-4.78	154	3.47	.54	2.06-4.78

Note. Possible scores for each variable were stated in the following. PLA = Parental Level of Acculturation (range = 1-6, with 1 = *not very much*, and 6 = *very much*), with high scores reflecting more acculturation to European American mainstream; PE-CSA = Parental Expectations of Children's School Attainment (range = 1-6, with 1 = *to receive less than a high school diploma*, and 6 = *to finish a PhD, MD or other advanced degree*), with high scores reflecting high expectations of children's school attainment; PE-CSRL = Parental Expectations of Children's Self-Regulated Learning, with low scores reflecting high expectations of children's self-regulated learning at an early age; PCI = Parental Cultural Identification (range = 1-12, with 1 = *very weak*, and 12 = *very strong*), with high scores reflecting strong Chinese affiliations; CEC = Children's Effortful Control (range = 1-5, with 1 = *almost always untrue*, and 5 = *almost always true*), with high scores indicating better effortful control.

Table 7

Descriptive Statistics for Independent and Dependent Variables for Each Grade Level and for the Total Sample

Independent and Dependent Variables	First Grade				Fourth Grade				Total Sample			
	n	*M*	*SD*	Range	*n*	*M*	*SD*	Range	*N*	*M*	*SD*	Range
PSE	76	4.42	.86	2.57-6.00	78	4.45	.72	3.00-6.00	154	4.43	.79	2.57-6.00
CP-FRR	76	49.77	4.53	34.47-58.62	78	50.22	3.70	38.80-57.63	154	50.00	4.12	34.47-56.82
CP-FRQ	76	2.28	.30	1.53-2.81	78	2.30	.25	1.44-2.83	154	2.29	.79	1.44-2.83
CP-CRQ	76	2.98	.50	1.08-4.00	78	3.03	.41	2.11-3.83	154	3.01	.46	1.08-4.00
SRL Strategies	76	4.48	1.11	1.33-6.89	78	4.34	1.13	2.00-7.00	154	4.41	1.12	1.33-7.00
ACH-CS	76	-.07	1.07	-2.80-1.19	78	.07	.93	-2.34-1.19	154	0.00	1.00	-2.89-1.19

Note. Possible scores for each variable were stated in the following. PSE = Parental Self-Efficacy (range = 1-6, with 1 = *disagree very strongly*, and 6 = *agree very strongly*), with high scores reflecting a strong sense of efficacy in helping children succeed in school; CP-FRR = Children's Participation in Family Rituals and Routines, with high scores reflecting more frequent rituals and routines; CP-FRQ = Children's Participation in Family Rituals (range = 1-3, with 1 = *not at all true*, and 3 = *very true*), with high scores reflecting more frequent rituals; CP-CRQ = Children's Participation in Family Routines (range = 0-4, with 0 = *never*, and 4 = *nearly always*), with high scores reflecting more frequent routines; SRL Strategies = Children's Self-Regulated Learning Strategies (range = 1-7, with 1 = *not at all true*, and 7 = *very true*), with high scores indicating good self-regulated learning skills; ACH-CS = Children's Academic Achievement - Component Scores, with high scores indicating good academic performances.

Table 8

One-Way Multivariate Analysis Examining the Effects of the Demographic Variables on Parental Self-Efficacy, Children's Participation in Family Rituals and Routines, Children's Self-Regulated Learning Strategies, and Academic Achievement for the Total Sample

Demographic Variables		MANOVA	
		F (1, 152)	η^2
Child's Gender			
	Parental Self-Efficacy	.16	.001
	Children's Participation in Family Rituals and Routines	.94	.000
	Children's Self-Regulated Learning Strategies	.87	.000
	Children's Academic Achievement	.52	.004

Table 8 (continued)

Demographic Variables		MANOVA	
		F (1, 152)	η^2
Presence of Older Siblings			
	Parental Self-Efficacy	.32	.003
	Children's Participation in Family Rituals and Routines	.40	.003
	Children's Self-Regulated Learning Strategies	.48	.004
	Children's Academic Achievement	2.81	.023
Parents' Gender			
	Parental Self-Efficacy	.16	.000
	Children's Participation in Family Rituals and Routines	.25	.002
	Children's Self-Regulated Learning Strategies	.19	.002
	Children's Academic Achievement	.85	.007

Table 8 (continued)

Demographic Variables		MANOVA	
		F (2, 152)	η^2
Parental Educational Level			
	Parental Self-Efficacy	2.05	.033
	Children's Participation in Family Rituals and Routines	1.52	.025
	Children's Self-Regulated Learning Strategies	.74	.012
	Children's Academic Achievement	3.67*	.058
Annual Household Income			
	Parental Self-Efficacy	1.56	.026
	Children's Participation in Family Rituals and Routines	.78	.013
	Children's Self-Regulated Learning Strategies	2.04	.033
	Children's Academic Achievement	2.58	.042

*$p < .05$.

Table 9

Correlations of Social-Cultural Variables and Children's Effortful Control to Parental Self-Efficacy, Children's Participation in Family Rituals and Routines, Self-Regulated Learning Strategies, and Academic Achievement for the Total Sample (N = 154)

Sociocultural Variables and Children's Effortful Control	PSE	FRR	SRL	ACH[a]
Parents' Cultural Identification	.00	-.03	-.04	.06
Parental Expectations of Children's School Attainment	.14	.06	.23***	.18*
Parental Expectations of Children's Self-Regulated Learning	-.07	-.06	-.22***	-.18*
Parental Level of Acculturation	.24***	.26***	.24***	.26***
Children's Effortful Control	.56***	.53***	.57***	.54***

[a] PSE = Parental Self-Efficacy; FRR = Children's Participation in Family Rituals and Routines; SRL = Children's Self-Regulated Strategies; ACH = Children's Academic Achievement

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

Table 10

Results of Analysis of Co-Variance for Children's Self-Regulated Learning Strategies by Grade Level after Controlling the Effects of Five Covariates for the Total Sample

Five Covariates and Grade Level	F (1,147)	η^2
Children's Participation in Individualized Education Plan	.228	.002
Parental Expectations of Children's School Attainment	5.53*	.036
Parental Expectations of Children's Self-Regulated Learning	2.10	.014
Parental Level of Acculturation	2.23	.015
Children's Effortful Control	58.88***	.286
Children's Grade Level	.89	.006

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

Table 11

Results of Hierarchical Regression Analysis Evaluating the Prediction of Children's Self-Regulated Learning Strategies to Academic Achievement after Controlling the Effects of Four Covariates for the Total Sample Excluding Four Parents with IEP Children (N = 150)

Covariates and Children's Self-Regulated Learning Strategies	R	R^2	ΔR^2	ΔF	B
Step 1 - Four Covariates	.58	.33	.33	18.65***	
Parental Expectations of Children's School Attainment					.09
Parental Expectations of Children's Self-Regulated Learning					-.06
Parental Level of Acculturation					.12
Children's Effortful Control					.37***
Step 2 - Children's Self-Regulated Learning Strategies	.60	.36	.03	6.99***	.22***

Note. Children with IEP were given an Individualized Education Plan (IEP) to help them achieve educational goals.

***$p < .001$.

Table 12

Results of Hierarchical Regression Analysis Evaluating the Predictive Strength of Children's Self-Regulated Learning Strategies to Academic Achievement across Grade Levels after Controlling the Effects of Four Covariates for the Total Sample Excluding Four Parents with IEP children (N = 150)

Covariates and Children's Self-Regulated Learning Strategies	R	R^2	ΔR^2	ΔF	β
Step 1 - Four Covariates	.58	.33	.33	18.65***	
Parental Expectations of Children's School Attainment					.08
Parental Expectations of Children's Self-Regulated Learning					-.08
Parental Level of Acculturation					.11
Children's Effortful Control					.36***
Step 2 – Children's Self-Regulated Learning Strategies across Grade Levels	.61	.37	.04	2.94*	
Children's Grade Level					-.20
Children's Self-Regulated Learning Strategies					.20
Grade Level × Self-Regulated Learning Strategies					.12

Note. Children with IEP were given an Individualized Education Plan (IEP) to help them achieve educational goals.

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

Table 13

Results of Weighted Least Square Analysis for Children's Participation in Family Rituals and Routines by Grade Level after Controlling the Effects of Five Covariates for the Total Sample

Five Covariates and Grade Level	F (1,74)	η^2
Children's Participation in Individualized Education Plan	2.85	.037
Parental Expectations of Children's School Attainment	.03	.000
Parental Expectations of Children's Self-Regulated Learning	1.23	.016
Parental Level of Acculturation	81.32***	.524
Children's Effortful Control	185.65***	.715
Children's Grade Level	1.77	.023

***$p < .001$.

Table 14

Results of Paired Sample t-Test and Effect Size on Children's Participation in Different Types of Family Routines for the Total Sample

Pairs of Routines	No. of Pairs	*t* values	*d*
Homework Routines vs. Household Chores	154	9.37***	.75
Homework Routines vs. Daily Life Routines	154	-1.41	.01
Homework Routines vs. Discipline Routines	154	8.86***	.71
Household Chores vs. Daily Life Routines	154	-13.88***	1.11
Household Chores vs. Discipline Routines	154	.59	.01

Note. If d is greater than .50, it means that the strength of paired *t*-tests have medium effect size. If d is greater than .80, it means that the strength of paired *t*-tests have large effect size.

***$p < .001$.

Table 15

Results of Paired Sample t-Test and Effect Size on Children's Participation in Different Types of Family Rituals for the Total Sample

Pairs of Rituals	No. of Pairs	*t* values	*d*
Dinner Time Rituals vs. Weekend Rituals	154	-1.52	.12
Dinner Time Rituals vs. Vacation Rituals	154	4.61***	.37
Dinner Time Rituals vs. Yearly Celebration Rituals	154	4.13***	.33
Dinner Time Rituals vs. Religious Holidays	154	11.26***	.91
Dinner Time Rituals vs. Cultural and Ethnic Traditions	154	7.02***	.57
Weekend Rituals vs. Vacation Rituals	154	7.13***	.58
Weekend Rituals vs. Yearly Celebration Rituals	154	5.96***	.48
Weekend Rituals vs. Religious Holidays	154	13.44***	1.09
Weekend Rituals vs. Cultural and Ethnic Traditions	154	9.26***	.75
Vacation Rituals vs. Yearly Celebration Rituals	154	.31	.03
Vacation Rituals vs. Religious Holidays	154	12.35***	1.00
Vacation Rituals vs. Cultural and Ethnic Traditions	154	3.13*	.25

Table 15 (continued)

Pairs of Rituals	No. of Pairs	*t* values	*d*
Yearly Celebration Rituals vs. Religious Holidays	154	8.74***	.71
Yearly Celebration Rituals vs. Cultural and Ethnic Traditions	154	2.26*	.18
Religious Holidays vs. Cultural and Ethnic Traditions	154	7.83***	.63

Note. If d is greater than .50, it means that the strength of paired *t*-tests have medium effect size. If d is greater than .80, it means that the strength of paired *t*-tests have large effect size.

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

Table 16

Results of Hierarchical Regression Analysis Evaluating the Prediction of Children's Participation in Family Rituals and Routines to Self-Regulated Learning Strategies after Controlling the Effects of Five Covariates for the Total Sample (N = 154)

Five Covariates and Children's Participation in Family Rituals and Routines	R	R^2	ΔR^2	ΔF	β
Step 1 – Five Covariates	.62	.39	.39	18.68***	
Children's Participation in Individualized Education Plan					.06
Parental Expectations of Children's School Attainment					.15*
Parental Expectations of Children's Self-Regulated Learning					-.12
Parental Level of Acculturation					.06
Children's Effortful Control					.38***
Step 2 - Children's Participation in Family Rituals and Routines	.66	.44	.05	13.65***	.27***

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

Table 17

Results of Hierarchical Regression Analysis Evaluating the Prediction of Children's Participation in Family Routines to Self-Regulated Learning Strategies after Controlling the Effects of Five Covariates for the Total Sample (N = 154)

Five Covariates and Children's Participation in Family Routines	R	R^2	ΔR^2	ΔF	β
Step 1 - Five Covariates	.62	.39	.39	18.68***	
Children's Participation in Individualized Education Plan					.08
Parental Expectations of Children's School Attainment					.13*
Parental Expectations of Children's Self-Regulated Learning					-.12
Parental Level of Acculturation					.06
Children's Effortful Control					.37***
Step 2 - Children's Participation in Family Routines	.68	.46	.07	18.85***	.31***

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

Table 18

Results of Hierarchical Regression Analysis Evaluating the Prediction of Children's Participation in Family Rituals to Self-Regulated Learning Strategies after Controlling the Effects of Five Covariates for the Total Sample (N = 154)

Five Covariates and Children's Participation in Family Rituals	R	R^2	ΔR^2	ΔF	β
Step 1 - Five Covariates	.62	.39	.39	18.68***	
Children's Participation in Individualized Education Plan					.04
Parental Expectations of Children's School Attainment					.15*
Parental Expectations of Children's Self-Regulated Learning					-.12
Parental Level of Acculturation					.08
Children's Effortful Control					.46***
Step 2 - Children's Participation in Family Rituals	.64	.40	.02	4.35*	.15*

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

Table 19

Results of Hierarchical Regression Analysis Evaluating the Relative Contributions of Children's Participation in Family Rituals and in Family Routines to Self-Regulated Learning Strategies after Controlling the Effects of Five Covariates for the Total Sample (N = 154)

Five Covariates and Children's Participation in Family Rituals and in Family Routines	R	R^2	ΔR^2	ΔF	β
Step 1 - Five Covariates	.62	.39	.39	18.68***	
Children's Participation in Individualized Education Plan					.08
Parental Expectations of Children's School Attainment					.13*
Parental Expectations of Children's Self-Regulated Learning					-.12
Parental Level of Acculturation					.06
Children's Effortful Control					.36***
Step 2 - Children's Participation in Family Routines	.68	.46	.07	18.85***	.29***
Step 3 - Children's Participation in Family Rituals	.68	.46	.00	.20	.03

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

Table 20

Results of Hierarchical Regression Analysis Evaluating the Predictive Strength of Children's Participation in Family Rituals and Routines to Self-Regulated Learning Strategies across Grade Levels after Controlling the Effects of Five Covariates for the Total Sample (N = 154)

Five Covariates and Children's Participation in Family Rituals and Routines	R	R^2	ΔR^2	ΔF	β
Step 1 - Five Covariates	.62	.39	.39	18.68^{***}	
Children's Participation in Individualized Education Plan					.05
Parental Expectations of Children's School Attainment					$.15^{*}$
Parental Expectations of Children's Self-Regulated Learning					-.11
Parental Level of Acculturation					.07
Children's Effortful Control					$.39^{***}$
Step 2 - Children's Participation in Family Rituals and Routines across Grade Levels	.67	.45	.06	5.22^{***}	
Children's Grade Level					.62
Children's Participation in Family Rituals and Routines					.20
Grade Level × Participation in Family Rituals and Routines					.69

$^{***}p < .001$. $^{*}p < .05$.

Table 21

Pearson Correlations between Children's Participation in Each Type of Family Ritual and Routine and Their Self-Regulated Learning Strategies for Each Grade Level and for the Total Sample

Children's Participation in Family Rituals and Routines	Children's Self-Regulated Learning Strategies		
	G1	G4	G1 & 4
Children's Participation in Family Rituals	.33***	.42***	.37***
Dinner Time	.29*	.28*	.28***
Weekend	.29*	.38***	.33***
Vacation	.20	.26*	.23***
Yearly Celebration	.25*	.35***	.30***
Religious Holidays	.15	.05	.10
Cultural and Ethnic Traditions	.18	.33***	.25***

Table 21 (continued)

Children's Participation in Family Rituals and Routines	Children's Self-Regulated Learning Strategies		
	G1	G4	G1 & 4
Children's Participation in Family Routines	.62***	.43***	.53***
Homework Routines	.49***	.40***	.45***
Household Chores	.56***	.37***	.44***
Daily Life Routines	.58***	.28*	.43***
Discipline Routines	.53***	.43***	.47***

Note. G1 = First Grade; G4 = Fourth Grade; G1 & 4 = Combination of First Grade and Fourth Grade.

***p < .001. *p < .05

Table 22

Results of Hierarchical Regression Analysis Evaluating the Prediction of Parental Self-Efficacy to Children's Participation in Family Rituals and Routines after Controlling the Effects of Five Covariates for the Total Sample (N = 154)

Five Covariates and Parental Self-Efficacy	R	R^2	ΔR^2	ΔF	β
Step 1 - Five Covariates	.56	.31	.31	13.18***	
Children's Participation in Individualized Education Plan					-.08
Parental Expectations of Children's School Attainment					-.01
Parental Expectations of Children's Self-Regulated Learning					.00
Parental Level of Acculturation					.11
Children's Effortful Control					.34***
Step 2 - Parental Self-Efficacy	.61	.37	.06	15.22***	.31***

***$p < .001$.

Table 23

Results of Hierarchical Regression Analysis Evaluating the Prediction of Parental Self-Efficacy to Children's Participation in Family Rituals after Controlling the Effects of Five Covariates for the Total Sample (N = 154)

Five Covariates and Parental Self-Efficacy	R	R^2	ΔR^2	ΔF	β
Step 1 - Five Covariates	.44	.20	.20	7.28^{***}	
Children's Participation in Individualized Education Plan					-.02
Parental Expectations of Children's School Attainment					-.05
Parental Expectations of Children's Self-Regulated Learning					.01
Parental Level of Acculturation					.11
Children's Effortful Control					$.19^{***}$
Step 2 - Parental Self-Efficacy	.54	.29	.09	18.37^{***}	$.39^{***}$

$^{***}p < .001$.

Table 24

Results of Hierarchical Regression Analysis Evaluating the Prediction of Parental Self-Efficacy to Children's Participation in Family Routines after Controlling the Effects of Five Covariates for the Total Sample (N = 154)

Five Covariates and Parental Self-Efficacy	R	R^2	ΔR^2	ΔF	β
Step 1 - Five Covariates	.52	.27	.27	11.15***	
Children's Participation in Individualized Education Plan					-.12
Parental Expectations of Children's School Attainment					.06
Parental Expectations of Children's Self-Regulated Learning					.00
Parental Level of Acculturation					.11
Children's Effortful Control					.39***
Step 2 - Parental Self-Efficacy	.54	.29	.02	3.46	.16

***$p < .001$.

Table 25

Results of Hierarchical Regression Analysis Evaluating the Predictive Strength of Parental Self-Efficacy to Children's Participation in Family Rituals and Routines across Grade Levels after Controlling the Effects of Five Covariates for the Total Sample (N = 154)

Five Covariates and Parental Self-Efficacy	R	R^2	ΔR^2	ΔF	β
Step 1 - Five Covariates	.55	.31	.31	13.18***	
Children's Participation in Individualized Education Plan					-.07
Parental Expectations of Children's School Attainment					-.01
Parental Expectations of Children's Self-Regulated Learning					.00
Parental Level of Acculturation					.11
Children's Effortful Control					.34***
Step 2 – Parental Self-Efficacy across Grade Levels	.61	.38	.07	5.32***	
Children's Grade Level					-.27
Parental Self-Efficacy					.37***
Grade Level × Parental Self-Efficacy					-.31

*** $p < .001$.

Table 26

Results of Hierarchical Regression Analysis Evaluating the Contributions of Parental Self-Efficacy and Children's Participation in Family Rituals and Routines(the Full Model) to Self-Regulated Learning Strategies after Controlling the Effects of Five Covariates for the Total Sample (N = 154)

Five Covariates and the Full Model	R	R^2	ΔR^2	ΔF	β
Step 1 - Five Covariates	.62	.39	.39	18.68***	
Children's Participation in Individualized Education Plan					.06
Parental Expectations of Children's School Attainment					.16*
Parental Expectations of Children's Self-Regulated Learning					-.12
Parental Level of Acculturation					.07
Children's Effortful Control					.44***
Step 2 – the Full Model	.67	.46	.07	8.92***	
Parental Self-Efficacy					-.16*
Children's Participation in Family Rituals and Routines					.32***

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

Appendix A

Children's participation in everyday family activities

University of California, Riverside
Psychology Department

The Cognitive Development Lab at the University of California, Riverside, is seeking Chinese immigrant parents to take part in a study. This study aims to understand children's opportunities to develop academic-related skills through their participation in organized family activities (e.g., celebrating special events each year, spending vacation time with family members each year, etc.).

Who is eligible?

- Chinese immigrant families who meet the following requirements:
  - Parents are ethnic Chinese born outside the United States.
  - Who have a child attending first grade (between ages 6 and 7), or fourth grade (between ages 9 and 10).

What will you be asked to do?

- Spend about 30 minutes at your home on one occasion to answer the following questions either on a secured website or by mail:
  - Provide information about family background.
  - Provide information about your expectations and beliefs in relation to children's academic learning.
  - Provide information about your familiarity with American culture and traditions, and your child's participation in everyday family activities.
  - Provide information that describes your child's approach to learning and academic performance.
- All the information we gathered will be kept strictly confidential.

Compensation.

You will receive a $10 check by mail for your completion of this study.

If you have any questions or are interested in participating, please contact Shuheng Zhao or Professor Mary Gauvain.

Email:szhao003@ucr.edu Email: mary.gauvain@ucr.edu
Phone: (951)-638-0001 Phone: 951-827-4810

Appendix B

Family Demographic Survey

Instructions: Please fill in the blanks and check the answers that apply to your family and your child who was recruited for this study.

1. What is your child's grade level?

   First grade___ Fourth grade___

2. How old is your child? _____Years___Months

3. What is the gender of your child?

   Male___ Female___

4. Was your child born in the United States? ___Yes ___No

   If you answer "No" to question 4, please indicate at what age your child come to the United States? _____

5. Has your child always attended school in the United States? ___ Yes ___ No

   If you answer "No" to question 5, please indicate at what grade did your child begin school in the United States? _____

6. Has your child ever been referred for testing for a learning disability?

   ___Yes___No

7. Has your child ever had an Individual Education Plan (IEP)? IEP is an individualized educational program that is designed to help children who has difficulty in learning and functioning. ___Yes___No

8. Does your child have an older sibling?___Yes ____ No

9. Which of the following can best describe the race or ethnic identity of your child?

Immigrant Chinese___ Chinese American___ American___

10. What is your gender?

    Male___ Female___

11. What is your relation to your child?_____

12. What is your marital status?

    Married___ Single___ Divorced___ Separated___ Widowed___

13. How many years of formal education have you completed? ___

    8 (junior high/middle school)

    12 (High school diploma)

    14 (Associate's degree)

    16 (Bachelor's degree)

    18 and above (Master's degree or doctorate degree)

    In which country did you get most of your education?_____

    In which country did you complete your education? _____

14. What is your schedule of work?

    Full-time___ Part-time___ Not applicable___

15. What is your spouse's schedule of work?

    Full-time___ Part-time___ Not applicable___

16. What is your annual household income?

    Less than $30,000 ____

    Between $30,000 and $50, 000 ____

    Between $50,000 and $100, 000____

More than $100, 000_____

17. We would like to ask you about your cultural/ethnic identity (the culture you feel the most sense of belonging to). Please rate the strength of your cultural identification with the family culture by circling the appropriate number from the scale below.

	Very Weak	Weak	Somewhat Weak	Somewhat Strong	Strong	Very Strong
U.S. American (North American)	1	2	3	4	5	6
Other:	1	2	3	4	5	6

What is the primary language spoken in your household?_____

If another language is frequently spoken, which other language?_____

Appendix C

Parental Expectations

Instructions: The following questions are about your expectations of your child's school attainment and your child's development of self-regulated learning. Achild who is a self-regulated learner initiates his or her own learning, monitors his or her learning progress, anticipates problems, persists on a difficult task, and knows when to seek help during study time.

1. How far in school you realistically expect your child will go, not how far you hope the child will go? ___

   1 (To receive less than a high school diploma)

   2 (To graduate from high school)

   3 (To attend two or more years of college)

   4 (To finish a 4- or 5-year college degree)

   5 (To earn a master's degree or equivalent)

   6 (To finish a PhD, MD or other advanced degree)

2. At what age you expect your child to become a self-regulated learner? _____

3. Do you expect your child to be a self-regulated learner now?

   ___ Yes ___No

Appendix D

Asian American Multidimensional Acculturation Scale-European American (AAMAS-EA)

Instructions: Use the scale below to answer the following questions. Please circle the number that best represents your view on each item.

	Not very well		Somewhat			Very well
1. How well do you speak the language of English?	1	2	3	4	5	6
2. How well do you understand the language of English?	1	2	3	4	5	6
3. How well do you read and write in the language of English?	1	2	3	4	5	6
4. How often do you listen to music or look at movies and magazines from the European American mainstream groups?	1	2	3	4	5	6
5. How much do you like the food of the European American mainstream groups?	1	2	3	4	5	6
6. How often do you eat the food of the European American mainstream groups?	1	2	3	4	5	6
7. How knowledgeable are you about the history of the European American mainstream groups?	1	2	3	4	5	6
8. How knowledgeable are you about the culture and traditions of the European American mainstream groups?	1	2	3	4	5	6
9. How much do you practice the traditions and keep the holidays of the European American mainstream culture?	1	2	3	4	5	6
10. How much do you identify with the European American mainstream groups?	1	2	3	4	5	6
11. How much do you feel you have in common with people from the European American mainstream groups?	1	2	3	4	5	6
12. How much do you interact and associate with people from the European American mainstream groups?	1	2	3	4	5	6
13. How much do you like to interact and associate with people from the European American mainstream groups?	1	2	3	4	5	6
14. How proud are you to be part of the European American mainstream groups?	1	2	3	4	5	6
15. How negative do you feel about people from the European American mainstream groups?	1	2	3	4	5	6

Appendix E

Parents' Self-Efficacy in Helping Children Succeed in School

Instructions: Please indicate how much you **AGREE** or **DISAGREE** with each of the following statements. Please think about *the current school year* as you consider each statement.

Disagree very strongly	Disagree	Disagree just a little	Agree just a little	Agree	Agree very strongly
1	2	3	4	5	6

___1. I know how to help my child do well in school

___2. I don't know if I'm getting through to my child. (reversed)

___3. I don't know how to help my child make good grades in school. (reversed)

___4. I feel successful about my efforts to help my child learn.

___5. Other children have more influence on my child's grades than I do. (reversed)

___6. I don't know how to help my child learn. (reversed)

___7. I make a significant difference in my child's school performance.

Appendix F

Family Rituals Questionnaire

Instructions: On the following pages are descriptions of family routines and traditions. Every family is somewhat different in the types of routines and traditions that they follow. In some families routines and traditions are very important but in other families there is a more casual attitude toward routines and traditions.

On the top of each page you will find a heading for a family setting. Think of how your family typically acts or participate during these events. Read the statements and indicate if each statement is not at all true, sort of true, or very true for your family. Circle the number that best describes your current family.

When thinking of your family, think of yourself, your partner and your children. Some of the settings may also include other family members such as grandparents, aunts, uncles and cousins. However, try to answer the questions as they best relate to your current family.

There are not right or wrong answers to each statement, so please try to choose the statement that most closely describes your family.

Not at all true	Sort of true	Very true
1	2	3

DINNER TIME

Think about typical dinner in your home with your family.

___1. In our family, dinner time is planned in advance.

___2. Our family regularly eats dinner together.

___3. In our family, we feel it is not important that we eat together. (reversed)

___4. In our family, everyone is expected to be home for dinner.

___5. In our family at dinner time, everyone has a specific role or job to do.

___6. In our family, dinner time is flexible; people eat whenever they want. (reversed)

Not at all true	Sort of true	Very true
1	2	3

WEEKENDS

Think of a typical weekend in your family.

___7. In our family, we feel that it is important to spend time together on the weekends.

___ 8. Our family rarely spends weekends together. (reversed)

___ 9. In our family, people pretty much come and go as they please on the weekends. (reversed)

___10. In our family, there are no assigned jobs to be done on the weekends. (reversed)

___11. In our family, there is much discussion and planning for the weekend.

___12. In our family, we have set routines and regular events that we all participate in on the weekends.

VACATIONS

Think of a typical vacation you have spent with your family.

___13. In our family, it is OK if some members decide not to go on the vacation. (reversed)

___14. In our family, people feel strongly that family vacations are important family events.

___ 15. In our family, there are no routines during vacation; this is the time for doing something new and different. (reversed)

___16. In our family, we do little planning before our vacation. We just go. (reversed)

___17. Our family regularly spends vacations together.

___ 18. In our family, every member has a job or task to do in preparing for the vacation.

Not at all true	Sort of true	Very true
1	2	3

ANNUAL CELEBRATIONS

Think of celebrations that you observe in your family. Some examples would be birthdays and anniversaries.

___19. In our family, yearly celebrations are pretty routine; everyone knows what is going to happen.

___20. In our family, we feel that yearly celebrations are important.

___21. In our family, everyone is expected to be there for the yearly celebration.

___22. In our family, people do not have assigned jobs to perform for each yearly celebration. (reversed)

___23. Our family has few yearly celebrations. (reversed)

___24. In our family, there is little planning for and discussion about these yearly celebrations. (reversed)

RELIGIOUS HOLIDAYS

Think of how religious holidays, such as Christmas, Chanukah, and Easter, are celebrated in your family.

___25. Our family rarely celebrates religious holidays.

___26. In our family, everyone has a certain job during religious holidays.

___27. In our family, there are few traditions during religious holidays; activities change from year to year. (reversed)

___28. In our family, everyone is expected to be there during religious holidays.

___29. In our family, we feel that it is important to observe religious holidays.

___30. In our family there is a lot of planning for and discussion about religious holidays.

Not at all true	Sort of true	Very true
1	2	3

CULTURAL AND ETHNIC TRADITIONS

Think of some cultural and ethnic traditions that your family observes. Some examples may be baptisms, naming ceremonies, marriage ceremonies, or funerals.

___31. In our family, we feel that cultural events are very important.

___32. In our family, cultural events are flexible in the ways that they are observed. (reversed)

___33. In our family, little planning is done by the members themselves; details are left to people outside of the family. (reversed)

___34. In our family, only a few members may attend cultural events to represent the family. (reversed)

___35. In our family, everyone has a set job to do during these cultural events.

___36. Our family observes cultural traditions.

Appendix G

Child Routines Questionnaire

Instructions: Routines are events that occur at about the same time, in the same order, or in the same way every time. **Please rate how often your child engages in each routine <u>in the last month</u> by circling a rating ranging from 0 (never) to 4 (nearly always).** If an item <u>does not apply</u> to your child due to his or her age, <u>please mark "0"</u>.

My child…	How **often** does it occur at about the **same time** or **in the same way**? 0 = Never 1 = Rarely 2 = Sometimes 3 = Often 4 = Nearly Always
1) … has a set routine for getting ready in the morning (e.g., brushing teeth, washing face, doing hair, and dressing)	0 1 2 3 4
2) … knows what will happen if he or she doesn't follow parent instructions or rules	0 1 2 3 4
3) … takes turns with family members talking about their day	0 1 2 3 4
4) … has regular chores (e.g., takes out trash, helps with laundry, feeds/cares for family pet)	0 1 2 3 4
5) … straightens bedroom daily	0 1 2 3 4
6) … eats meals with family at the table each day	0 1 2 3 4
7) … hugs / kisses parent before bed	0 1 2 3 4
8) … cleans up food mess after snack	0 1 2 3 4
9) … spends special time talking with parent (e.g., in the car or before bed) each day	0 1 2 3 4
10) … does the same things each night before bed (e.g., brush teeth, read story, say prayers, and kiss parent goodnight)	0 1 2 3 4
11) … has household rules such as "No cursing", "No talking while eating" or "No running inside"	0 1 2 3 4
12) … wakes up at about the same time on week days	0 1 2 3 4
13) … must finish household responsibilities (e.g., homework or chores) **before play time**	0 1 2 3 4
14) … receives rewards or privileges for specific good behavior (e.g., finishing homework or completing chores)	0 1 2 3 4

My child…	How **often** does it occur at about the **same time** or **in the same way**? 0 = Never 1 = Rarely 2 = Sometimes 3 = Often 4 = Nearly Always
15) … eats dinner at about the same time each day	0 1 2 3 4
16) … brushes teeth before bed	0 1 2 3 4
17) … picks up dirty clothes after changing	0 1 2 3 4
18) … washes hands before mealtime	0 1 2 3 4
19) … goes to bed at about the same time on week nights	0 1 2 3 4
20) … helps clean up after meals	0 1 2 3 4
21) … has time limits on fun activities (e.g., outside play, TV, video games, or phone use)	0 1 2 3 4
22) … washes hands after using toilet	0 1 2 3 4
23) … is disciplined for misbehavior (e.g., time out, loss of a privilege, or spanking)	0 1 2 3 4
24) … helps decide and prepare for family fun or events	0 1 2 3 4
25) … receives smaller punishment for minor misbehavior (e.g., not following instructions), and larger punishment for major misbehavior (e.g., fighting)	0 1 2 3 4
26) … picks up toys and puts them away when done playing	0 1 2 3 4
27) … eats breakfast at about the same time and place (e.g., at kitchen table or at school) each morning	0 1 2 3 4
28) … helps puts things away after shopping	0 1 2 3 4
29) … is praised or rewarded for specific good behavior (e.g., “I like the way you put away your toys”)	0 1 2 3 4
30) … says prayers before meals	0 1 2 3 4
31) … takes part in “family time” each week when the family does planned activities together (e.g., play games, watch movies, go out to eat)	0 1 2 3 4
32) … shows parent school work after school (e.g., art work or spelling test)	0 1 2 3 4
33) … begins homework at about the same time and place (e.g., at the kitchen table) during the week	0 1 2 3 4
34) … is supervised by an adult who helps child with homework by explaining tasks, demonstrating the task, and/or checking the answers when it is completed.	0 1 2 3 4
35) … completes homework	0 1 2 3 4
36) … studies for tests (e.g., weekly spelling test)	0 1 2 3 4

Appendix H

Early School-Age Children Temperament Questionnaire-Revised

Parent Report

Directions

On the following pages you will find a series of statements that people might use to describe their child. The statements refer to a wide number of activities and attitudes.

For each statement, please circle the answer which best describes how true each statement is for your child. There are no best answers. People are very different in how they feel about these statements. Please circle the first answer that comes to you.

You will use the following scale to describe how true or false a statement is about your child:

Circle Number	**If the statement is:**
1	Almost always untrue of your child
2	Usually untrue of your child
3	Sometimes true, sometimes untrue of your child
4	Usually true of your child
5	Almost always true of your child

My child:	Almost always untrue	Usually untrue	Sometimes true, sometimes untrue	Usually true	Almost always true
1) Has a hard time finishing things on time. (R)	1	2	3	4	5
2) If having a problem with someone, usually tries to deal with it right away.	1	2	3	4	5
3) Has a hard time waiting his/her turn to speak when excited. (R)	1	2	3	4	5
4) Opens presents before s/he supposed to. (R)	1	2	3	4	5
5) Usually does something fun for awhile before starting her/his homework, even though s/he is not supposed to. (R)	1	2	3	4	5
6) Finds it easy to really concentrate on a problem.	1	2	3	4	5
7) When asked to do something, does it right away, even if s/he doesn't want to.	1	2	3	4	5
8) When interrupted or distracted, forgets what s/he was about to say. (R)	1	2	3	4	5
9) Is more likely to do something s/he shouldn't do the more s/he tries to stop her/himself. (R)	1	2	3	4	5
10) Has a difficult time tuning out background noise and concentrating when trying to study. (R)	1	2	3	4	5
11) Usually finishes her/his homework before it's due.	1	2	3	4	5
12) Usually gets started right away on difficult assignments.	1	2	3	4	5
13) Is good at keeping track of several different things that are happening around her/him.	1	2	3	4	5
14) Usually puts off working on a project until it is due. (R)	1	2	3	4	5
15) Is able to stop him/herself from learning at inappropriate times.	1	2	3	4	5
16) Is often in the middle of doing one thing and then goes off to do something else without finishing it. (R)	1	2	3	4	5
17) Is usually able to stick with his/her plans and goals.	1	2	3	4	5
18) Pays close attention when someone tells her/him how to do something.	1	2	3	4	5

Appendix I

Learning Strategies-Chinese Version

The following questions ask about your child's learning strategies and study skills. Again, there are no right or wrong answers. Please answer the questions about how your child studies as accurately as possible. Use the same scale to answer the remaining questions. If you think the statement is very true of your child, circle 7; if a statement is not at all true of your child, circle 1. If the statement is more or less true of your child, find the number between 1 and 7 that best describes your child.

1	2	3	4	5	6	7
Not at all true						Very true

__1. When studying for a test, my child tries to put together the information from class and from the textbook.

__2. When doing homework, my child tries to remember what the teacher said in class so he or she can answer the questions correctly.

__3. My child asks himself or herself questions to make sure he or she knows the materials being studied.

__4. When studying, my child puts important ideas into his or her own words.

__5. My child always tries to understand what the teacher is saying even if it doesn't make sense.

__6. When studying for a test, my child tries to remember as many facts as he or she can.

__7. When studying, my child copies his or her notes over to help him or her remember materials.

__8. My child works on practice exercises and answers end of chapter questions even when he or she doesn't have to.

1	2	3	4	5	6	7
Not at all true of me						Very true of me

__9. Even when study materials are dull and uninteresting, my child keeps working until he or she finishes.

__10. When studying for a test, my child practices saying the import facts over and over to himself or herself.

__11. Before beginning to study, my child thinks about things he or she will need to do to learn.

__12. My child uses what he or she has learned from old homework assignments and the textbook to do new assignments.

__13. When studying a topic, my child will try to make everything fit together.

__14. When studying, my child stops once in a while and goes over what he or she has read.

__15. When reading material from my child's class, my child says the words over and over to help him or her remember.

__16. My child outlines the chapters in the textbook to help him or her study.

__17. My child works hard to get a good grade even when he or she doesn't like a class.

__18. When studying, my child tries to connect his or her readings with what he or she already knows.

Appendix J

Children's Academic Performance

Instruction: Based on your knowledge of the child's school work, including homework assignments, test scores, and report cards, please use the scale below to rate the child's school performance in five areas (mathematics, reading, writing, social science, and overall achievement).

1	2	3	4	5
Not very well at all	Not well	Somewhat well	Well	Very well

____ Mathematics ____Reading ____Writing

____Social Science ____Overall Achievement