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Parental involvement in early childhood education among Chinese immigrant and English Speaking non-Chinese parents in New Zealand

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The University of Auckland

Abstract

This study compared 120 Chinese immigrant parents and 127 English speaking non-Chinese parents on their parental involvement in early childhood education (ECE), and investigated the role of parenting beliefs, parenting practices, and demographic variables on the level of parental involvement. Parental involvement was measured with the Parental Family Involvement Questionnaire, which was administered to all parents, and interview data collected from 50 parents about reasons for early childhood education involvement. Parenting beliefs and practices were assessed with the Parental Role Construction for Involvement in the Child's Education Scale: Role Activity Beliefs, the Parental Sense of Competence Scale, and the Parenting Styles and Dimension Questionnaire (PSDQ). ECE practices to encourage parental involvement were also examined from interviews conducted with 30 kindergarten head teachers.

Results showed that Chinese immigrant parents were less likely than non-Chinese parents to communicate with teachers, volunteer to help at the kindergarten, and participate in kindergarten decision making. Hierarchical multiple regression analyses revealed that, for the whole sample, role construction and self-efficacy were important predictors of communicating with teachers, volunteering to help at the kindergarten, and participating in kindergarten decision making. For the Chinese sample only, perceived opportunity for involvement, parent education and English language proficiency predicted communication with teachers, and opportunity for involvement was the only significant predictor of participating in kindergarten decision making. Parent interviews corroborated and supplemented these findings. Teacher interviews highlighted a range of communication strategies, policies and systems used by kindergartens to encourage parental involvement.

Based on findings from parents and teachers this thesis makes some tentative recommendations for early childhood services, particularly about ways to increase Chinese

immigrant parents' level of ECE involvement, such as helping Chinese immigrant parents to understand the importance of parental involvement, suggestions for enhancing the parenting confidence of Chinese immigrant parents, and their perceptions of opportunity for involvement, employing bilingual staff, and developing relationships with Chinese immigrant parents.

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Chapter One: Introduction and literature review

1.1 Importance and professional significance of the topic

New Zealand's early childhood education (ECE) policy recognises the value of collaborative relationships between ECE services and parents and Whānau (extended family). The concept of parent-teacher partnership is a strong aspect of New Zealand's early childhood philosophy and this is acknowledged in both Te Whāriki (Ministry of Education, 1996), and the Revised Statement of Desirable Objectives and Practices for Chartered Early Childhood Services in New Zealand (DOPs) (Crown, 1996) which remain current policy guidelines for the early childhood education sector in New Zealand (Ministry of Education, 2007a; Bushouse, 2008).

Te Whāriki, the New Zealand early childhood education curriculum, puts much emphasis on the wider world of family and community. It emphasises the centrality of parents and Whānau as partners in an ECE setting. Te Whāriki makes "family and community" one of the four foundation principles of learning and development in early childhood, and the wider world of family and community an integral part of the early childhood curriculum. One of its five strands is "belonging", and the first goal of the strand is "Children and their families experience an environment where connecting links with the family and the wider world are affirmed and extended" (Ministry of Education, 1996, p.54). It illustrates the meaning of the goal by providing reflective questions such as: "In what ways are staff able to be a resource for parents, and families able to be a resource for staff? Can this be done in any other ways" (p.56)? It also sets out children's learning outcomes concerning experience in strong parent-teacher connections and provides examples of experiences which help to meet these outcomes.

The DOPs sets out mandatory requirements for ECE services to work in partnership with

parents/guardians and Whānau to promote and extend the learning and development of each child who attends or receives the services (Crown, 1996). The Education Review Office, a government department whose purpose is to evaluate and report publicly on the education and care of students in schools and early childhood services, holds that strengthening links with families and the wider world helps children to extend their knowledge of both familiar and unfamiliar people, places, things and events (Education Review Office, 2004).

The increase in enrolments of Chinese immigrant children seems to have posed great challenge to early childhood education services when it comes to the construction and maintenance of a successful parent-teacher partnership. According to the 2006 Census, Chinese New Zealanders (147,570) accounted for 3.7% of New Zealand's total population and approximately 42% of all Asian New Zealanders, the largest Asian ethnic group in New Zealand (Statistics New Zealand, 2006). The number of Chinese enrolments (3,499) in early childhood services accounts for 33.4% of that of total Asians (10,464) in 2004 (Education Counts, 2004). As at 1 July 2010, Asian enrolments (13,181) accounted for 7.0% of the total enrolments (188,924) in licensed early childhood services, only second to European/Pakeha (63.1%) and Maori (20.4%). During the period 2006-2010, Asian enrolments increased by 39.0%, compared to 24.9% of Pasifika, 16.8% of Maori, and 8.0% of European/Pakeha (Education Counts, 2010), which was largely attributable to the increase in Chinese enrolments.

Thus, given that parental involvement is an important indicator of the quality of early childhood education services (Zellman & Perlman, 2006), the topic is particularly important for early childhood education centres enrolling immigrant Chinese children. The topic is also of developmental significance given that there is a link between parental involvement in education and children's learning and school success (Mulligan, 2005; Fuller, 2005; Morrison, 2006), and evidence suggests that the link is stronger for the language and cultural minority parents (Lin, 2003; Begum, 2007).

There is evidence that parental involvement practices happened when early childhood programmes came into being (Cantor, 1999). As early as the 1860s, Elizabeth Peabody, who led the movement to establish kindergartens in the United States, encouraged mothers to learn about the kindergarten so that they could understand and be able to cooperate in spirit with the kindergarten in the education of the children (Mann & Peabody, 1869). The history of early childhood programmes reveals a wide range of attempts to bring parents and early childhood programmes together (Tyler, 1993). There is now a growing body of literature that highlights the importance of families and teachers working together to support children's learning. Aspects of this literature will be discussed in the following sections and will include conceptual frameworks of parental involvement, definitions of parental involvement, research about the importance, quality and quantity of parental involvement, and the determinants of parental involvement. Literature on the influence of the traditional Chinese culture on parental involvement and research on parental involvement among Chinese immigrant parents in New Zealand will also be reviewed. Finally, an overall summary of the research gaps is provided leading to the research questions, hypotheses and aims that will be examined by this thesis. The main purposes of this study are: (1) to compare Chinese immigrant and English speaking non-Chinese parents on the nature and level of their involvement in early childhood education; (2) and to investigate the role of parenting beliefs and practices and demographic factors on their level of involvement.

1.2 Conceptual Frameworks

Bronfenbrenner (1979) proposed that human development occurs within and between diverse, interactive environments which are constructed by different layers of the ecosystem, that is, from the inner to the outer, microsystem, mesosystem, exosystem, and macrosystem. The micro-system is the level within which a child experiences immediate interactions with other people. At the beginning, the micro-system is the home, involving interactions with only one or two people in the family. As the child ages, the microsystem

is more complex, involving more people; such as in a child-care centre or preschool. Meso-systems are the interrelationships among settings (i.e., the home, a day-care centre, and the schools). The stronger and more diverse the links among settings, the more powerful an influence the resulting systems will be on the child's development. In these interrelationships, the initiatives of the child, and the parents' involvement in linking the home and the school, play roles in determining the quality of the child's meso-system. The exo-system influences the quality of interrelationships among settings and has a direct bearing on parents and other adults who interact with the child. These may include the parental workplace, school boards, social service agencies, and planning commissions. Macro-systems are "blueprints" for interlocking social forces at the macro-level and their interrelationships in shaping human development. They provide the broad ideological and organisational patterns within which the meso- and exo-systems reflect the ecology of human development. Macro-systems are not static, but might change through evolution and revolution. For example, economic recession, war, and technological changes may produce such changes (Bronfenbrenner, 1979).

Through this ecosystem framework of various, embedded systems, we can understand the developing child in a complex and holistic manner. Partnership practices at the mesosystemic (home-school) level involve meaningful connections among important developmental contexts, facilitate continuity and smooth transitions across systems, and are considered to be particularly important during the preschool years (Raffaele & Knoff, 1999; Sheridan, Knoche, Edwards, Bovaird, & Kupzyk, 2010).

Seginer (2006) gives a detailed analysis of the relevance of Bronfenbrenner's (1979, 1986) developmental ecology framework to parental involvement in a child's education. According to her, a parent's home-based involvement forms part of the child's microsystem, while a parent's school-based involvement and parent-teacher interaction forms part of child's mesosystem, and ethnic and sociocultural effects form part of the macrosystem of the child.

Informed by Bronfenbrenner's developmental ecology framework, Epstein (1995, 2001) developed a framework of six types of involvement with associated activities, challenges, and expected results. She classified parental involvement behaviour into six discrete categories of influence, from proximal home influences to the more distal community influences as follows: (1) Parenting - nurturing children, giving them guidance, and providing motivation and discipline; (2) Communicating- talking regularly with school staff about programs, children's progress, and other school affairs; (3) Volunteering - helping with school-wide and classroom activities; (4) Learning at home - assisting student learning through help with homework and other curriculum-related activities; (5) Decision-making - participating in school decision making, and becoming a parent leader or representative; (6) Collaborating with community- identifying and integrating family and community resources to strengthen school programs and student learning.

Other researchers have constructed different frameworks around the concept of parental involvement. Grolnick, Benjet, Kurowski, and Apostoleris (1997) acknowledged that parental involvement could not be conceived as a unitary phenomenon and that a broad and multidimensional perspective was needed. They endorsed three types of involvement in children's schooling: behaviour, cognitive-intellectual, and personal. According to Grolnick et al, the parent's behaviour concerns participation in activities at school (e.g., attending parent-teacher conferences and school activities) and at home (e.g., helping with homework, asking about school). Cognitive-intellectual involvement includes exposing the child to intellectually stimulating activities such as going to the library and talking about current events. The third category, personal involvement, is knowing about and keeping abreast of what is going on with the child in school. While this framework takes a multidimensional perspective, it is not as inclusive as Epstein's (1995) typology. Compared to Epstein (1995), it excludes parenting, decision making and collaborating with the community from the list of parental involvement activities.

While Epstein's (1995) typology originated in the primary schooling settings as some other models did (Grolnick et al., 1997; Hoover Dempsey & Sandler, 1997), it has been adopted

in a number of early childhood education studies on parental involvement (Fantuzzo, Tighe, & Childs, 2000; Pelletier & Brent, 2002; Rimm-Kaufman, Pianta, Cox, & Bradley, 2003). Some researchers believe that the concept of parental involvement in early childhood education is borrowed from efforts at the elementary school level to involve parents in their children's education (Zellman & Perlman, 2006).

However, activities often found in primary schools, such as parent-teacher conferences, may not be appropriate to the needs of parents, caregivers or children in child care settings, and the findings reported in the large body of literature on parent involvement, much of which focuses on primary school-aged children, may not directly apply to parents of children of preschool age. Therefore, any models originating from research on the primary or secondary schooling settings should be carefully examined before they are applied into the early childhood education contexts, regardless of the fact that there lacks established conceptual frameworks of parental involvement specifically for early childhood education.

1.3 Interpretation of parental involvement

Parental involvement in early childhood programmes encompasses a range of terms including family involvement, parent participation, parent-teacher collaboration, or home-school partnership. Lin (2003) referred to parental involvement as "the amorphous term which was difficult to clarify" (p.43). There is much complexity around the term of "parental involvement" for a number of reasons.

Firstly, researchers disagree on the scope or content of parental involvement. Yang (2006) believes parental involvement is an "all-purpose" term describing all manner of parent-programme interactions such as policy making, parent education, fund raising, volunteering time, and even the simple exchange of information of various sorts with staff. She contended that parental involvement should be construed as including any adults who played an important role in a child's upbringing and wellbeing. Sy (2002) embraced a

broad approach of this kind and identified a narrow definition of parental involvement as a major limitation to the existing parental involvement literature. She asserted that the majority of research on parental involvement during the transition to school had defined the concept narrowly, primarily focusing on parents' school participation and parents' home involvement. She believed that parental involvement included a wider variety of parent behaviours, such as general parenting style, non-academic activities in the home, and involvement in community resources for educational enrichment.

Sy (2002) categorised parental involvement into direct involvement and indirect involvement. She defined direct involvement as managerial involvement which included direct hands-on practices, such as directly teaching or tutoring children, participating in school activities and events. Indirect involvement was defined as structural involvement, such as exerting control over when and with whom to play, and providing extra workbook and additional homework. According to Yang (2006), direct involvement activities include receiving personal notes from teacher, talking with the teacher about positive events, receiving information about school activities, talking with the teacher about negative events, praising one's child for school performance, doing activities at home suggested by the teacher, and reading with or to the child. Indirect involvement refers to activities that allow parents to take part in activities at school, that is, attending parent and teacher conferences, attending open days, attending parent workshops, helping with school work, helping in the classroom, visiting the classroom, and helping with a class trip/event. Although both Sy (2002) and Yang (2006) classified parental involvement into "direct" and "indirect" aspects, they defined "directness" quite differently. While Sy (2002) looked at how "directly" the parental involvement behaviour acts on the child rather than the teacher, Yang (2006) emphasised how "directly" the parental involvement behaviour has an effect on the teacher rather than the child.

Secondly, researchers disagree on who should be ultimately responsible for parental involvement. Palenchar (2002) pointed out that the phrase "parental involvement" seemed to imply that the relationship between the parent and school was one-sided, dependent

upon the involvement of the family. Palenchar argued there was no implication in this phrase that teachers or schools took an active role in initiating or fostering the relationship or connection between home and school. Instead the wording implied that parents should establish and maintain the relationship. In contrast to this one-sided approach, Tyler (1993) believed that "in any successful programme of parental involvement, school initiative is critical. Gaining parent support for educational programmes requires much planning on the part of the teacher" (p. 22). This notion suggests that, instead of parents and families, teachers and schools are ultimately responsible for the extent of parental involvement. In support of this idea, Billman, Geddes, and Hedges (2005) held that while the philosophy and research of early childhood education described the benefits of collaboration between parents and teachers for children's learning, ongoing responsibility for establishing and maintaining this collaboration rested largely with teachers. Parent-teacher partnerships can be complex and teachers' and parents' views about children's learning might be different or even conflict. For example, Billman et al. (2005) reported the differences in the views of parents and teachers about parent involvement such as "differences in perceptions of the parent-help role" (p.46), and described the teachers' efforts to close the gaps in understanding by making "changes to snack time routines" (p.47).

Thirdly, researchers disagree on the primary place where parental involvement happens. Researchers have classified parental involvement into school-based activities and home-based activities, and they have different views on which represent typical parental involvement. Nord and West (2001) defined parental involvement as participating in at least three of four school activities - attending a general school meeting, attending regular parent-teacher conferences, attending a school or class event, or volunteering at school. In support of this notion, Mulligan (2005) believed that school-based involvement activities should be the focus of research "because this is the type of involvement most readily affected by the characteristics of the school and its personnel...as such, it is the most amenable to being increased and better facilitated by changes in school policy and practices" (p.5). Waanders, Mendez, and Downer (2007) adopted three dimensions of parent involvement in research on preschool parental involvement: school-based

involvement, home-based involvement, and the parent-teacher relationship. If the parent-teacher relationship is a category of involvement behaviours, as Waanders et al. (2007) postulated, it usually occurs in centres rather than at homes except for the home visits. In summary, in terms of the primary location where parental involvement occurs, parental ECE involvement seems to be more centre-based than home-based.

1.4 Effect of parental involvement

Parental involvement in early childhood education is important in a number of ways. Across a range of studies, there has emerged a strong conclusion that parental involvement in child and adolescent education generally benefits children's learning and school success (Mulligan, 2005; Mitchell, Haggerty, Hampton, & Pairman, 2006; Fuller, 2005; Morrison, 2006).

Parental involvement can be important during children's transition from home or preschool environment to a more formal school environment. Parental involvement in preschool can make this transition a less difficult one for both children and parents, and it provides more continuity between home and school life (Mulligan, 2005). Research conducted over several decades demonstrates a strong and consistent relationship between parents' involvement in education-related activities and their children's educational attainment (Guskey, Ellender, & Wang, 2006). For example, Senechal (2006) reviewed 14 studies which included an intervention where researchers tested whether parental involvement in literacy acquisition enhanced children's literacy and found that parental involvement had a positive impact on children's reading acquisition from kindergarten to grade 3.

Parent involvement is particularly important for minority children who experience a greater level of discontinuity in culture (Ogbu, 1982). Using data from the Early Childhood Longitudinal Study (ECLS), Kindergarten Class of 1998-99, Lin (2003) explored the relationship between parental involvement and a large sample of five or six-year-old first-time kindergarteners' academic performance. Results indicated that minority children

including Asian children were more influenced than White children by parental involvement. Using the same data, Begum (2007) found that the African American and Hispanic children benefited more than the mainstream White children by a higher level of parent involvement in the education process of their children.

Furthermore, researchers have suggested that parent involvement in the early childhood years may influence children's academic achievement to a greater extent than does parent involvement in elementary or high school (Chao, 2000; Rogala, 2001; Singh et al., 1995). Englund, Luckner, Whaley, and Egeland (2004) found that the quality of mothers' instruction when children were 3.5 years old directly influenced children's IQ and indirectly influenced children's achievement in first and third grades. They suggested that parent provision of a firm academic foundation led to higher achievement in the early grades, which might lead to greater support for academic achievement in the later grades.

1.5 Determinants of parental involvement

Research has identified a number of possible determinants which may help answer questions about the level of parental involvement in their children's early childhood education. These determinants include parents' role construction, parents' sense of efficacy, invitations and opportunities for involvement, demographic factors, language and culture. Models explaining how these factors influence parental involvement are discussed below.

The Hoover-Dempsey and Sandler (1995, 1997) model

Hoover-Dempsey and Sandler (1995, 1997) reviews psychological theory and research critical to understanding why parents become involved in their children's elementary and secondary education. According to the researchers, three major constructs are central to parents' basic involvement decisions. Firstly, parents' role construction defines parents'

beliefs about what they are supposed to do to support their children's education and establishes the range of activities that parents regard as important and permissible for their own actions with and on behalf of children. Secondly, parents' sense of efficacy for helping their children succeed in school focuses on the extent to which parents believe that through their involvement they can exert a positive influence on their children's educational outcomes. Thirdly, general invitations and opportunities for involvement refer to parents' perceptions that the child and school want them to be involved. The review by Hoover-Dempsey and Sandler suggests that even well-designed school programmes inviting involvement will meet with only limited success if they do not address issues of parental role construction and parental sense of efficacy for helping children succeed in school.

Research has shown that parents' construction of family roles and parents' self-efficacy are two of the most important psychological traits which influence parental involvement (Hoover-Dempsey & Sandler, 1997; Pelletier & Brent, 2002; Yamamoto, Holloway, & Suzuki, 2006). According to Bandura (1997), a parent's construction of the family's role establishes the range of activities deemed to be important, necessary, and permissible for parents' actions on behalf of the child. Role construction is influenced by the expectations held by parents themselves and by those around them, for example, family members, school personnel. Self-efficacy is beliefs in one's capabilities to organise and execute the courses of action required to produce given attainments. Individuals with high self-efficacy in a particular area exert effort in that area, persevere in the face of difficulty, and respond resiliently to adversity; additionally, they are less prone to self-defeating thought patterns, and experience less stress and depression than those with lower self-efficacy (Bandura, 1997).

The Hoover-Dempsey and Sandler (1995; 1997) model highlights the importance of parents' psychological traits, namely, parental beliefs, in initiating or activating involvement behaviour. Both parental self-efficacy and parental role construction are dependent on parents' belief system concerning parents' abilities and responsibilities.

General invitations and opportunities for involvement are seemingly external factors beyond parents' control, nevertheless, to a great extent, they may be more of an outcome of parents' perception than of the reality. While it is true different centres may offer parents different invitations and opportunities for involvement, the same inviting message from the centre could be perceived or interpreted differently by different parents with particular belief system or psychological traits (Hoover-Dempsey and Sandler, 1997).

The Hoover-Dempsey and Sandler model was revised by Walker, Wilkins, Dallaire, Sander, and Hoover-Dempsey in 2005. In the revised model, the initial decision to be involved and the forms of involvement are not distinguished as they are in the original model. Role construction and self-efficacy are conceptualised as interrelated aspects of parents' motivated beliefs. The invitations variables are conceptualized as aspects of perceptions of invitations for involvement from others (general school invitations, specific school invitations, and specific child invitations) (Walker et al., 2005).

While the Hoover-Dempsey and Sandler (1995; 1997) model was based on research on children's elementary and secondary education, it has been used to investigate factors influencing parental involvement in early childhood education (Pelletier & Brent, 2002; Yamamoto et al., 2006). Pelletier and Brent (2002) suggested that parents who perceived themselves as more effective were more involved in their children's education at the preschool level. Participants in their study were 123 mothers and their 4-year-old children in the greater metropolitan region of Toronto, Ontario, Canada who did not receive normal junior kindergarten education. Both the mothers and the children attended 12-week school readiness intervention sessions. In semi-structured interviews, parents were asked about their perceptions of self-efficacy including their beliefs about: (a) their own teaching efficacy based on their instructional skills, their ability to motivate their child, and their teaching experience; (b) their beliefs about who controls learning (teacher or parent); (c) how much academic, social, and motivational influence they have on their child; and (d) how much more confident they are, having acquired new skills at the centre. Teachers were asked in questionnaires to share their perceptions of total parent involvement in terms of

active participation in the programme and evidence of programme extension through home learning. The study found that teachers' perceptions of total parent involvement were significantly associated with parents' perceptions of self-efficacy. Another example is provided by Yamamoto et al. (2006) who examined the relation of maternal beliefs (parenting self-efficacy and family role construction) and family socio-economic status to three dimensions of parent involvement in Japan: preschool selection strategies, engagement in reading at home, and involvement in activities at the preschool. Participants consisted of 108 Japanese mothers with children aged 5 or 6 years old. The results indicated that parenting self-efficacy and family role construction were associated with Japanese mothers' strategies for selecting their child's preschool, and the frequency of engaging in home reading.

The Hoover-Dempsey and Sandler model attributed parental involvement mainly to parents' psychological traits. While this model provides a psychological perspective on the determinants of parental involvement, the range of factors associated with parental involvement may be far more complex as the following model demonstrates.

The Grolnick et al. (1997) hierarchical model

Grolnick et al. (1997) investigated a multilevel model of factors that might influence multiple facets of parent involvement. On the basis of Bronfenbrenner's (1986) ecological cross-disciplinary approach, the researchers postulate a hierarchical model specifying three levels of factors:

(1) Individual level. Parents' levels of involvement in school may be influenced by the qualities of the parent-child dyad and, within the dyad, by the characteristics of each member. Within this category, parents' thoughts and beliefs about themselves as parents are one set of such characteristics. First, parents differ in terms of their ideas about their role in their child's learning. To the extent that they believe strongly that parents have a

role in the teaching-learning process, they may be more likely to take on involvement activities. Further, personal efficacy is also likely to impact on behaviour. Parents who believe they can "make a difference" are more likely to be involved. The second construct concerns characteristics of the children themselves. Children create their own contexts and parents use their children's behaviour as regulators of their actions, tailoring parenting efforts to them, for example, parents who see their adolescents as more difficult are less involved with them (Grolnick et al., 1997).

- (2) Contextual level. The parent's behaviour can not be taken out of the context within which the parent and family live. From an ecological perspective, the social context of parenting will be a key contributor to the way resources are allotted to the child. There is much evidence that economic hardship undermines parenting more generally. Grolnick et al. suggest that beyond demographic measures per se, it is the parents' experienced inadequacy of resources that will be most likely to disrupt involvement. There is evidence that high level of stress negatively influences parenting characteristics such as warmth and responsiveness (Grolnick et al., 1997). Stressful events may take time, energy and attention from parents, making parents less psychologically available for or aware of involvement activities. Conversely, social support has been positively associated with the provision of a nurturant family environment. Such support may provide the parent with the time to be involved and help the parent mobilize resources to cope with stress.
- (3) Institutional level. The strength of the connections between families and schools may be a function of characteristics of the school institution and its representatives. Teachers are parents' primary contacts within the school and thus practices in the classroom are potential influences on parent involvement. There are wide variations in whether teachers believe involving parents is an effective strategy for enhancing children's education. Some teachers believe that parents are interested and willing to help and that it is time-effective to involve parents in their children's education, whereas others feel it will be a source of conflict between parent and child and that parents will not wish to or be able to carry through commitments. Teacher practices can affect parents' behaviour. When teachers

make parent involvement part of their regular teaching practice, parents are more involved and feel more positive about their abilities to help. Furthermore, Grolnick et al. demonstrate that students whose teachers use more parent involvement practices are more positive toward school and achieve greater gains in reading than those of teachers who use fewer of these practices.

Grolnick et al. (1997) investigated parent self efficacy, parent role construction and child's difficulty at individual level, stressful life events, family resources, and satisfaction with social support at the contextual level, and teacher attitudes, teacher behaviour at an institutional level. Participants were 209 mothers (81% Caucasian, 11% Hispanic, 4% African American, and 4% other minority) of children from four urban public elementary schools in Northeast America. The children and their teachers also participated. Parents, teachers, and children reported on three types of involvement: school (involvement behaviour at school, e.g., going to school events, talking with the teacher before or after school), cognitive (exposing the child to intellectually stimulating activities at home, e.g., going to the library, talking about current events), and personal (knowing about and keeping abreast of what is going on with the child in school). Mothers who felt efficacious, who saw their roles as that of teacher, and who viewed their children as less difficult were more involved in cognitive activities. A stressful family context, social support, and teacher attitudes and practices were associated with both school and personal involvement. In comparison with the Hoover-Dempsey and Sandler (1995, 1997) model, the "individual level" in the hierarchical model is consistent with parental self-efficacy and parenting role construction and the "institutional level" is consistent with general invitations and opportunities for involvement. Therefore, the "contextual level" is essentially where the hierarchical model is different. While Grolnick et al. (1997) studied stressful life events, family resources, and satisfaction with social support as factors at the "contextual level", factors at the "contextual level" also comprise a wide scope of demographic data including socioeconomic status (SES).

Demographic characteristics

Demographic characteristics such as single parenthood, ethnic minority status, parent education, and employment status have been linked to decreased parent involvement (Castro, Bryant, Peisner-Feinberg, & Skinner, 2004; Fantuzzo et al., 2000; Kohl, Lengua, & McMahon, 2000; Waanders et al., 2007; Laforett & Mendez, 2010). For example, low socioeconomic status and low maternal education have been linked to lower levels of parent involvement (Fantuzzo et al., 2000; Kohl et al., 2000). Inflexible work schedules, lack of child care, lack of income, and transportation problems can make it difficult for parents to participate more in their child's schooling (Lareau, 1987; Parker et al., 1997).

A number of studies have examined familial context as determinants of parental involvement. For example, Waanders et al. (2007), in a study of 154 caregivers/parents from two Head Start centres in the southeastern United States, revealed that perceived context variables, including economic stress and neighbourhood social disorder, related negatively to parent involvement. Another example comes from Holloway, Yamamoto, Suzuki, and Mindnich (2008) who examined how demographic and psychological factors shaped the involvement of Japanese mothers in their children's education. The five demographic variables studied were family income, maternal education, family size, mothers' employment status, and sex of the child. It was found that more highly educated and wealthier mothers with fewer children reported investing to a greater extent in supplementary lessons.

Language and culture barriers to language minority parental involvement

Another set of demographic variables language and cultural differences are key barriers to language minority parental involvement (Brooks, 2004; Pena, 2000; Johns, 2001). Morrison (2006) defined "language minority parents" as individuals whose English proficiency was minimal, and who often faced language and cultural barriers that greatly

hampered their ability to become actively involved in their children's education. Primary home language use has been the prevailing criterion for determining whether a parent/child is a language minority parent/child (Carter, 2002; Ready & Tindal, 2006; Ishizawa, 2006; August & Hakuta, 1998; Durham, 2006; Mulligan, 2005).

Mulligan (2005) suggested that language minority parents were expected to be less involved than other parents because they lacked linguistic capital or the ability to speak the dominant language and to use it appropriately, given the context in which social interaction took place. Pena (2000) found that language barrier was particularly influential in determining the activities in which parents chose to participate. This influence of language differences was especially apparent at parent meetings. Other research suggests that language difficulties can preclude many parents from engaging in a number of school activities when parents feel powerless to make a difference to their children's education. Language-minority families often lack information about the mainstream educational system, including basic school philosophy, practice, and structure, which can result in misconceptions, fear, and a general reluctance to become involved (Gorinski & Fraser, 2006). This suggestion is supported by Pelletier and Brent's (2002) study with a sample of Canadian parents of 4-year olds. The study found that parents who spoke English as a second language including Chinese were significantly less involved in active participation in the centre and program extension through home learning than their English-speaking counterparts, were less likely to approach the teacher with questions and observations, and were less confident in taking part in follow-up activities because the context was unfamiliar.

Research has also shown that many language minority parents may not be able to perceive involvement opportunities to the same extent as mainstream parents do. For example, drawing on data from the US Parent and Family Involvement in Education Survey of the 2003 National Household Education Surveys Program, Enyeart, Diehl, Hampden-Thompson, and Scotchmer (2006) reported differences in perceived opportunities for parent involvement between English-speaking and Spanish-speaking

parents of school-age students, and found that Spanish-speaking parents perceived fewer opportunities.

There is some argument over the extent to which demographic factors influence parental involvement. Grolnick et al. (1997) emphasised that it was not the demographic factors per se that influenced parental involvement, instead, it was the parents' experienced inadequacy of resources that would be most likely to disrupt involvement. This view is quite close to the argument of Hoover-Dempsey and Sandler (1995) who state that while demographic factors play a role, they are not the primary determinants of whether and how parents become involved in their children's schooling. Instead, it is likely that demographic variables serve as proxy variables for more complex dynamics within individuals and communities, such as parenting efficacy, perceived economic stress, and neighbourhood context.

Furthermore, the factors that influence parental involvement are inter-related. For example, it is likely that minority language status may have effects on self-efficacy (Ali, 2008). Understanding the determinants of parental involvement is challenging not only because the factors influencing parental involvement are complex, but also because parental involvement comprises complex aspects. While a certain factor may enhance one aspect of parental involvement, it may impede other aspect(s) of parental involvement. The study by Holloway, Yamamoto, et al. (2008) provides a relevant example. The authors found that parenting self-efficacy was negatively related to investment in supplementary lessons but positively related to engaging in cognitive stimulation at home. Another example is the conflicting findings in different studies concerning the effect of employment status of parents on parental involvement dimensions. For instance, it was found by Holloway, Yamamoto, et al. (2008) that mothers' work status was not associated with any of the three forms of parental involvement, that is, investment in lessons, homework monitoring and teacher communication, and cognitive stimulation. In contrast, Castro et al. (2004) found parent employment to be the strongest predictor of parental involvement compared to other parent characteristics. The discrepancy between the two studies may be attributable to a

number of factors, for example, different measures of both parental involvement dimensions and parental involvement predictors, different ages of the children, and different countries where the studies were carried out. The study by Holloway, Yamamoto, et al. (2008) was conducted in Japan with Japanese mothers of 7 and 8- year-old children. The finding that mothers' employment status had no effect on parental involvement could be related to maternal roles in the Japanese culture. According to Holloway, Yamamoto, et al., part-time work might afford women the flexibility they needed to remain fully involved in children's schooling, and the confidence and satisfaction women received from being employed might counterbalance the potentially negative drain of work on their time and energy. The study by Castro et al. (2004) was conducted with parents of Head Start programs in the US who were from low-income families and tended to work in service-level jobs. Parent involvement in Castro et al.'s study included category of volunteer (e.g. parent, other relative, community member), number of times volunteered, type of volunteer activity performed each time (e.g. helping in classroom, going on field trip, attending parent meeting, preparing materials at home), and time spent at each activity for every volunteer activity that occurred. In comparison with the parents in Holloway, Yamamoto, et al. (2008), parents in Castro et al. (2004) appeared to have less time for involvement activities due to their work status, which could be a main reason for the conflicting findings of the two studies.

1.6 Traditional Chinese culture

Chinese cultural values may be significant determinants of parental involvement in early childhood education among immigrant Chinese parents. There is research evidence which contends that, regardless of where the children live, the child-rearing practices of Chinese migrant families are still influenced by traditional Chinese cultural beliefs. Chinese parents retain many traditional aspects of parenting values and practices, even when living in a place not of their origin (Chen, 2001; Lin & Fu, 1990; Zhang, Kohnstamm, Slotboom,

A long list of studies shows that the Confucian ideology plays a guiding role in the education and rearing of children in the Chinese culture (Li, 2004; Lin & Fu, 1990; Shek & Chan, 1999). The principles of Confucianism on the purpose of living determine the orientation, approach and aim of child-rearing and education in Chinese culture. In general, the Chinese tend to value the needs of the group and emphasise duty and obligation (Hui & Triandis, 1986). Also, centered on Confucianism, the Chinese parental style traditionally has a strong focus on parental control and training. The training of infants and young children in Chinese families focuses on parents teaching children how to control themselves. There is a greater emphasis on how a child acts than how he or she feels. In the Chinese culture, children's learning is a major responsibility of parents, and this is reflected in the Chinese notion of "guan" (to discipline), which is the key to Chinese parenting. Parents' heightened monitoring of children's activities is central to the concept of guan with such monitoring viewed as an act of love (Chao, 1994).

According to Ho (1986), shaming is a prevalent Chinese socialisation practice based on Confucian philosophy. It is designed to help children be sensitive to the perceptions of others and to teach them to avoid future behaviours that would bring shame or embarrassment to the family. Research conducted by Fung (1999), a native Taiwanese, described how shaming is practiced by Taiwanese parents in the socialisation of their children's moral behaviour. In an effort to understand shame in Chinese terms, the ethnographic study examined parental beliefs and practices with respect to shame, as well as young children's participation in shaming events. Nine middle-class Taiwanese families participated in this study. Interviews with the primary caregivers and longitudinal observations of spontaneous home interactions revealed that the socialisation of shame was well underway by age two-and-a-half. Shaming included elements of guilt induction, love withdrawal, and guilt laden warnings of punishment, along with explicit statements about being embarrassed and ashamed of child misbehaviour. According to Fung (1999), although shaming is generally thought to threaten children's self-esteem in western society,

discretionary use of shame in Confucian philosophy is thought to help children regulate and enact their behaviour in culturally appropriate modest, tactful, restrained, respectful, and sensitive ways.

Priority on academic excellence is another value of Confucianism which has been maintained by generations of Chinese migrants (Dyson, 2001). Therefore, Chinese migrant parents incline towards an emphasis on educational achievement. Their communications with the school tends to focus on their children's academic achievement. For example, Dyson (2001) investigated communication between home and school in Chinese families who recently immigrated to Canada. The participants were 21 recent Chinese immigrants and 19 non-immigrant Caucasian-Canadians living in a medium-sized Canadian metropolitan city. The majority of the Chinese families, who originated from Taiwan, mainland China, and Hong Kong, had immigrated to Canada within the last 5 years. All the children were attending elementary school in grades 2 to 7, with ages ranging from 7 to 13 years. All the Chinese parents spoke some English, and the most recent immigrants (immigrating within the last two years) spoke only limited English and had difficulty comprehending ordinary conversational English. Members of the non-immigrant families were all Caucasian, having been born and having always resided in Canada. An open-ended questionnaire was used in interviews with both the new immigrant Chinese parents and non-immigrant parents. It was found that, compared to non-immigrant parents, immigrant Chinese parents especially emphasised the academic progress of their children and were more concerned with the quality of teaching.

A further example comes from a cross-cultural comparison study of parental beliefs. Chao (1996) asked 48 immigrant Chinese mothers about their perspectives regarding the role of parenting in their children's school success. Participants were mostly from Taipei, Taiwan, and were recruited from the greater Los Angeles area. Their children were preschool aged, ranging from 2 to 5 years. All of the Chinese mothers immigrated to the United States as adults and were English speaking. The participants were interviewed face to face about how they felt their parenting or child rearing affected their children's school achievement.

It was found that: (a) Chinese mothers stressed academic skills and wanted more well-performing children, and their children's school performance was a central and necessary objective of child rearing; (b) Chinese mothers' view of their contribution to their children's learning involved a more direct approach or intervention, for example, they felt they needed to provide direct teaching or tutoring by checking over their children's homework, having their children redo homework, assigning extra supplementary work to them, and hiring tutors or having their children attend study groups or after-school academic programs; and (c) Direct parental involvement may be regarded as an integral part relating to their children's academic achievement at school.

Placing a large measure of faith in authority and experts is also an important heritage of Confucianism. In this respect, Guo (2004) provided an explanation for the lack of willingness to communicate with NZ early childhood centre teachers among the Chinese migrant parents. In answer to questions about why Asian parents in particular seem to avoid contact with early childhood teachers, Guo (2004) maintained that minority ethnic parents, Chinese parents in particular, often put their trust in professionals. They believed that the "experts" knew best and were acting in the best interest of their child; therefore, they did not need to intervene in the educational process and work in partnership with their children's teachers. She argued that in Asian countries teachers stood for authority and all educational issues were the province of schools. Therefore, when Asian parents had little or no contact with teachers, this was often based on respect and the concept of "saving face". When parents doubted the adequacy of a teacher's practice, they still avoided questioning the teacher to keep their respectful image to authority. In doing so, Asian parents not only 'saved face' for the teacher but also saved their children from being unfairly treated by the teacher's power. This was particularly true with Chinese migrant parents (Guo, 2004). Similarly, in a qualitative study of immigrant Chinese parents' involvement in their disabled child's education in Canada, Lai and Ishiyama (2004) found that Chinese parents' view of teachers as authority figures and Chinese parents' pedagogical beliefs and practices might deter them from being actively involved.

Cross cultural comparisons have also been made across a range of Chinese specific parenting practices. Wu et al. (2002) examined dimensions of parenting practices emphasised in the Chinese culture in conjunction with those derived and emphasised in North America. Mothers of preschool-age children from mainland China and from the United States completed two self-report parenting questionnaires. One questionnaire assessed dimensions of parenting practices emphasised in China, that is, encouragement of modesty, protection, directiveness, shaming/love withdrawal, and maternal involvement. Another questionnaire measured authoritative (warmth/acceptance, reasoning/induction, democratic participation) and authoritarian (physical coercion, verbal hostility, nonreasoning/punitive) parenting emphasised in North America. Results showed that Chinese mothers scored higher than American mothers on parenting practices emphasised by Chinese parents except for maternal involvement. For parenting practices emphasised in North America, Chinese mothers scored lower than US mothers on warmth/acceptance and democratic participation, but scored higher on physical coercion.

In summary, there is consistency across the literature concerning how Chinese cultural heritage, centred on Confucianism, influences parenting styles used by Chinese parents. Control and training of children, pursuit of academic excellence and respect for authority are values that shape the parenting styles of many Chinese parents. These beliefs to some extent define how immigrant Chinese parents interact with their children (parenting practices) and how they interact with the teachers (parental involvement behaviour) (Ho, 1986; Fung, 1999).

1.7 Parental involvement among Chinese immigrant parents in NZ

There is little research on parental involvement in early childhood education which targets Chinese immigrant parents in New Zealand. Most of the studies dealt with the subject of parental involvement among this group only to the extent that they included incidental case studies. These studies are reviewed here.

Linda Mitchell, a senior researcher at New Zealand Council for Educational Research (NZCER), and her team conducted a one-year research and professional development project aimed at supporting ways in which teachers and parents/Whānau work together to enhance children's learning and wellbeing in New Zealand early childhood services settings. The research involved case studies in three education and care centres and three kindergartens. It explored the professional development process, the perceptions of teachers and parents/Whānau of parent/Whānau involvement and the process of change over the course of the year, and factors that helped or hindered teacher and parent/Whānau partnerships. A parallel research and professional development project was undertaken in Australia (Mitchell et al, 2006).

The sub-study of Mitchell et al. (2006) entitled "Working with culturally diverse families" is of relevance to this research. The study by Mitchell et al. was conducted in a multicultural kindergarten located in a culturally diverse suburb of Wellington. Many of the families attending the kindergarten were recent immigrants from other countries. The sub-study interviewed five families, one of which was of Chinese originality.

A key finding by Mitchell et al. (2006), of relevance to this study, relates to the case study of a Chinese couple. The couple had come from China six months earlier. In the interview, they reported their aspirations for their daughter's education which included having a tertiary education as "a key for a job and wellbeing in the future" (p.52), the greater cost of education in China and the lower cost and availability of student loans in New Zealand, and the "marked differences" with the early childhood programmes in China. According to the Chinese couple, kindergarten teachers in China teach children many things including literacy and numeracy and give children a lot of homework, but here in New Zealand teachers just let children play or draw on their own, listen to stories, sing songs and have morning tea.

The Chinese couple also compared the parent-teacher relationship between New Zealand and China. According to them, New Zealand teachers are more approachable, and they try to build a very good relationship with the parents. In China, kindergarten teachers pose themselves as the authority figure and they treat children as children. Here in New Zealand, according to the couple, teachers are more caring to children.

With respect to expectations from the kindergarten, the couple emphasised the teaching of the English language. While they acknowledged the importance of learning Chinese at home, they hoped they could know more about their child's learning English in the kindergarten by seeing their results of exams in English. Also, they were keen to understand and know more about their daughter's experiences, learning, and development, and the early childhood education curriculum. They wanted to "see an immediate result" from their daughter's attendance at kindergarten. The Chinese parents acknowledged that their own limited ability to speak English, or unwillingness to ask, could be a barrier to communication with the teacher.

The case study of the new immigrant Chinese family in Mitchell et al. (2006) demonstrates the different experiences and perspectives about the purpose of ECE that some Chinese parents may have when they come to NZ. It demonstrates the challenges of communicating when the languages of teachers and parents are different, and the reticence that may be felt by parents in initiating a conversation. The study suggests the difficulty in communicating may be attributable to cultural differences which shape the beliefs and values of the parents.

Another perspective is provided by Guo (2005) who examined the views of a small number of Asian immigrant parents and New Zealand early childhood teachers about parent-teacher partnerships in children's early education and care. The study was conducted with six Asian immigrant families and 26 early childhood teachers. It sought parental views on parents and teachers working with each other for the benefit of children's learning. All participants were sampled from the Auckland region. Two of the

six Asian immigrant families came to NZ from mainland China and one was from Taiwan. Parents were interviewed in their own homes using an unstructured interview format (Guo, 2005). The parents were asked what role they considered they should play in their child's early childhood education and how they felt about working with New Zealand early childhood teachers. The teachers were asked about their opinions on the same topic.

The interviews with the three Chinese parents showed that they did not want to play an active role for various reasons. Their typical responses were: they believed it was the teacher's job to take care of their children; they did not think their help would be of any use; and they did not approach the teacher because they were afraid of making mistakes and being thought silly. "These thoughts of parents indicate lack of confidence inhibiting willingness to work with teachers" (Guo, 2005, p.130). As Heald (2006) noted, "Guo's (2005) research in Aotearoa/New Zealand found that both Asian parents and centre staff had reservations about establishing effective partnerships" (p. 41).

A further example comes from Liao (2007) who conducted a qualitative study which investigated Chinese immigrant parents' educational expectations, practices and experience with regard to their children's new entrant years in New Zealand's primary schools. A two-phase data collection procedure was designed for this research to gather information about Chinese immigrant parents' educational expectations, practices and experience. In the first phase of data collection, a questionnaire with open-ended questions and Likert-scale questions was established. The analysis of the questionnaires then framed the procedure of the second phase of data collection, a focus group interview. The target population for the questionnaire was immigrant parents with a Chinese background who were residing in the Auckland or Christchurch region. The 75 respondents were from different Chinese countries/regions including Taiwan, Mainland China, Hong Kong, Malaysia, and Singapore. The respondents all had children who were attending or had attended the first year (new entrant class and year one) of primary school in New Zealand in the past five years.

It was affirmed that Chinese Confucian values continued to remain central in most educational expectations and child-rearing practices of Chinese immigrant parents in New Zealand. Aligning with the Confucian values, education continued to be respected by Chinese parents as the most essential element in one's life. Parents expected their immigrant children to attain high academic achievements, a university qualification, a good career and life. Chinese immigrant parents were reported to have high expectations on children's sense of academic effort and their academic achievement (Liao, 2007).

The study also affirmed that most Chinese immigrant families in the sample continued to value behavioural discipline and parental control as the normal childrearing practices at home. Parents' responses indicated that they liked to control and shape their children's behaviours, and schedule their time and learning at home. However, Chinese parents also considered the values of the host country so that they lowered their expectation of children's obedience and discipline and showed a desire for their children to adapt and integrate well to New Zealand's society (Liao, 2007).

Liao (2007) discovered that many of Chinese immigrant parents expressed an appreciation of New Zealand's play, child-centred, loving and gentle teaching approach at primary schools. The study also discovered that the Chinese parents valued English as the most important learning area for their children. The Chinese immigrant parents considered assisting children with their English learning as the most important parental task. The study further reported that immigrant Chinese parents' perception of the problems with New Zealand early primary schooling was: (a) lack of effective communication between the parents and the teachers; (b) generally too positive school reports; and (c) lack of standardised teaching curriculum.

Although Liao (2007) investigated immigrant Chinese parents' expectations, practices and experiences with regard to early primary schooling rather than early childhood education, findings of the study are enlightening given its high relevance to parental involvement among immigrant Chinese parents in NZ and the small age difference between the new

entrants of primary school it targeted and the preschool children in this thesis.

Based on the above review of the few New Zealand studies, due to the small samples in these studies, the results cannot be widely generalised. However, the findings from this research provide a valuable starting point for further work. The inconsistencies between these studies highlight some issues that will be examined in this thesis. For example, both Guo (2005) and Mitchell et al (2006) found that English language and cultural difference were leading factors influencing communication and other parental involvement indicators such as parental participation in the education programme. However, Guo's (2005) finding of the reluctance of the immigrant Chinese parents and other Asian immigrant parents to participate in early childhood education is in stark contrast to the case study findings by Mitchell et al (2006) which revealed a strong willingness to participate in ECE in these immigrant Chinese parents. While some parents are likely to be more involved than others, the discrepancy between the two studies in respect of parents' willingness to participate raises one question: What factors are most likely to influence the involvement of immigrant Chinese parents in NZ ECE?

1.8 Parental involvement in NZ ECE settings

Across the different types of early childhood services in New Zealand, a key difference is how much involvement ECEs expect of parents and whānau (Education Review Office, 2007). Some services, such as playcentres and Kōhanga reo, are more reliant than others on parent/whānau participation in centre management and programmes. In teacher-led services (kindergartens, home-based services and education and care centres) paid staff have the main responsibility for children's education and care. Parents are often encouraged to support the educators through involvement in the learning programme. Kindergartens employ qualified and registered teachers. Kindergartens have a variety of sessional structures, and most kindergartens cater for children aged between two-and-a-half

and five years. Although the paid teachers have responsibility for the programme, parents/ whānau are encouraged to participate in programmes, talk with staff, ask questions and offer information about their child. Home-based and family day-care services provide babies and young children with early childhood education either in the child's own home or in the home of an adult educator. This may be all-day or part-day education and care. Home-based services provide learning opportunities for children in small groups within homelike surroundings. Qualified and registered teachers are employed as coordinators to support the educators within each network. Communication between parents/whānau and educators is an important feature of these services. All centre-based services other than playcentres, kōhanga reo and kindergartens are known as education and care centres. Parents/whānau usually pay fees for their child to attend education and care services, and they are sometimes involved in the management of the centre. The extent and manner of parent participation in the programme depends on the choice of service. In all types of education and care service parents should be encouraged to talk to educators, ask questions and offer information about their child (Education Review Office, 2007). In parent-led services (playcentres, Te Kōhanga Reo and playgroups), it is the parents of the children who are the main educators or teachers. Playcentres are parent cooperatives. The families/ whānau of children attending are responsible for how the centres are managed and operated. Parents become members of their playcentre and most pay low fees to attend. In general, parents/whānau are responsible for running the sessions, and are expected to participate regularly with their child. As well as providing early childhood programmes for children, playcentres provide educational programmes for parents/whānau to learn alongside their children. Te Kōhanga Reo aims at fostering young children's and parent's knowledge of te reo Māori (language) and tikanga Māori (culture). In kōhanga reo, the parents/whānau are closely involved in the total immersion learning and development programmes. Te reo Māori is the main language used. Playgroups are license-exempt services where parents attend with their children and provide the play programme (Education Review Office, 2007).

extracted from the philosophy statements of early childhood umbrella organisations for public kindergartens and child care services published on their official websites as well as philosophy statements of individual kindergartens provided by the head teachers. It was found that parental involvement in NZ ECE settings incorporates all of Epstein's six types of involvement except for "parenting" and "collaborating with community". Forms of "communicating" in New Zealand early childhood include talking or chatting with the teachers about the child, reading the manual/newsletters/daily information sheets, reading centre's charter, reading the notice board, phoning the teachers when having a concern, reading the journals which document the children's development, and collecting children's work in a portfolio. For example, the Wellington Kindergarten Association states "Parents are welcome to take profile books home to look at and add material", Kindercare Learning Centres states that "The portfolios of learning and development provide invaluable feedback to parents/Whānau as well as enjoyment for the children to look back on what they have done and achieved". "Volunteering" in New Zealand early childhood settings includes contributing time to enhance the sessions, helping with rosters, attending fund-raising activities, helping on excursions, spending time in the centre supporting children's engagement with activities. For example, Devonport Kindergarten states that "parents feel welcome to stay and settle their child and to support children in the programme, and many parents are regular helpers in the kindergarten", and KidStart states "Becoming a volunteer is a very practical way for you to help children in need". On its website, Wellington Kindergarten Association summarised a range of ways that parents help with their child's learning at home: listening to the radio and watching television with the children, playing with children, taking an interest in children's projects, listening to their ideas, acknowledging and appreciating the ideas and skills children might learn, reading to and with children. "Decision-making" in New Zealand refers to participating in centre decision making, becoming a parent leader/representative, providing input or feedback to the centre. In Auckland, Cascades Kindergarten states that "some parents take a leadership role in a programme", and Chelsea Kindergarten states that "a strong parent committee supports teachers in aspects of centre management".

1.9 Research gaps and justification for the current study

Bronfenbrenner's (1979) ecosystem model provides a strong theoretical underpinning for the importance of partnership between family and school. Based on the ecosystem model, Epstein (1995, 2001) compiled a comprehensive list of parental involvement behaviours which consists of six categories, that is, parenting, communicating, volunteering, learning at home, decision making, and collaborating with community. Although the typology originated in the primary schooling settings, there are some overlaps with the types of parental involvement present in NZ ECE settings. Four of the categories of parental involvement behaviours identified by Epstein are identifiable in NZ ECE settings. No research could be located that has studied these four aspects of parental involvement, that is, communicating, volunteering, learning at home and decision making, in New Zealand ECE settings nor with significant samples of immigrant Chinese parents. Thus, these aspects of parental involvement will be examined in this thesis.

As earlier discussed there is no common agreement on the definition of parental involvement which determines the subject matter, the measures and the results of parental involvement studies. For the purpose of this research, the term parental involvement will be interpreted to mean ways that parents are involved in their children's education both at home and at school, and the ways include parent-teacher communicate (e.g., parent-teacher conferences, phone conversations with teachers, information sent home, and informal conversation while dropping off or picking up children), volunteering at kindergarten (e.g., helping with sessions or activities such as trips), learning at home (e.g., providing educational resources, spending time with children on reading), and decision making (e.g., participating in parent committee). Parent involvement in NZ ECE settings will be treated as a unique concept that is independent of other parent attributes, such as social skills, parent education and commitment to the parenting role (Fantuzzo et al., 2000).

Epstein's (1995, 2001) framework of six types of family and community involvement, the

three dimensions of involvement by Grolnick et al. (1997) along with other theory and research (Fantuzzo et al., 2000; Green, Walker, Hoover-Dempsey, & Sandler, 2007; Hoover-Dempsey et al., 2005; McWayne, Campos, & Owsianik, 2008; Zellman & Waterman, 1998) have in common the multidimensional nature of parental involvement in education. This body of work has identified a range of factors that may influence parental involvement in early childhood education including: parents' beliefs (role construction, parent self-efficacy), general invitations and opportunities for involvement, and family demographic variables. Lack of proficiency in English language and cultural difference are key factors affecting parental involvement in early childhood education among language minority parents. For Chinese immigrant parents, traditional Chinese culture, characterised by its cornerstone Confucian ideology, is likely to influence parents' belief systems and parenting styles, which in turn define parents' involvement behaviours. Although these possible determinants of parental involvement have been discussed in NZ ECE settings, and there are small case studies of Chinese immigrant parents with children attending ECEs, there is no research which investigates these determinants in New Zealand ECE settings and with a large sample of immigrant Chinese parents. Most of the literature reviewed in the previous sections is based on overseas educational settings, largely at the primary school level, which may not translate easily to NZ ECE settings given substantial cross-national and structural differences between grade-school and pre-school that might influence the effects of parent involvement (Arnold, Zeljo, Doctoroff, & Ortiz, 2008).

In summary, based on the literature reviewed especially the Epstein typology and Hoover-Dempsey and Sandler model, this study will examine four dimensions of parental involvement: communicating with teachers, volunteering to help at kindergarten, helping with the child's learning at home, and participating in kindergarten decision making. The study will investigate the influence of parental role construction, parental self-efficacy, perceived opportunities for involvement, English language ability, and demographic variables on the nature and level of parental ECE involvement. Given the cultural influences on Chinese parenting practices highlighted in the reviewed literature, that may influence the nature of involvement at home and ECE, differences in parenting styles and

parenting practice emphasised in China of Chinese immigrant and English speaking non-Chinese New Zealand parents will also be investigated.

1.10 Research questions and hypotheses

Based on the preceding review of the literature this thesis will examine the following questions and hypotheses.

Research question 1

How and to what extent do Chinese immigrant parents and non-Chinese parents involve themselves in early childhood education in NZ?

Hypothesis 1: It is hypothesised that Chinese immigrant parents will have a lower level of involvement than non-Chinese parents in communicating with teachers, volunteering to help at the kindergarten, helping with the child's learning at home, and participating in kindergarten decision making.

Research question 2

How do Chinese immigrant parents differ from non-Chinese parents in parental beliefs and parenting styles?

Hypothesis 2.1: It is hypothesised that Chinese immigrant parents will have lower levels of role construction about their ECE involvement, lower levels of parenting self-confidence and will perceive less opportunity for ECE involvement than non-Chinese parents.

Hypothesis 2.2: It is hypothesised that Chinese immigrant parents will report less

authoritative and more authoritarian parenting practices than non-Chinese parents.

Hypothesis 2.3: It is hypothesised that Chinese immigrant parents will report greater encouragement of modesty, more directiveness, more use of shaming/love withdrawal, and greater maternal involvement in their child rearing practices than non-Chinese parents.

Research question 3

What are the determinants of parental involvement in NZ early childhood education among Chinese immigrant and non-Chinese parents?

Hypotheses 3.1: It is hypothesised that communicating with teachers, volunteering to help at the kindergarten, helping with the child's learning at home, and participating in kindergarten decision making will be influenced by parents' role construction, self-efficacy and perceived opportunities for ECE involvement, and these relationships will be stronger for Chinese immigrant parents than non-Chinese parents.

Hypotheses 3.2: It is hypothesised that communicating with teachers, volunteering to help at the kindergarten, helping with the child's learning at home, and participating in kindergarten decision making will be influenced by parents' child rearing style.

Hypotheses 3.3: It is hypothesised that communicating with teachers, volunteering to help at the kindergarten, helping with the child's learning at home, and participating in kindergarten decision making will be influenced by family income level, parent educational qualifications, parent work hours and family size.

Hypotheses 3.4: It is hypothesised that for Chinese parents communicating with teachers, volunteering to help at the kindergarten, and participating in kindergarten decision making will be influenced by their level of acculturation and English language proficiency.

In addition to these specific questions and hypotheses this study will also examine:

- (1) Possible reasons for low and high levels of parental ECE involvement, including communicating with teachers, volunteering to help at kindergarten, and participating in kindergarten decision making.
- (2) Kindergartens' approaches to encouraging parents, Chinese immigrant parents in particular, to communicate with teachers, volunteer to help at kindergarten, and participate in kindergarten decision making.

Chapter Two: Method

2.1 Participants

The participants were 247 parents (120 Chinese, 127 non-Chinese) who were recruited from 50 public kindergartens in the Auckland region. The kindergartens deciles¹ (Ministry of Education, 2011) ranged from 1 to 10 based on nearest school decile rankings. An independent samples t-test revealed that on average Chinese immigrant children (M = 6.46, SD = 2.86) attended kindergartens with a higher decile ranking than non-Chinese children (M = 7.18, SD = 2.64).

In this study, a Chinese immigrant parent was defined as any immigrant parent who identifies himself/herself as being of Chinese descent and who was born in a Chinese-speaking country or region, such as mainland China, Hong Kong and Taiwan. A non-Chinese parent was defined as a parent who is non-Chinese and speaks English as first language.

Table 1 compares the Chinese immigrant and non-Chinese parents on a range of family background characteristics. The only significant differences between groups were for family income and number of children in the family. On average, Chinese parents had a lower annual household income, with a mean score of 2.64 (approximately \$50,000 p.a.) compared to 4.28 (approximately 82,000 p.a.) for non-Chinese parents. Thirty five per cent of Chinese parents reported only one child under 18 living at home with the parent compared to 7.9% non-Chinese parents. The majority of parents in both groups were mothers (Chinese 87.5%; non-Chinese 95.3%) and were married (Chinese 93.3%; non-Chinese 91.3%). Approximately half of parents in both groups (Chinese 50.0%;

¹ The Ministry of Education uses a decile rating (ranking) system for school funding purposes. Each decile contains approximately 10% of schools. Schools in decile 1 have the highest proportion of students from low socio-economic backgrounds. Schools in decile 10 have the lowest proportion of these students. The five factors that make up the socio-economic indicator are: household income, occupation, household crowding, educational qualification and income support.

non-Chinese 53.5%) were not in paid employment. The category "not employed" included both non-home makers (unemployed and full-time or part-time student) and home makers. Fewer Chinese parents (15.0%) described themselves as "home maker" than non-Chinese (26.8%), and the difference was statistically significant, X^2 (1) = 4.46, p = .035. The average age of parents in both groups was approximately 36 years, and the average highest qualification of parents in both groups was above diploma or 1-3 years tertiary education without degree. For Chinese immigrant parents, the average length of time living in NZ was 8.9 years and the average length of education received in NZ was 2.5 years.

Table 2 compares child characteristics of the Chinese immigrant and non-Chinese groups. The only significant between-group difference was for child birth order; 53.3% of the Chinese children were first born compared to 37.8% of the non-Chinese children. A chi-square test for goodness-of-fit confirmed an equal proportion of child gender in both groups. The average age of the child was approximately 51 months for children in both the Chinese and non-Chinese groups. The average length of time children attended kindergarten prior to the questionnaire being completed was approximately 10 months for the Chinese children and 11 months for the non-Chinese children, but the difference was not statistically significant.

Table 1
Comparison of Individual and Family Characteristics of Chinese Immigrant and Non-Chinese Parents

Characteristics	Chinese	e (n=120)	Non-Chir	ese (<i>n</i> =127)	$X^2(\mathrm{df})$	p	phi
	n (%)	M(SD)	n (%)	M(SD)			
Relation to child					5.20(2)	.074	.139
Mother	105 (87.5)		121 (95.3)				
Father	14 (11.7)		5 (3.9)				
Other	1 (0.8)		1 (0.8)				
Marital status					.179 (1)	.672	.042
Not married	8 (6.7)		11 (8.7)				
Married	112 (93.3)		116 (91.3)				
Work status					4.744 (2)	.093	.137
Not employed	60 (50.0)		68 (53.5)				
Part-time work	32 (26.7)		43 (33.9)				
Full-time work	28 (23.3)		16 (12.6)				
					<i>t</i> (df)	p	Cohen's d
Age (years)		36.31 (5.40)		35.97 (4.73)	.526 (244)	.60	.07
Length in NZ (years)		8.92 (5.04)		-	-	-	-
Qualification		3.38(0.97)		3.28 (1.10)	.85 (249)	.396	.10
No qualification	1 (0.8)		5 (3.9)				
High school	23 (19.2)		29 (22.8)				
Diploma	42 (35.0)		38 (29.9)				
Bachelor	38 (31.7)		36 (28.3)				
Postgraduate	16 (13.3)		19 (15.0)				

(Continued)

Table 1
Comparison of Individual and Family Characteristics of Chinese Immigrant and Non-Chinese Parents (Continued)

Characteristics	Chinese	e (n =120)	Non-Chin	ese $(n = 127)$	t(df)	p	Cohen's d
	n (%)	M(SD)	n (%)	M(SD)			
Annual income (NZ\$)		2.64 (1.33)		4.28 (1.54)	8.99 (245)	.000	1.14
Less than 20,000	20 (16.7)		6 (4.7)				
20,001-40,000	48 (40.0)		10 (7.9)				
40,001-60,000	26 (21.7)		28 (22.0)				
60,001-80,000	14 (11.7)		22 (17.3)				
80,001-100,000	5 (4.2)		21 (16.5)				
100,001 and over	7 (5.8)		40 (31.5)				
Number of children		1.88 (0.82)		2.43 (0.75)	5.52 (245)	.000	.70
One	43 (35.8)		10 (7.9)				
Two	54 (45.0)		63 (49.6)				
Three	18 (15.0)		44 (34.6)				
Four	5 (4.2)		10 (7.9)				
Education		2.54 (1.61)		-	-	-	-
Less than 1 year	47 (39.2)		-				
1 to below 2 years	21 (17.5)		_				
2 to below 3 years	17 (14.2)		-				
3 to below 4 years	17 (14.2)		_				
4 to below 5 years	11 (9.2)		-				
Over 5 years	7 (5.8)		-				

Table 2
Comparison of Chinese and Non-Chinese Child Characteristics

Characteristics	Chinese	(n=120)	Non-Chine	ese (<i>n</i> =127)	$X^2(df)$	p	phi
	n (%)	M(SD)	n (%)	M(SD)			
Gender					.179 (1)	.672	.035
Boy	64 (53.3)		73 (57.5)				
Girl	56 (46.7)		54 (42.5)				
					t(df)	p	Cohen's d
Age in months		50.83 (6.40)		51.36 (5.89)	.68 (245)	.500	.09
Months in kindergarten		9.84 (6.86)		11.16 (6.32)	1.57 (245)	.118	.20
Birth order		1.58(0.73)		1.92 (0.91)	3.22 (245)	.001	.20
First child	64 (53.3)		48 (37.8)				
Second child	45 (37.5)		49 (38.6)				
Third child	8 (6.7)		23 (18.1)				
Fourth child	3 (2.5)		6 (4.7)				
Fifth child	0 (0.0)		1 (0.8)				

Table 3 shows the ethnic breakdown of both the immigrant Chinese and non-Chinese groups, as well as self-rated English language proficiency of the Chinese parents. Chinese from mainland China made up 79.2% of the Chinese immigrant group and European/Pakeha accounted for 81.1% of the non-Chinese group. Chinese parents' average self-ratings of their English language level were fair (2.2 for oral and 2.1 for written on a 4-point scale), and a paired samples t-test showed that the oral English was rated higher than written English, t (119) = 2.31, p = .023.

Table 3

Parent Ethnicity and Chinese Immigrant Parent English Language Ability

	Chinese	Non-Chinese
<u>_</u>	(n=120)	(n=127)
Ethnicities		
European/Pakeha	-	103(81.1%)
Maori	-	5(3.9%)
Pasifika	-	4(3.1%)
Indian	-	3(2.4%)
Chinese from mainland China	95(79.2%)	-
Chinese from Hong Kong	5(4.2%)	-
Chinese from Taiwan	4(3.3%)	-
Southeast Asia	16(13.3%)	-
Other	0	12(9.4%)
Oral English		
Limited	32(26.7%)	-
Fair	45(37.5%)	-
Good	28(23.3%)	-
Very good	15(12.5%)	-
Written English		
Limited	36(30.0%)	-
Fair	47(39.2%)	-
Good	24(20.0%)	_
Very good	13(10.8%)	-

2.2 Sampling procedures

Approval for the study was given by the University of Auckland Human Participants Ethics Committee. Subsequently, research access permission was sought from and granted by the Auckland Kindergarten Association and the Counties Manukau Kindergarten Association. Kindergartens were chosen to recruit parents for the study on the grounds that kindergartens are likely to provide information-rich cases that manifest the phenomenon intensely (Patton, 1990). This is because, among all types of New Zealand early childhood services, public kindergartens encourage and enjoy significant parent involvement (Billman et al., 2005).

Upon gaining permission from the two kindergarten associations, the researcher visited kindergartens that had Chinese immigrant children on their rolls to explain the study and secure head teachers' informed consent for participation in the study. Head teachers were asked to give parents questionnaire packs that included a participant information sheet, consent form, family background and parenting questionnaires, and a return addressed, stamped envelope to mail the forms back to the researcher. Head teachers were also asked to give permission for the researcher to contact parents directly for recruitment by talking to parents about the study when they collected their child from kindergarten. For Chinese parents, both the English version and a Chinese translation of the questionnaires and forms were provided. Teachers were requested to give out questionnaire packs to all Chinese parents who had children enrolled at the kindergarten. Non-Chinese parents were identified for inclusion in the study by selecting the parents of children who came next on the kindergarten roll after each Chinese immigrant child. In an attempt to boost the questionnaire return rate, the researcher also advertised in a key Chinese newspaper, which attracted no Chinese parents.

A total of 400 Chinese parent questionnaires and 350 non-Chinese parent questionnaires were distributed. Responses were received from 124 Chinese parents, four of which were

dropped from the data set because the respondents were born in NZ or Australia, and 127 valid non-Chinese responses were received. Repeat visits were made to 10 kindergartens with high enrolments of Chinese immigrant children in order to recruit sufficient Chinese parents for the study. The response rate of non-Chinese parents was 36.3% (127 out of 350), and the response rate of Chinese parents was 30.0% (120 out of 400). Response rates for postal surveys in early childhood samples and other social science disciplines generally range from 20% to 60% (Mitchell, 1985; Visser, Krosnick, Marquette, & Curtin, 1996; Keeter, Kennedy, Dimock, Best, & Craighill, 2006; Anderson & Minke, 2007), and the return rates for this study fall within the range.

Sample size and power

In order to determine the requisite sample size of the study, an a priori power analysis for linear multiple regression (fixed model, R^2 deviation from zero) was conducted using G*Power 3.1 (Erdfelder, Faul, & Buchner, 1996). When the effect size f^2 was set at .15 (a medium size according to Cohen, 1988), error probability α was set at .05, statistical power was set at .95, and the number of predictors was set at 7, a total sample size of 153 was required. When f^2 , α , and statistical power were kept unchanged, and the number of predictors increased to 15, the total sample size required increased to 199. Since the planned number of variables including all interaction terms in any of the regression analyses in this study was not expected to exceed 15, the actual total sample size of 247 of this study was sufficient.

2.3 Measures and procedure

Parent questionnaires were used to measure dimensions of parent ECE involvement (communicating with teachers, volunteering to help at kindergarten, helping with the child's learning at home, and participating in kindergarten decision making), parent role construction, parenting self-efficacy, perceived opportunities for parental ECE involvement,

parenting styles (authoritative and authoritarian), and parenting practices emphasised in China (encouragement of modesty, directiveness, protection, shaming/love withdrawal, and maternal involvement). Questions to assess Chinese parents' acculturation tendency, that is, the extent to which Chinese immigrant parents do not retain their Chinese language, culture and life styles, were also included. Semi-structured interviews with parents were conducted to obtain more in-depth information on parental ECE involvement. Parent interview questions covered talking about their child, reading the ECE notice board, reading the child's portfolio, helping with kindergarten sessions, helping with fundraising, offering ideas and suggestions to improve the kindergarten, and participating in committee meetings. Semi-structured interviews were also conducted with kindergarten head teachers to find out about the steps taken by kindergartens to facilitate parental involvement, particularly for Chinese immigrant parents. Interview questions covered how teachers encouraged parents to talk about their child, to read the ECE newsletter and notice board, to help with kindergarten sessions and to participate in committee meetings, and any specific steps taken to involve Chinese immigrant parents.

Parent Questionnaires

Parental involvement

The Parent Family Involvement Questionnaire (FIQ) (Fantuzzo et al., 2000) was used to measure communication with teachers, volunteering to help at kindergarten, and helping with the child's learning at home. The FIQ is a multidimensional measure of parental involvement in early childhood education. Parents were asked to report on the frequency of specific involvement behaviours using a 4-point Likert response format (1 = rarely, 2 = sometimes, 3 = often, 4 = always). Previously, a confirmatory multiple-group cluster analysis confirmed that the multivariate scale met multiple construct validity criteria, and each of the three constructs (school-based involvement, home-based involvement, and home-school conferencing) was reported to have good reliability, with Cronbach's alphas

of .85, .85, and .81, respectively (Fantuzzo et al., 2000). To make the wording more consistent with NZ ECE involvement practices, in this thesis, the three constructs were renamed, with school-based involvement renamed as volunteering to help at kindergarten, home-based involvement as helping with the child's learning at home, and home-school conferencing as communicating with teachers. Also, to better capture the range of parental involvement, a category of 'never' was added, extending the 4-point Likert scale to a 5-point scale. In this study, Cronbach's alphas of .93, .77, and .83 were obtained for communicating with teachers, volunteering to help at kindergarten and helping with child's learning at home respectively for the Chinese sample; for the non-Chinese sample, the alphas for the three involvement dimensions were .87, .74, and .72 respectively. Item 23 ("I ensure my child has a place for books and toys at home") was deleted from the construct "helping with the child's learning at home" to achieve satisfactory Cronbach alpha. Before item 23 was removed, the alpha value of the construct was .67 for the non-Chinese samples compared to .72 after the item was removed.

Based on philosophy statements of early childhood umbrella organisations for public kindergartens and child care services published on their official website as well as philosophy statements of individual kindergartens provided by the head teachers, a 3-item construct was developed to measure participation in kindergarten decision making. The construct included: participating in decisions about kindergarten's programs and activities, offering ideas and suggestions on ways to improve the kindergarten, and participating in kindergarten committee meetings. The items were subjected to principal components analysis. Inspection of the correlation matrix revealed that all coefficients were above .30, the Kaiser-Meyer-Oklin value was .65, and Bartlett's Test of Sphericity reached statistical significance, supporting the factorability of the correlation matrix. The analysis revealed the presence of one component with eigenvalues exceeding 1, and the one-component solution explained a total of 67.4% of the variance and showed 3 strong loadings of .72, .86 and .87. Cronbach's alphas of .71 and .75 were obtained for the Chinese and non-Chinese sample respectively.

Parental role construction

The Parental Role Construction for Involvement in the Child's Education Scale: Role Activity Beliefs (Walker et al., 2005) was adapted to measure parental early childhood role construction. The 10-item Role Activity Beliefs scale assesses the beliefs component of role construction. The scale employs a 6-point Likert response format, with higher scores indicating that the parent believes he or she holds a more active role in his or her child's education. Parents responded to statements such as: "It is my responsibility to volunteer at the school", "It is my responsibility to stay on top of things at school". For the purpose of this study the following modifications were made to the scale to make it more appropriate to a NZ ECE context: (1) "School" was changed to "kindergarten" as school represents primary school; (2) "Stay on top of things at school" was changed to "stay up to date with what is happening at kindergarten", and "help my child with homework" was changed to "help my child with the questions from the teacher she/he may bring home from the kindergarten"; (3) The item "explain tough assignments to my child" was deleted as New Zealand children do not receive homework in kindergarten. An alpha reliability of .80 was previously reported for the scale (Walker et al., 2005). In the present study, Cronbach's alphas of .90 and .77 were obtained for the 9-item scale for the Chinese and non-Chinese samples respectively.

Parental self-efficacy

The Parental Sense of Competence Scale (PSOC) was developed by Gibaud-Wialliston and Wandersman (1978) to assess parenting self-esteem, and it consists of Satisfaction and Efficacy sub-scales (Gibaud-Wallston & Wandersaman, 1978; Cutrona & Troutman, 1986; Johnston & Mash, 1989). The 7-item Efficacy subscale was used to measure parental self-efficacy in the present study. Using a 6-point Likert scale, parents were asked to respond to statements such as: "Being a parent is manageable, and any problems are easily solved", "I meet my own personal expectations for expertise in caring for my child". An

alpha coefficient of .76 was reported by Johnston and Mash (1989). Reliability tests in the present study yielded Cronbach's alphas of .81 and .82 for the Chinese and non-Chinese sample respectively.

Opportunities and invitations for involvement

A measure of perceived parental opportunity for ECE involvement was developed based on 15 items from Brooks' (2004) Parent Survey I - Interactions among Teachers and Families that tapped parent's perception of the opportunities for teacher-parent interaction. The 3-point Likert scale used by Brooks was expanded to 6 points to more accurately capture the perceptions of the participants and keep the format of the scale consistent with other 6-point parental belief scales in this study. Parents were asked to respond to statements such as: "I feel comfortable talking to the teachers about my child", "I personally feel welcome when I enter the kindergarten". The fifteen items were subjected to principal components analysis. Inspection of the correlation matrix revealed the presence of many coefficients of .3 and above, the Kaiser-Meyer-Oklin value was .92, and Bartlett's Test of Sphericity reached statistical significance, supporting the factorability of the correlation matrix. The analysis revealed the presence of two components with eigenvalues exceeding 1. An inspection of the screeplot revealed a clear break after the first component. The one-component solution explained a total of 50.0% of the variance and showed 14 strong loadings ranging from .54 to .81. Item 11 ("Parent-teacher meetings are held to discuss children's progress, accomplishments, and/or difficulties at least once a year, and more often if parents want them") was its own component and was therefore excluded by the test. A reliability test in this research revealed Cronbach's alphas of .92 and .91 for the Chinese and non-Chinese sample respectively.

Parenting styles and parenting practices

The Parenting Styles and Dimensions Questionnaire was initially developed by Robinson,

Mandleco, Olsen, and Hart (2001). The adapted Parenting Styles and Dimensions Questionnaire (PSDQ) (Wu et al., 2002) was used to measure authoritative and authoritarian parenting styles and constructs of parenting practices emphasised in China. The scale uses a 5-point Likert format (1 = never, 2 = once in a while, 3 = about half of the)time, 4 = very often, 5 = always) assessing frequency. However, for the "maternal involvement" construct, an agreement format is used (1 = strongly disagree, 2 = disagree, 3 = not sure, 4 = agree, 5 = strongly agree). The authoritative parenting style scale contains 15 items assessing warmth/acceptance (7 items, e.g., "I show sympathy when my child is hurt or frustrated", "I tell my child that I appreciate what the child tries to accomplish"), reasoning/induction (4 items, e.g., "I talk it over and reason with my child when he/she misbehaves"), and democratic participation (4 items, e.g., "I apologize to my child when making a mistake in parenting"). The Authoritarian parenting style scale contains 9 items assessing physical coercion (3 items, e.g., "I use physical punishment as a way of disciplining my child"), verbal hostility (3 items, e.g., "I yell or shout when my child misbehaves") and/or non-reasoning/punitive (3 items, e.g., "I punish by taking privileges away from my child with little if any explanations"). Wu, et al (2002) extended the PSDQ to include parenting practices emphasised in China which contains 18 items assessing five constructs: (1) Encouragement of modesty (4 items, e.g., "I discourage my child from strongly expressing his/her point of view around others"); (2) Shaming/love withdrawal (4 items, e.g., "I tell my child that I get embarrassed when he/she does not meet my expectations"); (3) Protection (3 items, e.g., "I expect my child to be close by when playing"); (4) Directiveness (3 items, e.g., "I demand that my child does things that I want or think he/she needs to do"); (5) Maternal involvement (4 items, e.g., "Mothers should do everything for their children's education and make many sacrifices"). Robinson et al. (2001) reported Cronbach alphas of .91 and .86 for authoritative and authoritarian respectively. Wu et al. (2002) used multi-sample confirmatory factor analysis to test the measurement model of the latent constructs. All the factor loadings were .40 and above, which indicated scale reliability for a large sample. Reliability tests conducted for the present study revealed Cronbach's alphas of .88 and .81 for authoritative and authoritarian respectively for the Chinese sample, and .77 and .69 for the non-Chinese sample. For the five constructs

of Chinese parenting practices, the Cronbach's alphas were .64 (encouragement of modesty), .69 (shaming/love withdrawal), .37 (protection), .57 (directiveness) and .68 (maternal involvement) for the Chinese sample, and .60 (encouragement of modesty), .56 (shaming/love withdrawal), .27 (protection), .61 (directiveness) and .82 (maternal involvement) for the non-Chinese sample.

Acculturation

The General Ethnicity Questionnaire - Chinese Version (abridged) (Tsai, 2000) was used to measure Chinese parents' acculturation tendencies, including parent's attitude toward Chinese culture elements (food, music, literature, festival), parent's language preference (using Chinese or English at work place and school) and choice of friends (Chinese speaking or English speaking). Participants were asked to indicate how much they agreed with the statements on a five-point scale from strongly disagree to strongly agree. The instrument has previously been administered to immigrant Chinese and had a high internal reliability of .92. The reliability test for the Chinese sample in the present study revealed a Cronbach alpha of .84.

Overall summary of Scale Reliability

Table 4 shows the Cronbach alpha values and mean inter-item correlations of all constructs for both Chinese and non-Chinese samples. As shown in Table 4, while the Cronbach alpha values of most of the sub-scales were high (above .70), some were not, especially for those sub-scales which had few items. Pallant (2007) suggests an alternative reliability indicator for short scales: "...with short scales (with fewer than 10 items), it is common to find quite low Cronbach values. In this case, it may be more appropriate to report the mean inter-item correlation for the items" (p.95). According to Briggs and Cheek (1986), "The mean inter-item correlation differs from a reliability estimate in that it is not influenced by scale length, and it is therefore a clearer measure of item homogeneity" (p.115). Briggs and

Cheek (1986) recommended an optimal range for the inter-item correlation of .2 to .4: "We believe that the optimal level of homogeneity occurs when the mean inter-item correlation is in the 2 to 4 range...the 2 to 4 range of intercorrelations would seem to offer an acceptable balance between bandwidth on the one hand and fidelity on the other" (p.115). Based on Briggs and Cheek's (1986) criterion, with the exception of protection, all of the sub-scales of this study in Table 4 showed acceptable reliability based on Cronbach alpha above .70, or an inter-item correlation of .2 to .4. Therefore, protection was excluded from further analyses due to its low reliability.

Table 4

Cronbach's Alpha and Mean Inter-Item Correlations of Sub-Scales

Sub-scale	Cronb	oach's Alpha	Mean Inter-Item Correlations			
	Chinese	Non-Chinese	Chinese	Non-Chinese		
Parental involvement in ECE						
Communicating	.93	.87	.73	.57		
Volunteering	.77	.74	.42	.38		
Helping with learning	.83	.72	.55	.41		
Decision making	.71	.75	.46	.54		
Parental beliefs about ECE						
Role construction	.90	.77	.52	.27		
Parental self-efficacy	.81	.82	.38	.40		
Perceived opportunities						
for involvement	.92	.89	.44	.40		
Parenting styles						
Authoritative	.88	.77	.33	.21		
Authoritarian	.81	.69	.33	.21		
Parenting practices						
emphasised in China						
Encouragement of modesty	.64	.60	.38	.28		
Shaming/love withdrawal	.69	.56	.39	.25		
Protection	.37	.27	.18	.11		
Directiveness	.57	.61	.31	.34		
Maternal involvement	.68	.82	.34	.53		
Chinese acculturation	.84	-	.25	-		

Prior to distributing the parent questionnaires to kindergartens to send home to parents, the researcher translated the parent questionnaires into Chinese. A PhD student from the Faculty of Education of the university who was familiar with the early childhood education terms translated the Chinese version back into English. The researcher compared the back-translated English version and the original English version, and highlighted the discrepancies. An experienced native English speaker who held a masters degree in Psychology examined all the discrepancies, and made judgments on which discrepancies were meaningful. For the meaningful discrepancies, the researcher and the back translator discussed the details until all inaccuracies in the Chinese translation were addressed and rectified. The same procedures were applied to ensure an accurately translated Chinese version of Participant Information Sheet and Consent Form.

Parent interview

Parents were asked to indicate on the consent form whether they were willing to attend an interview. Semi-structured interviews were conducted with 50 parents (25 Chinese, 25 non-Chinese) who completed parent questionnaires and agreed to be interviewed. The Chinese immigrant parents consisted of all parents who agreed to be interviewed. Thirty five non-Chinese parents agreed to be interviewed. Selection for interview was based on the first 25 parents who volunteered. Details of kindergartens that the interviewed parents came from are shown in Table 5. Overall, for both the Chinese immigrant and non-Chinese samples, parents from kindergartens with a range of deciles and Chinese enrolments were represented, except there were a higher proportion of parents from high decile kindergartens for the non-Chinese sample compared to the Chinese sample.

The majority of parents (45) chose to be interviewed in their home with their children playing around, and a small proportion (5) of parents chose to be interviewed in a public library or a KFC outlet where they were spending time with their child as usual. Interviews

lasted between 20 to 40 minutes. All interviews were audio recorded with a digital voice recorder.

Parent interviews were based on a selection of questions from the parental involvement section of the parent questionnaires. Questions were chosen to provide further insight into possible reasons for low and high levels of ECE involvement in communicating with teachers (i.e., talking with teachers about how their child is getting on at kindergarten, reading the notice board, reading the child's portfolio), volunteering to help at kindergarten (i.e., helping with kindergarten sessions, helping with fundraising), and participating in kindergarten decision making (i.e., offering ideas and suggestions to improve the kindergarten, participating in committee meetings). During the interview, parents were asked to elaborate on their questionnaire responses. For example, a typical parent interview question was: "For Question X of the questionnaire, you answered that you never participate in parent committee meeting at kindergarten. Can you tell me more? Are there any particular reasons?" Before the parents were read the questions, they were provided the original copy of the questionnaire they completed as a tool to refresh their memory.

All interviews were conducted by the researcher. The majority of the Chinese parents were interviewed in Chinese with exception of three parents who chose to complete the questionnaire in Chinese and be interviewed in English.

All parent interviews were transcribed by the researcher. Twenty per cent of the transcripts and the English translation of the Chinese parent interviews were cross checked by a competent bilingual (Chinese and English) education advisor who was a former University of Auckland staff member. One hundred per cent of the non-Chinese parent interviews were cross checked by a competent native English speaker who was undertaking PhD research in Faculty of Education at the University of Auckland. All coding was conducted by the researcher. The researcher read the transcripts several times to identify initial categories. Upon completion of the initial coding of all transcripts, to check on the clarity of categories (Thomas, 2006), all categories, together with sample raw text, were

cross-checked by supervisors. Fifty per cent of the initially captured categories were then reconceptualised and collapsed according to feedback from supervisors, and then final coding was completed.

Teacher interview

The researcher interviewed selected head teachers of kindergartens where parents returned completed questionnaires. Thirty head teachers were purposefully sampled (Sandelowski, 2000) so that kindergartens with different decile levels, Chinese child enrolment, and questionnaire return rates were represented. Details of kindergartens that the interviewed head teachers came from are shown in Table 6.

Semi-structured teacher interviews were conducted to investigate each kindergarten's approach to encouraging parental involvement and the head teacher's perceptions of possible barriers to involvement. Head teacher interviews focused on the kindergarten's policy and procedures in relation to parental involvement at kindergarten. The following questions were sequentially asked of head teachers: What steps does your kindergarten take to involve parents in the following activities: talking to teachers about how their child is getting on at kindergarten; reading the kindergarten's newsletter/notice board; helping at kindergarten sessions; serving on the kindergarten committee? Does your kindergarten take any other steps to specifically involve Chinese parents? The interviews were conducted at the kindergarten and each interview took 25-35 minutes. All interviews were audio recorded.

All teacher interviews were transcribed by the researcher. The transcriptions of all teacher interviews were cross checked by a competent native English speaker who was undertaking PhD research in Faculty of Education at the University of Auckland. Initial coding was conducted by the researcher. The researcher read the transcripts carefully, and then identified initial categories. Upon completion of the initial coding of all transcripts,

the researcher compared his set of categories with a second coder. The PhD candidate who cross-checked the English transcript acted as a second coder, and was asked to create a second set of categories from 20% of the teacher interview transcripts without seeing the initial categories. The second set of categories was then compared with the initial set to establish the extent of overlap (Thomas, 2006). The overall category overlap rate was 91%, and the two sets of categories were subsequently merged into a combined set.

Table 5
Number of Interviewed Parents by Kindergarten Ratio of Chinese Enrolment and Decile

	Low	Chinese ratio		Me	edium Chinese	e ratio	High Chinese ratio			
	Low decile	Medium decile	High decile	Low decile	Medium decile	High decile	Low decile	Medium decile	High decile	
Chinese	0	2	4	3	3	5	3	2	3	
Non-Chinese	2	1	3	1	1	10	0	2	5	

Note. Ratio of Chinese enrolment is the percentage of Chinese enrolment in a kindergarten (low: below 5%; medium: 5-10%; high: above 10%); Decile is a decile rating of a kindergarten (low: 1-5; medium: 6-7; high: 8-10).

Table 6
Number of Interviewed Kindergartens by Decile, Ratio of Chinese Enrolment and Questionnaire Return Rate

	Low Chinese ratio				edium Chinese	ratio	High Chinese ratio			
	Low	Medium	High	Low	Medium	High	Low	Medium	High	
	return rate	return rate	return rate	return rate	return rate	return rate	return rate	return rate	return rate	
Low decile	2	1	-	1	2	2	2	-	1	
Medium decile	1	1	2	1	1	1	-	1	-	
High decile	1	-	2	2	2	2	-	2	-	

Notes: Return rate is the percentage of approached parents who returned a completed questionnaire in a kindergarten (low: below 30%; medium: 30-60%; high: above 60%).

Chapter Three: Results

This chapter describes the results of the data analyses conducted to address each research question. Each item on the survey was coded and the data were entered into a SPSS 16.0 dataset to perform statistical analyses.

3.1 Data analytic plan

Firstly, SPSS DESCRIPTIVE and EXPLORE were used to screen and clean the data, that is, to inspect the data for errors and missing data. Preliminary analyses were then performed to ensure that the data meet statistical assumptions for subsequent tests. Univariate analyses (e.g., descriptive statistics, skewness, kurtosis) were compared to examine normality, linearity, and homoscedasticity.

Next, to answer research questions 1 and 2, two tailed independent-samples t-tests were used to compare Chinese immigrant parents and non-Chinese parents on all hypothesised differences in parental involvement, parenting beliefs and parenting practices. For each comparison group mean scores, standard deviations, mean difference between the two groups, 95% confidence interval of the difference were calculated. Given the number of t-test analyses and the size of the sample, a p-value of .01 was used to minimize the risk of making Type 1 errors. In addition to the statistical significance level p, the effect size statistics Cohen's d was also calculated to examine the magnitude of the difference (Cohen, 1988). The Levene's test was used to check for the equality of variance. When the test was significant, the adjusted t-test would be used.

Then Pearson product-moment correlations were conducted for the Chinese sample and the sample as a whole to examine the direction and strength of the relationships of each parental involvement dimension with all potential predictors (parenting beliefs, parenting practices, and family background variables). The bivariate correlations were conducted to inform selection of the independent variables for the multiple regression analyses.

To answer research question 3, hierarchical multiple regressions were then conducted to investigate the pattern of the associations between the hypothesised predictors and each parental involvement dimension. Prior to conducting the regressions bivariate correlations were run between the independent variables to check for possible multicollinearity. In the situation of multicollinearity, the coefficient estimates may change erratically in response to small changes in the regression model or the data, therefore highly correlated variables were not entered in the regression model simultaneously.

Each of the parental involvement dimensions was regressed on selected variables for the whole sample. Interaction terms between group and relevant variables on the parental involvement dimension were tested to detect group difference. Separate hierarchical multiple regressions were conducted for the Chinese sample when the model included Chinese specific variable(s).

Variables entering the regression equations were selected according to their correlations with each parental involvement dimension. For the whole sample, given the large sample size, in order to capture the contribution of all potential independent variables, all variables that correlated with a parental involvement dimension were included. For the Chinese sample, given the smaller sample size, in order to maintain satisfactory statistical power, variables were selected parsimoniously to keep the number at a minimum. A preferred correlation threshold of .30 (Pallant, 2007) was adopted to achieve this effect.

All regression analyses followed a fixed entry order and only included those that met statistical significance. For the whole sample regressions, the dummy variable "group" (Chinese, non-Chinese) was entered at the first step, demographic variables the second step, opportunity the third step, all parental belief and parenting practice variables the fourth step, and interaction terms were entered at the last step. For the Chinese sample regressions, similar entry order was followed, but no dummy variable or interaction terms were entered, and English proficiency was entered after the demographic variables.

3.2 Preliminary data analysis

Examination of skewness and kurtosis led to transformation of some variables to improve the normality, linearity, and homoscedasticity. However, there was no difference in the results when analyses were conducted between transformed and non-transformed data. This pattern is consistent with Tabachnick and Fidell (2007) who state that with reasonably large samples, skewness will not 'make a substantive difference in the analysis' (p.80). Therefore, for ease of interpretation using the unstandardised coefficients, non-transformed data were used for all analyses.

Bivariate correlational analyses detected possible multicollinearity between several variables according to guidelines by Tabachnick and Fidell (2007) who recommend omitting one of the variable where there is a bivariate correlation of r = .70 or more. Tables 5 and 6 display the correlations between independent variables for the Chinese and whole sample respectively. The correlations between number of children under 18 and child birth order for both the Chinese (r = .68) and non-Chinese (r = .70) groups were high, therefore, the two measures were not entered into the regression equation simultaneously. To decide which variable to enter, two separate models were run, one model with number of children and the other model with child birth order, and the model that explained larger variance in the dependent variable was selected. For the Chinese sample, the correlations between opportunity and role construction (r = .69) and between opportunity and self-efficacy (r= .67) were high, opportunity was therefore not entered in the same models with role construction or self-efficacy. Instead, two separate models were run, one model without opportunity and a second model with opportunity included but self efficacy and role construction excluded. The results of the two sets of analyses were then compared and the selection of the final model was based on the assessment of the overall model in terms of its ability to predict the dependent measure.

Table 7

Pearson Product-Moment Correlations between Independent Variables (Chinese Sample)

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Role construction	-												
2. Self efficacy	.54***	-											
3. Authoritative	.59***	.43***	-										
4. Shaming/love withdrawal	44***	23*	35***	-									
5. Maternal involvement	08	.17	16	.26**	-								
6. Opportunity	.69***	.67***	.51***	38***	.08	-							
7. Qualification	.08	.12	.15	.01	18*	.09	-						
8. Household income	.11	.20*	.12	21*	08	.14	.25**	-					
9. Number of children	.04	.11	02	02	.13	.13	20*	.10	-				
10. Child's birth order	13	.05	17	.12	.07	.03	03	03	.70***	-			
11. Work hours	20*	08	22*	.08	06	16	.31**	.24**	24**	16	-		
12. Acculturation	.05	01	.03	.21*	.27**	06	11	28**	00	.08	21*	-	
13. English proficiency	.01	.23*	.03	20*	04	.23*	.50***	.45***	09	09	29**	47***	
* .05 ** .01 *** .001												·	

^{*} p <.05 ** p <.01 *** p <.001

Table 8

Pearson Product-Moment Correlations between Independent Variables (Whole Sample)

	1	2	3	4	5	6	7	8	9	10	11
1. Role construction	-							•		·	
2. Self efficacy	.37***	-									
3. Authoritative	.45***	.35***	-								
4. Shaming/love withdrawal	36***	27***	31***	-							
5.Maternal involvement	08	.14*	07	.34***	-						
6.Opportunity	.53***	.49***	.44***	48***	21**	-					
7.Qualification	.04	06	.10	.05	14*	01	-				
8. Household income	.17**	.14*	.06	37***	33***	.27***	.25***	-			
9. Number of children	.07	.15*	01	20**	16*	.26***	16*	.27***	-		
10. Child's birth order	01	.09	08	07	13*	.17**	15*	.10	.68***	-	
11. Work hours	23***	09	14*	.13*	.00	16*	.18**	.10	10	03	-

3.3 Comparisons between Chinese and Non-Chinese Parents in Parental

Involvement, Parental Beliefs and Parenting Practices

Parental Involvement

Table 9 displays results of independent-samples *t*-tests comparing parental involvement dimensions between the Chinese and non-Chinese samples.

For communicating with teachers, there was a significant difference in mean scores for the Chinese, M = 2.67, SD = .92, and non-Chinese, M = 3.23, SD = .74, samples, t (229) = 5.34, p < .001. The magnitude of the differences in the means (mean difference = .57, 95% CI: -.78 to -.36) was medium (Cohen's d =.67). This result shows that Chinese immigrant parents were significantly (p < .001) less likely to communicate with teachers than non-Chinese parents.

For volunteering to help at kindergarten, there was a significant between-group difference in the mean scores for the Chinese, M = 2.37, SD = .83, and non-Chinese, M = 2.75, SD = .81, samples, t (245) = 3.60, p < .001. The magnitude of the differences in the means (mean difference = .38, 95% CI: -.58 to -.17) was close to medium (Cohen's d = .46). This result shows that Chinese immigrant parents were significantly (p < .001) less likely to volunteer to help at kindergarten than non-Chinese parents.

For participating in kindergarten decision making, there was a significant difference in mean scores for the Chinese, M = 1.84, SD = .82, and non-Chinese, M = 2.32, SD = 1.09, samples, t (234.2) = 3.89, p < .001. The magnitude of the differences in the means (mean difference = .48, 95% CI: -.72 to -.24) was medium (Cohen's d = .50). This result shows that Chinese immigrant parents were significantly (p < .001) less likely to participate in kindergarten decision making than non-Chinese parents.

There was no significant difference between Chinese immigrant parents and non-Chinese

parents in helping with their children's learning at home. However, there were significant between-group differences in two of the four individual items of the construct (Table 10). There was a significant difference in mean scores of providing educational resources for the Chinese, M = 3.83, SD = .93, and non-Chinese, M = 3.24, SD = 1.10, samples, t (245) = 4.60, p < .001. The magnitude of the differences in the means (mean difference = .60, 95% CI: -.85 to -.34) was medium (Cohen's d = .58). There was a significant difference in mean scores of spending time on creative activities for the Chinese, M = 3.41, SD = .87, and non-Chinese, M = 3.84, SD = .77, samples, t (237) = 4.13, p < .001. The magnitude of the differences in the means (mean difference = .43, 95% CI: .23 to .64) was medium (Cohen's d = .52). There was no between-group difference in mean scores of spending time on numeracy skills or reading and writing skills. These results show that, compared with non-Chinese parents, Chinese parents more often (p < .001) provided their child with educational resources, but spent less time (p < .001) working with their child on creative activities at home.

Parental Beliefs - Role Construction, Self Efficacy, Opportunity for Involvement

Table 9 also displays the results of independent-samples t-tests comparing role construction, self-efficacy and perceived opportunity between the Chinese and non-Chinese samples. For self-efficacy, there was a significant difference in mean scores for the Chinese, M = 4.05, SD = .76, and non-Chinese, M = 4.39, SD = .75, samples, t (245) = 3.53, p = .001. The magnitude of the differences in the means (mean difference = .34, 95% CI: -.53 to -.15) was close to medium (Cohen's d = .45). For opportunity, there was a significant difference in mean scores for the Chinese, M = 4.61, SD = .72, and non-Chinese, M = 5.24, SD = .55, samples, t (221.9) = 7.72, p < .001. The magnitude of the differences in the means (mean difference = .63, 95% CI: -.79 to -.47) was large (Cohen's d = .83). These results show that, compared to non-Chinese parents, Chinese immigrant parents were slightly less likely to believe it was their role to be involved in kindergarten, were less likely to express confidence in solving parenting problems than non-Chinese parents, and perceived less opportunities and invitations for involvement in kindergarten than non-Chinese parents. There was no significant between-group difference in role construction.

Parenting Practices Emphasised in China

Also reported in Table 9 are the results of the independent-samples t-tests comparing encouragement of modesty, shaming/love withdrawal, directiveness, and maternal involvement between the Chinese and non-Chinese samples. For shaming/love withdrawal, there was significant difference in mean scores for the Chinese, M = 2.40, SD = .80, and non-Chinese, M = 1.40, SD = .36, samples, t (162.9) = 12.54, p < .001. The magnitude of the differences in the means (mean difference = 1.00, 95% CI: .84 to 1.16) was large (Cohen's d = 1.61). For directiveness, there was significant difference in mean scores for the Chinese, M = 3.21, SD = .72, and non-Chinese, M = 2.49, SD = .63, samples, t (245) = 8.41, p < .001. The magnitude of the differences in the means (mean difference = .72, 95% CI: .55 to .89) was large (Cohen's d = 1.06). For maternal involvement, there was significant difference in mean scores for the Chinese, M = 3.54, SD = .73, and non-Chinese, M = 2.75, SD = .93, samples, t (236.5) = 7.47, p < .001. The magnitude of the differences in the means (mean difference = .79, 95% CI: .58 to 1.00) was large (Cohen's d = .94). Contrary to the postulation, there was no significant difference in encouragement of modesty between the Chinese and the non-Chinese groups.

These results show that, as it is hypothesised, Chinese parents use significantly more shaming/love withdrawal (e.g., "I tell my child that I get embarrassed when he/she does not meet my expectations", "I tell my child that he/she should be ashamed when he/she misbehaves"), directiveness (e.g., "I demand that my child does things that I want or think he/she needs to do", "I scold or criticize when my child's behaviour doesn't meet my expectations"), and maternal involvement (e.g., "A mother's sole interest is in taking care of her children", "Mothers should do everything for their children's education and make many sacrifices"), with Chinese parents showing a greater tendency to make their child feel guilty about not meeting their expectations, give instructions that the child must follow, and acknowledge mothers' self-sacrificing for their child's education. However, compared to non-Chinese parents, Chinese parents practised as little encouragement of modesty as non-Chinese parents. Both groups rarely discouraged their child from being proud and

showing their skills and confidence. There were no significant differences between Chinese and non-Chinese parents in authoritative or authoritarian parenting practices.

Table 9

Comparison between Chinese and Non-Chinese Parents on the Level of Parental ECE Involvement, Parenting Beliefs and Parenting Practices

Parameters (Mean score range)	Chinese (<i>n</i> =120)	Non-Chinese (<i>n</i> =127)	t (df)	p	Cohen's d	Skewness (n=247)	Kurtosis (n=247)
	M (SD)	M (SD)				Statistic (Std. Error)	Statistic (Std. Error)
Parental involvement							
Communicating (1-5)	2.67 (.92)	3.23 (.74)	5.34 (229)	<.001	.67	.03 (.16)	20 (.31)
Volunteering (1-5)	2.37 (.83)	2.75 (.81)	3.60 (245)	<.001	.46	.24 (.16)	50 (.31)
Helping with learning (1-5)	3.75 (.70)	3.65 (.65)	1.14 (245)	.254	.15	.01 (.16)	13 (.31)
Decision making (1-5)	1.84 (.82)	2.32 (1.09)	3.89 (234.2)	<.001	.50	.77 (.16)	13 (.31)
Parental beliefs							
Role construction (1-6)	4.69 (.80)	4.88 (.54)	2.14 (206.8)	.034	.28	88 (.16)	.87 (.31)
Parental self-efficacy (1-6)	4.05 (.76)	4.39 (.75)	3.53 (245)	.001	.45	23 (.16)	16 (.31)
Opportunities (1-6)	4.61 (.72)	5.24 (.55)	6.39 (224.1)	<.001	.83	87 (.16)	.97 (.31)
Parenting styles							
Authoritative (1-5)	3.99 (.61)	4.07 (.40)	1.28 (205.1)	.202	.16	56 (.16)	.22 (.31)
Authoritarian (1-5)	1.97 (.53)	1.84 (.39)	2.20 (217.8)	.029	.28	.98 (.16)	1.17 (.31)
Parenting practices emphasised in China							
Modesty (1-5)	1.54 (.58)	1.51 (.43)	.52 (218.7)	.606	.06	1.19 (.16)	1.70 (.31)
Shaming (1-5)	2.40 (.80)	1.40 (.36)	12.54 (162.9)	<.001	1.61	1.13 (.16)	.94 (.31)
Directiveness (1-5)	3.21 (.72)	2.49 (.63)	8.41 (245)	<.001	1.06	.12 (.16)	.13 (.31)
Maternal involvement (1-5)	3.54 (.73)	2.75 (.93)	7.47 (236.5)	<.001	.94	.04 (.16)	82 (.31)

Table 10
Group Difference in Individual Items of Helping with the Child's Learning at Home

Parameters (Mean score range)	Chinese (n=120)	Non-Chinese (<i>n</i> =127)	t (df)	p	Cohen's d	Skewness (n=247)	Kurtosis (n=247)
	M (SD)	M (SD)				Statistic (Std. Error)	Statistic (Std. Error)
Learning at home							
Numeracy skills (1-5)	3.91 (.77)	3.67 (.85)	2.32 (245)	.021	.30	45 (.16)	.07 (.31)
Reading/writing skills (1-5)	3.86 (.88)	3.87 (.78)	.07 (245)	.941	01	47 (.16)	.01 (.31)
Educational resources (1-5)	3.83 (.93)	3.24 (1.10)	4.60 (245)	<.001	.58	34 (.16)	41 (.31)
Creative activities (1-5)	3.41 (.87)	3.84 (.77)	4.13 (237)	<.001	52	14(.16)	19 (.31)

3.4 Factors Associated with Parental Involvement

Factors Associated with Communicating with Teachers

Table 11 shows the Pearson product-moment correlation between communicating with teachers and each independent variable for both the Chinese and whole samples. For both the Chinese sample and the sample as a whole, with roughly decreasing strength, opportunity (p < .001), role construction (p < .001), self-efficacy (p < .001) and authoritative (p < .001) were most strongly, positively correlated with communicating with teachers, and shaming/love withdrawal was negatively related to communicating (p < .01 for Chinese sample; p < .001 for whole sample). For the Chinese sample, English proficiency (p < .001), qualification (p < .001), household income (p < .01) and Chinese acculturation (p < .05) were positively correlated with communicating with teachers with decreasing strength. For the whole sample, household (p < .001), number of children (p < .01) and child birth order (p < .05) were positively correlated with communicating with decreasing strength, and maternal involvement (p < .01) was negatively correlated with communicating. Work hours was not correlated with communicating for either the Chinese or whole sample.

Table 11

Pearson Product-Moment Correlations between Independent and Dependent Variables for Both Chinese and Whole Samples

	Communi	Communicating		ring to help	Helping w	ith child's	Participat	ing in
	with teach	ers	at kinder	at kindergarten		learning at home		naking
	Chinese	Whole	Chinese	Whole	Chinese	Whole	Chinese	Whole
	sample	sample	sample	sample	sample	sample	sample	sample
Role construction	.47***	.41***	.54***	.46***	.27**	.22**	.42***	.36***
Self-efficacy	.51***	.38**	.43***	.36***	.35***	.24***	.45***	.34***
Authoritative	.39***	.34***	.44***	.36***	.49***	.43***	.41***	.29***
Shaming/love withdrawal	27**	34***	32***	33***	13	04	18	24***
Maternal involvement	01	18**	08	10	.03	.14*	10	15*
Opportunity	.56***	.53***	.54***	.43***	.22*	.10	.53***	.34***
Qualification	.37***	.12	.12	05	.15	09	.22*	04
Household income	.27**	.29***	.02	.14*	.16	.04	.07	.20**
Number of children	03	.17**	07	.04	28**	.20**	.05	.11
Child birth order	09	.14*	13	.08	26**	13*	08	.10
Work hours	01	.04	12	12	03	02	03	06
Chinese acculturation	.21*	-	04	-	.05	-	05	-
English proficiency	.39***	-	.17	-	.04	-	.25**	-

^{*} *p* <.05 ** *p* <.01 *** *p* <.001

Table 12 presents results of the hierarchical regression analysis used to examine the associations of communicating with teachers with child birth order, household income, opportunity, maternal involvement, authoritative, self efficacy, role construction, and shaming/love withdrawal, moderated by their interactions with group. In the hierarchical multiple regression, the group variable was entered at Step 1, explaining 10.6% of the variance in communicating with teachers, F(1, 245) = 28.90, p < .001. After entry of income and child birth order at Step 2, the total variance explained by the model was 13.3%, $F(3, 243) = 12.40, p < .001; \Delta R^2 = .027; \Delta F(2, 243) = 3.81, p < .05.$ At Step 3, opportunity for involvement was entered resulting in the total model variance of 30.2%, F(4, 242) =26.17, p < .001; $\Delta R^2 = .169$, $\Delta F (1, 242) = 58.68$, p < .001. Upon entry of authoritative, shaming/love withdrawal, role construction, self-efficacy and maternal involvement at Step 4, the total variance explained by the model as a whole was 35.4%, F(9, 237) = 14.40, p< .001, ΔR^2 = .052, ΔF (5, 237) = 3.79, p < .01. Interaction terms between group and all independent variables were entered at Step 5, and none of them produced significant regression coefficients, showing no group difference in the associations of communicating with teachers with the variables entered, ΔF (6, 231) = .62, p > .05. Therefore, Model 4 was reported as the final model, and it showed among all entered measures, three were statistically significant, with opportunity recording the highest beta value, $\beta = .26$, p < .01, followed by role construction, $\beta = .15$, p < .05, and self-efficacy, $\beta = .14$, p < .05.

Table 12 Summary of Hierarchical Regression Analysis for Variables Predicting Communicating with Teachers (whole sample, N=247)

Variable	В	SE B	β
Step 1			
Group	57	.11	33***
Step 2			
Group	39	.12	23**
Annual household income	.09	.04	.17*
Child's birth order	.08	.06	.07
Step 3			
Group	07	.12	04
Annual household income	.08	.03	.14*
Child's birth order	.04	.06	.04
Opportunity	.57	.08	.46***
Step 4			
Group	11	.14	06
Annual household income	.06	.03	.12
Child's birth order	.06	.06	.06
Opportunity	.32	.09	.26**
Authoritative	.17	.11	.10
Shaming/love withdrawal	.01	.08	.01
Role construction	.19	.09	.15*
Self-efficacy	.16	.07	.14*
Maternal involvement	05	.06	06
Step 5			
Group	18	.16	10
Annual household income	.05	.03	.10
Child's birth order	.06	.06	.06
Opportunity	.20	.13	.16
Authoritative	.31	.18	.18
Shaming/love withdrawal	.15	.19	.13
Role construction	.25	.13	.19*
Self-efficacy	.10	.10	.09
Maternal involvement	06	.08	07
Interaction between group and opportunity	.20	.20	.12
Interaction between group and authoritative	18	.23	09
Interaction between group and self-efficacy	.15	.16	.09
Interaction between group and role construction	15	.18	10
Interaction between group and shaming/love withdrawal	18	.22	.12
Interaction between group and maternal involvement	.01	.13	.01

Note: $R^2 = .11$ for Step 1, p < .001; $\Delta R^2 = .03$ for Step 2, p < .05; $\Delta R^2 = .17$ for Step 3, p < .001; $\Delta R^2 = .05$ for Step 4, p < .01.

^{*}p < .05 **p < .01 ***p < .001

A separate hierarchical multiple regression including a Chinese-specific variable was performed for the Chinese sample. Two separate models were run, one model without opportunity and a second model with opportunity included but self efficacy and role construction excluded. Since the total variance explained by both models as a whole was same ($R^2 = 44.9\%$), the adjusted R^2 of the two models was compared. The model with opportunity included but self efficacy and role construction excluded had a higher adjusted R^2 (42.9%) and was therefore chosen and its results presented.

Table 13 presents results of the hierarchical regression analysis used to examine the associations of communicating with teachers with qualification, English proficiency, opportunity, and authoritative parenting. In the hierarchical multiple regression, qualification was entered at Step 1, explaining 13.5% of the variance in communicating with teachers, F(1, 118) = 18.48, p < .001. After entry of English proficiency at Step 2 the total variance explained by the model was 19.4%, F(2, 117) = 14.10, p < .001; $\Delta R^2 = .059$; $\Delta F(1, 117) = 14.10$, $\Delta R^2 = .059$; $\Delta F(1, 117) = 14.10$, $\Delta R^2 = .059$; $\Delta R^2 = .059$; $\Delta F(1, 117) = 14.10$, $\Delta R^2 = .059$; $\Delta R^2 = .05$ 117) =8.53, p < .01. At Step 3, opportunity for involvement was entered resulting in the total model variance of 43.5%, F(3, 116) = 29.79, p < .001; $\Delta R^2 = .241$; $\Delta F(1, 116) = 49.50$, p< .001. Upon entry of authoritative at Step 4, the total variance explained by the model as a whole was 44.9%, F(4, 115) = 23.39, p < .001; $\Delta R^2 = .013$; $\Delta F(1, 115) = 2.79$, p < .05. Authoritative explained an additional 1.3% of the variance in communicating, after controlling for qualification, English proficiency and opportunity for involvement, R square change = .013, F change (1, 115) = 2.79, p < .05. The final model showed among the four entered variables, three were statistically significant, with opportunity recording the highest beta value, β = .43, p < .001, followed by qualification, β = .21, p < .05, and English proficiency, $\beta = .18$, p < .05.

Table 13 Summary of Hierarchical Regression Analysis for Variables Predicting Communicating with Teachers (Chinese sample, N=120)

Variable	В	SE B	β
Step 1			
Qualification	.35	.08	.37***
Step 2			
Qualification	.22	.09	.23*
English proficiency	.14	.05	.28**
Step 3			
Qualification	.23	.08	.24**
English proficiency	.08	.04	.16
Opportunity	.65	.09	.50***
Step 4			
Qualification	.20	.08	.22*
English proficiency	.09	.04	.18*
Opportunity	.55	.11	.43***
Authoritative parenting	.21	.12	.14

Note: $R^2 = .14$ for Step 1, p < .001; $\Delta R^2 = .06$ for Step 2, p < .01; $\Delta R^2 = .24$ for Step 3, p < .001; $\Delta R^2 = .01$ for Step 4, p > .05.

^{*}p < .05 **p < .01 ***p < .001

Factors associated with volunteering to help at kindergarten

Table 11 shows the Pearson product-moment correlations between volunteering to help at kindergarten and each independent variable. For both the Chinese and whole samples, with roughly decreasing strength, opportunity (p < .001), role construction (p < .001), self-efficacy (p < .001) and authoritative (p < .001) were most strongly, positively correlated with volunteering to help at kindergarten, and shaming/love withdrawal (p < .001) was negatively related to volunteering. No other correlations were significant except household income which had a weak positive correlation (p < .05) with volunteering.

Table 14 presents results of the hierarchical regression analysis used to examine the associations of volunteering to help at kindergarten with income, opportunity, authoritative, self efficacy, role construction, shaming/love withdrawal, moderated by their interactions with group. In the hierarchical multiple regression, the variable group was entered at Step 1, explaining 5.0% of the variance in volunteering to help at kindergarten, F(1, 245) = 12.99, p < .001. Entry of income at Step 2 did not make significant R square or F change. At Step 3, opportunity for involvement was entered resulting in the total model variance of 18.3%, F $(3, 243) = 18.16, p < .001; \Delta R^2 = .132; \Delta F (1, 243) = 39.26, p < .001.$ Upon entry of authoritative, shaming/love withdrawal, role construction, and self-efficacy at Step 4, the total variance explained by the model as a whole was 29.6%, F(7, 239) = 14.35, p < .001; $\Delta R^2 = .113$; ΔF (4, 239) = 9.57, p < .001. Interaction terms between group and all independent variables were entered at Step 5, and none of them produced significant regression coefficients, showing no group difference in the associations of volunteering to help at kindergarten with the variables entered, $\Delta F(5, 234) = .50$, p > .05. Therefore, Model 4 was reported as the final model, and it showed among all entered measures, two were statistically significant, with role construction recording higher beta value, $\beta = .26$, p < .001, than self-efficacy, $\beta = .14$, p < .05.

No separate hierarchical multiple regressions were conducted for the Chinese sample because no Chinese-specific variables were correlated with volunteering to help at kindergarten (as shown in Table 8).

Table 14 Summary of Hierarchical Regression Analysis for Variables Predicting Volunteering to Help at Kindergarten (whole sample, N=247)

Variable	В	SE B	β
Step 1			
Group	38	.10	22***
Step 2			
Group	35	.12	21**
Annual household income	.02	.04	.03
Step 3			
Group	07	.12	04
Annual household income	.00	.03	.01
Opportunity	.48	.08	.41***
Step 4			
Group	10	.14	06
Annual household income	01	.03	02
Opportunity	.13	.09	.11
Authoritative	.20	.11	.12
Shaming/love withdrawal	08	.08	08
Role construction	.32	.09	.26***
Self-efficacy	.15	.07	.14*
Step 5			
Group	06	.16	04
Annual household income	01	.03	02
Opportunity	.05	.13	.04
Authoritative	.27	.18	.17
Shaming/love withdrawal	13	.19	12
Role construction	.41	.12	.33**
Self-efficacy	.18	.09	.17*
Interaction between group and opportunity	.22	.20	.14
Interaction between group and authoritative	09	.23	05
Interaction between group and self-efficacy	10	.15	06
Interaction between group and role construction	18	.18	12
Interaction between group and shaming/love withdrawal	.06	.21	.04

Note: $R^2 = .05$ for Step 1, p < .001; $\Delta R^2 = .13$ for Step 3, p < .001; $\Delta R^2 = .11$ for Step 4, p < .001.

^{*}*p* < .05 ***p* <.01 ****p* <.001

Factors associated with helping with the child's learning at home

Table 11 shows the Pearson product-moment correlation between helping children learn at home and each independent variable for both the Chinese and whole samples. For both the Chinese and whole samples, with roughly decreasing strength, authoritative (p < .001), self-efficacy (p < .001) and role construction (p < .01) were most strongly, positively correlated with helping children learn at home. Opportunity was weakly, positively correlated (p < .05) with helping child's learning for Chinese sample only. Number of children was negatively correlated (p < .01) for the Chinese sample, but positively correlated (p < .01) for the whole samples. Child birth order was negatively correlated for both the Chinese (p < .01) and whole (p < .05) samples. Maternal involvement was weakly correlated (p < .05) for the whole sample. Shaming/love withdrawal, qualification, income, and work hours were not correlated for any of the sample.

Table 15 presents results of the hierarchical regression analysis used to examine the associations of helping child's learning at home with number of children under 18, authoritative, self efficacy, role construction, and maternal involvement, moderated by their interactions with group. In the hierarchical multiple regression, the variable group was entered at Step 1, and no significant R square or F change was found, F(1, 245) = 1.31, p > .05. After entry of number of children at Step 2, the total variance explained by the model was 3.9%, F(2, 244) = 4.91, p < .01; $\Delta R^2 = .033$; $\Delta F(1, 244) = 8.47$, p < .01. At Step 3, authoritative, maternal involvement, role construction and self-efficacy were entered resulting in the total model variance 24.8%, F(6, 240) = 13.18, p < .001; $\Delta R^2 = .209$; $\Delta F(4, 240) = 16.69$, p < .001. Interaction terms between group and all independent variables were entered at Step 4, and none of them produced significant regression coefficients, showing no group difference in the associations of helping with child's learning at home with entered variables, $\Delta F(4, 236) = .95$, p > .05. Therefore, Model 3 was reported as the final model, and it showed among all entered measures, two were statistically significant, with authoritative recording higher beta value, $\beta = .38$, p < .001, than number of children under 18,

$$\beta$$
 = -.19, p < .01.

No separate hierarchical multiple regressions were conducted for the Chinese sample because no Chinese specific variables were correlated with helping with the child's learning at home (as shown in Table 8).

Table 15
Summary of Hierarchical Regression Analysis for Variables Predicting Helping with Child's Learning at Home (whole sample, N=247)

Variable	В	SE B	β
Step 1			
Group	.10	.09	.07
Step 2			
Group	.01	.09	.01
Number of children under 18	16	.05	19**
Step 3			
Group	.04	.09	.03
Number of children under 18	15	.05	19**
Authoritative	.50	.09	.38***
Maternal involvement	.08	.05	.11
Role construction	.03	.07	.03
Self-efficacy	.10	.06	.12
Step 4			
Group	.04	.09	.03
Number of children under 18	15	.05	19**
Authoritative	.50	.14	.38***
Maternal involvement	.07	.06	.10
Role construction	.15	.10	.15
Self-efficacy	.06	.08	.07
Interaction between group and authoritative	.04	.18	.03
Interaction between group and maternal involvement	.01	.10	.01
Interaction between group and self-efficacy	.13	.12	.11
Interaction between group and role construction	24	.14	20

Note: $\Delta R^2 = .03$ for Step 2, p < .01; $\Delta R^2 = .21$ for Step 3, p < .001.

^{*}*p* < .05 ***p* < .01 ****p* < .001

Factors associated with participating in kindergarten decision making

Table 11 shows the Pearson product-moment correlation between participating in kindergarten decision making and each independent variable for both the Chinese and whole samples. For both the Chinese and whole samples, opportunity (p < .001), self-efficacy (p < .001), role construction (p < .01) and authoritative (p < .001), were most strongly, positively correlated with participating in kindergarten decision making. For the Chinese sample, English proficiency (p < .01) and qualification (p < .05) were weakly correlated. For the whole sample, income (p < .01) was positively correlated and shaming/love withdrawal (p < .001), maternal involvement (p < .05) were negatively correlated.

Table 16 presents results of the hierarchical regression analysis used to examine the associations of participating in kindergarten decision making with annual household income, opportunity, maternal involvement, authoritative, self efficacy, role construction, and shaming/love withdrawal, moderated by their interactions with group. In the hierarchical multiple regression, the variable group was entered at Step 1, explaining 5.7% of the variance in participating in kindergarten decision making, F(1, 245) = 14.93, p < .001. Entry of income at Step 2 did not produce significant R square or F change, ΔF (1, 244) = 2.20, p > .05. At Step 3, opportunity for involvement was entered resulting in the total model variance of 13.3%, F(3, 243) = 12.44, p < .001; $\Delta R^2 = .067$; $\Delta F(1, 243) = 18.85$, p < .001. Upon entry of authoritative, shaming/love withdrawal, role construction, self-efficacy and maternal involvement at Step 4, the total variance explained by the model was 22.4%, F (8, 238) = 8.61, p < .001; $\Delta R^2 = .091$; ΔF (5, 238) = 5.61, p < .001. Interaction terms between group and all independent variable were entered at Step 5, the total variance explained by the model as a whole was 26.4%, F(14, 232) = 5.95, p < .001; $\Delta R^2 = .091$; $\Delta F(5, 238) = 5.61$, p< .001. Interaction terms explained an additional 4.0% of the variance in decision making. In the last model, four measures were significant, with role construction recording the highest beta value, $\beta = .40$, p < .001, followed by interaction between group and opportunity, $\beta = .35$, p < .01, interaction between group and role construction, $\beta = -.33$, p < .01, and self-efficacy, $\beta = .23$, p < .05.

Figure 1 illustrates how group and opportunity interact in their effect on participating in kindergarten decision making. In the figure, the two lines represent the regression lines from the regression of decision making on opportunity for Chinese and non-Chinese parents, respectively. For Chinese parents, opportunity has a positive effect on decision making, whereas it has negative effect for non-Chinese parents. Figure 2 illustrates how group and role construction interact in their effect on participating in kindergarten decision making. In the figure, the two lines represent the regression lines from the regression of decision making on role construction for Chinese and non-Chinese parents, respectively. For Chinese parents, role construction has no effect on decision making, whereas it has a strong positive effect for non-Chinese parents.

Table 16
Summary of Hierarchical Regression Analysis for Variables Predicting Participating in Kindergarten Decision Making (whole sample, N=247)

Variable	В	SE B	β
Step 1			-
Group	48	.12	24***
Step 2			
Group	37	.14	19**
Annual household income	.06	.04	.11
Step 3			
Group	13	.15	07
Annual household income	.05	.04	.09
Opportunity	.41	.09	.29***
Step 4			
Group	23	.17	12
Annual household income	.03	.04	.05
Opportunity	.04	.12	.03
Maternal involvement			
Authoritative	.21	.13	.11
Self-efficacy	.26	.09	.20**
Role construction	.32	.11	.22**
Shaming/love withdrawal	.08	.10	.06
Step 5			
Group	10	.20	05
Annual household income	.03	.04	.05
Opportunity	22	.16	16
Maternal involvement	14	.09	13
Authoritative	.34	.22	.18
Self-efficacy	.30	.12	.23*
Role construction	.59	.15	.40***
Shaming/love withdrawal	05	.23	04
Interaction between group and maternal involvement	04	.15	02
Interaction between group and self-efficacy	13	.19	07
Interaction between group and authoritative	13	.28	06
Interaction between group and role construction	58	.22	33**
Interaction between group and opportunity	.67	.24	.35**
Interaction between group and shaming/love withdrawal	.17	.26	.10

Note: $R^2 = .06$ for Step 1, p < .001; $\Delta R^2 = .07$ for Step 3, p < .001; $\Delta R^2 = .09$ for Step 4, p < .001.

^{*}p < .05 **p < .01 ***p < .001

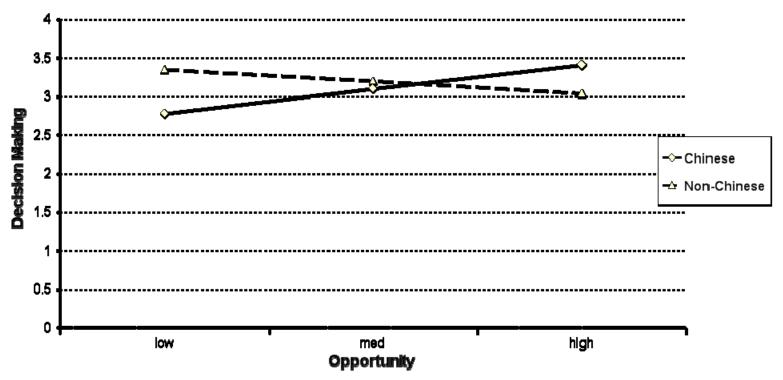


Figure 1 Graphic display of interaction between Group and Opportunity on Decision Making

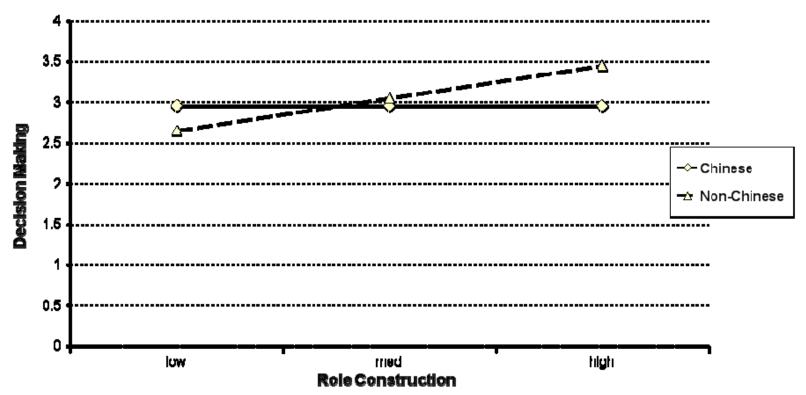


Figure 2 Graphic display of interaction between Group and Role Construction on Decision Making

A separate hierarchical multiple regression including a Chinese specific variable was performed for the Chinese sample. Two separate models were run, one model without opportunity and a second model with opportunity included but self efficacy and role construction excluded. The model with opportunity included and self efficacy and role construction excluded explained a larger R square variance ($R^2 = 33.8\%$) and was therefore chosen and its results presented. Table 17 presents results of the hierarchical regression analysis used to examine the associations of participating in kindergarten decision making with highest qualification, English proficiency, opportunity, and authoritative parenting style.

In the hierarchical multiple regression, qualification was entered at Step 1, explaining 4.7% of the variance in participation in kindergarten decision making, F(1, 118) = 5.85, p < .05. After entry of English proficiency at Step 2, the total variance explained by the model was 7.2%, F(2, 117) = 4.54, p < .05; $\Delta R^2 = .025$; $\Delta F(1, 117) = 3.12$, p > .05. At Step 3, opportunity for involvement was entered resulting in the total model variance of 31.2%, F(3, 116) = 17.52, p < .001; $\Delta R^2 = .240$; $\Delta F(1, 116) = 40.42$, p < .001. Upon entry of authoritative at Step 4, the total variance explained by the model as a whole was 33.8%, F(4, 115) = 14.65, P < .001; $\Delta R^2 = .026$; $\Delta F(1, 115) = 4.47$, P < .05. Authoritative explained an additional 2.6% of the variance in decision making, after controlling for qualification, English and opportunity. In the final model, among the four entered variables, two were statistically significant, with opportunity recording a higher beta value, $\beta = .40$, p < .001 than authoritative, $\beta = .19$, p < .05.

Table 17 Summary of Hierarchical Regression Analysis for Variables Predicting Participating in Kindergarten Decision Making (Chinese sample, N=120)

Variable	В	SE B	β
Step 1			
Qualification	.18	.08	.22*
Step 2			
Qualification	.11	.09	.13
English proficiency	.08	.05	.18
Step 3			
Qualification	.12	.08	.14
English proficiency	.03	.04	.06
Opportunity	.58	.09	.50***
Step 4			
Qualification	.09	.08	.10
English proficiency	.04	.04	.10
Opportunity	.46	.11	.40***
Authoritative	.26	.12	.19*

Note: $R^2 = .05$ for Step 1, p < .05; $\Delta R^2 = .24$ for Step 3, p < .001; $\Delta R^2 = .03$ for Step 4, p < .05.

^{*}p < .05 **p < .01 ***p < .001

Chapter Four: Parent and teacher interview findings

This chapter presents the findings from the parent and teacher interviews. As previously stated in chapter 2, semi-structured interviews with parents were conducted to obtain more in-depth information on parental ECE involvement including talking about their child, reading the ECE notice board, reading the child's portfolio, helping with kindergarten sessions, helping with fundraising, offering ideas and suggestions to improve the kindergarten, and participating in committee meetings. Semi-structured interviews were also conducted with kindergarten head teachers to find out details about the steps taken by kindergartens to facilitate parental involvement, particularly for Chinese immigrant parents.

4.1 Findings from parent interviews

The findings for each parent interview question are presented in the format as follows: (1) a table that contains the categories and category definitions summarising the reasons for low and high parental involvement, and the number and percentage of Chinese and non-Chinese parents who provided a response for each category; and (2) a summary of the key findings reported in each table illustrated by quotes to provide insight into category meanings. Some parents reported more than one reason for high or low involvement. Accordingly, their responses were coded into more than one category. Thus the percentages reported in the tables reflect the percentage of parents in each group whose responses were coded in each category. Independent sample *t*-tests were conducted to determine whether there was a significant difference in the types of reasons reported for high and low involvement between Chinese immigrant and non-Chinese parents.

Communicating with teachers

Talk to teachers about how their child gets along with other children

Table 18 shows parents' responses when questioned about reasons why they seldom or frequently talked to teachers about how their child gets along with other children. Reasons for low involvement (never, rarely, sometimes) were captured in 3 categories: (a) language barrier, (b) no problem, and (c) role construction. Reasons for high involvement (often, always) were captured in 5 categories: (a) information, (b) problem solving, (c) sufficient time, (d) invitations from teachers, and (e) teacher-parent relationship.

Table 18

Communicating - Talk to teachers about how their child gets along with other children

Category	Definition	Chinese	Non Chinese				
Low involver	nent						
Language barrier	Difficulty in communicating in English	9 (36%)	-				
No problem	No perceived problem with the child	6 (24%)	10 (40%)				
Role construction	Belief that it is teachers' role to approach parents.	4 (16%)	4 (16%)				
High involve	High involvement						
Information	To get information about how the child is getting on	11 (44%)	9(36%)				
Solve problem	To prevent or solve a problem the child has	5(20%)	7(28%)				
Time	Sufficient time to communicate	5 (20%)	4 (16%)				
Invitation from teachers	Teachers are easy to approach and talk to	2 (8%)	4 (16%)				
Relationship	Close relationship with teachers	4 (16%)	2 (8%)				

Language barrier

Of the Chinese immigrant parents who did not talk to teachers often approximately one

third of them attributed their low involvement to their poor English proficiency.

No problem

Among both the Chinese immigrant and non-Chinese parents who did not talk to teachers often, many of them reported that the lower involvement was because they did not perceive any problem with their child, particularly non-Chinese parents.

"I know that Emily is quite social, so I don't have any concerns with how she gets along with other children at kindy, and I can see that she has a lot of friends from different sessions, so I don't feel the need to go and talk to them, if I thought there was a problem I would." [non-Chinese]

Role construction

Another reason mentioned by both the Chinese immigrant and non-Chinese parents was their belief that it was not their role to initiate conversation with teachers.

"Mostly I don't really feel I need to ask them every single day about how they're getting along. I think a lot of interactions that children have between children are dealt with by the kindergarten staff at the time, and I trust that if there is something they need me to talk about with him at home they will tell me." [Chinese]

Information

The majority of both Chinese immigrant and non-Chinese parents stressed obtaining information about their child at the kindergarten as their motive to talk to teachers often.

"....to see how he is doing at kindy, if he has any interactions with other children, if he had a fight, or if he can communicate with them, and if he can make friends."

[Chinese]

Solve problem

The second main reason for high involvement that was mentioned by both Chinese immigrant and non-Chinese parents was that they wanted to prevent or solve the problem their child had at the kindergarten.

"If there's been issue like Conner and I have talked about something and he said something a bit strange, or you know, one of the children hit him or something like that, or he hit one of other children, then I might say to the teacher ..." [non-Chinese]

Time

Some Chinese immigrant and non-Chinese parents spoke of the availability of time that allowed them to talk to teachers often.

Invitation from teachers

Some Chinese immigrant and non-Chinese parents reported that they talked to teachers often because they perceived that teachers welcomed them to talk.

"The head teacher there is brilliant. I don't know if you've met Browyn, but she is very very good, she's worth her weight in gold, so very approachable." [non-Chinese]

Relationship

Some Chinese immigrant and non-Chinese parents mentioned that they talked to teachers often because they had good personal relationship with teachers.

"I have good relationship with teachers, I often help kindergarten to translate stuff, so we are familiar, it's good to communicate often, I ask them how my child is doing at kindy." [Chinese]

Read the kindergarten notice board

Table 19 shows parents' responses to the interview question on reading the kindergarten notice board. Reasons for low involvement were captured in one category only: language barrier. Reasons for high involvement were captured in 5 categories: (a) information, (b) visibility, (c) role construction, (d) relationship, and (e) no language barrier.

Table 19
Communicating - Read the kindergarten notice board

Category	Definition	Chinese	Non Chinese
Low involvement	Diego Ivilia II II II II	1 (40/)	
Language barrier	Difficulty in reading English	1 (4%)	-
High involvement			
Information	To get information of benefit for	18 (72%)	25(100%)
	their child		
Visibility	Notice board in a prominent and convenient place	2 (8%)	19 (76%)
Role construction	Belief that it is parents' role to read notice board	3 (12%)	5 (20%)
Relationship	Close relationship with teachers	2 (8%)	2 (8%)
No language	No difficulty in reading English	4 (16%)	-
barrier			

Language barrier

One Chinese parent reported that she did not read notice board because she had difficulty in reading English.

Information

The majority of both Chinese immigrant and non-Chinese parents reported that they read notice board often because they wanted to get information for the benefit of their child.

"There is always information there. There are a lot of things you need to know, even just general information they have things about food allergies, they have sort of public health type notices, you know, cleaning kid's teeth, immunizations, so it's a really good place to get updates on things." (non-Chinese)

Visibility

Having the notice board in the prominent place emerged as the second main reason for the non-Chinese parents reading the notice board. Over three quarters of them spoke of the visibility of notice board, compared to only 8% of Chinese immigrant parents.

"I don't know whether we are really encouraged to read it. It's just there, as you walk in, it's just sort of first thing you see, so I just always glance at it and see if there is anything new." [non-Chinese]

Role construction

Some Chinese immigrant and non-Chinese parents described that they read notice board regularly because they believed it was their role.

"Before having children, I'm a primary school teacher, so I know the importance of parents reading what you send out to them, I make sure the notice board is the daily

communication with the parents, make sure I do my part." [non-Chinese]

Relationship

Some Chinese immigrant and non-Chinese parents spoke of their good relationship with teachers as part of the reason why they read notice board regularly.

"I need to read, also I need to explain that to some grandparents who don't understand English, like information on holiday and so on, because I am very familiar with the teachers there, and we have very close relationship." [Chinese]

No language barrier

Some Chinese immigrant parents stressed no language barrier as a reason for reading notice board.

Read the child's portfolio

Table 20 shows parents' responses to the interview question on reading the child's portfolio. Reasons for high involvement were captured in 5 categories: (a) learn about their child's progress, (b) invitation from the teacher, (c) family reasons; (d) visibility, and (e) time.

Table 20 Communicating - Read the child's portfolio

Category	Definition	Chinese	Non Chinese
Low involvement			
-	-	-	-
High involvement			
Learn about child progress	To know about the child's learning activities and give the child feedback	18 (72%)	25 (100%)
Invitation from teacher	Teachers encourage and remind parents	5 (20%)	10 (40%)
Family reasons	To share the child's learning activities with family members	7 (28%)	9 (36%)
Visibility	Portfolio in a prominent and convenient place	0 (0%)	4 (16%)
Time	Sufficient time to read	4 (16%)	0 (0%)

Learn about child progress

Obtaining information on child's learning activities and providing feedback to the child was described as the main reason for reading the child's portfolio by both the Chinese immigrant and non-Chinese parents.

"The portfolios they keep the different activities that the children have done, like could be, they have a big thing out there at the moment, kids have been interested in volcano, and they've made volcano in the sandpit, they had them erupting, and they've done paper mache and it's just giving you bits and pieces of what the child's done on art work or writing samples and that ... because we are not there the whole time, it's just for our knowledge." [non-Chinese]

Invitation from teacher

There were both Chinese immigrant and non-Chinese parents who described that teachers

encouraged them to read the portfolio.

"The kindergarten teachers, they told us when his story was there, so at that time that's when we looked at it." [non-Chinese]

Family reasons

There were both Chinese immigrant and non-Chinese parents who mentioned that they shared the portfolio with other family members.

"So if I know that we will be seeing Lily's grandparents who don't live in Auckland, that weekend I'll take it, or over the holidays I will take it, so the grandparents can read about what she is doing." [non-Chinese]

Visibility

Some non-Chinese parents mentioned visibility of the portfolio as part of the reason for their reading the portfolio.

"You walk in the door, and they are by the office door, and there is a big wall of them, you just go and pick them up, and bring them home."

Time

According to some Chinese immigrant parents, availability of time was a reason for reading their child's portfolio.

In summary, in relation to communicating with teachers, reasons for low involvement included language barrier (Chinese parents only), no problem perceived, and not perceiving that it is their role. Reasons for high involvement were obtaining information

about the child, solving a problem, being invited by teachers, having a good working relationship with teachers, having sufficient time (Chinese parents only), visibility of the child's portfolio (non-Chinese only), and having no language barrier (Chinese parents only). However, there were some significant between-group differences in the frequency that reasons for high involvement were reported. Compared to non-Chinese parents, significantly fewer Chinese parents mentioned obtaining information for their child, t (48) = 2.85, p=.006, visibility of the notice board, t (48) = 4.87, t <.001), learning about the child's progress, t (48) = 2.85, t = 2.09, t =

Volunteering to help at kindergarten

Help with kindergarten sessions

Table 21 shows parents' responses about why they had a low or high level of involvement in helping with kindergarten sessions. Reasons for low involvement were captured in three categories: (a) time and energy, (b) knowledge and skill, and (c) language barrier. Reasons for high parental involvement in helping with kindergarten sessions were captured in five categories: (a) types of help; (b) invitation from their child; (c) kindergarten roster; (d) to help teachers; and (e) role model provided by other parents.

Time and energy

Among both Chinese immigrant and non-Chinese parents who have low involvement in helping with kindergarten sessions, lack of time and energy was the most frequently mentioned reason for low involvement.

"That's really a time factor because I...two of the sessions I'm working right through that day, so I don't drop off or pick up, two of them I drop off then go straight to work, then work a couple of hours then go back pick up..." [non-Chinese]

Table 21 Volunteering - Help with Kindergarten Sessions

Category	Definition	Chinese	Non Chinese
Low involvement			
Time and energy	Having no time or energy	7 (28%)	12 (48%)
Knowledge and skill	Having no knowledge or skill	4 (16%)	0 (0%)
Language barrier	Difficulty in communicating in English	2 (8%)	-
High involvement			
Types of help	A range of forms of help you can offer	11 (44%)	13 (52%)
Invitation from child	Encouraged or motivated by the child	8 (32%)	7 (28%)
Roster	Required by kindergarten parent help roster	7 (28%)	2 (8%)
To help teachers	Empathizing with teachers who are in difficulty getting tasks done	2 (8%)	10 (40%)
Role model	Following examples set by other parents	2 (8%)	0 (0%)

Knowledge and skill

Some Chinese immigrant parents stressed that they did not help because they had no required knowledge or skill.

"I don't know why...do other parents all know what to do...but teachers didn't tell us what to do. They should give us an orientation, we were confused, not knowing what on earth we should do, afterwards we felt like to give up, mainly because we were not given any orientation."

Language barrier

Some Chinese immigrant parents emphasised that they did not help because they did not have sufficient English.

Types of help

Approximately 50% of both Chinese immigrant and non-Chinese parents described a range of different types of help they offered.

"A lot of what we do as volunteers is cutting up the food and the fruit, doing the dishes and helping with messy table." [Chinese]

Invitation from child

Invitation from child was the most frequently mentioned reason for helping with kindergarten session among Chinese immigrant parents, while many non-Chinese parents also described that they helped because their child wanted them to help.

"Like before this year's Lantern Festival, Amy bought some good traditional Chinese costumes, she wanted to wear and show in the kindergarten, then I proposed to teachers, I said I could come over and help you do a ten minute presentation to share with you the tradition and culture of Chinese people." [Chinese]

Roster

Parent help roster was the second most frequently mentioned reason for helping with kindergarten session among Chinese immigrant parents (28%), compared to 8% of non-Chinese parents.

"It's parent help, it's rostered. It lists the time slots for example the afternoon of a day...then you choose a time when you are available. I haven't participated yet this year, I went to help both morning and afternoon last year. I helped two or three times between August and December, almost once a month." [Chinese]

To help teachers

Forty per cent non-Chinese parents emphasised that they helped with kindergarten sessions because they empathised with teachers who were struggling with too much work, making "to help teachers" the most frequently mentioned reason among the non-Chinese parents.

"It's a public kindergarten, so they don't get huge money, and there is no big fees paid, so I think as parents if you're home, if you can help out, you should do that."

Role model

Some Chinese immigrant parents mentioned that they helped because they followed the example set by European parents.

"Here in New Zealand I find Pakeha people like to go to some place to help and with no pay. We are in New Zealand now and we probably should follow the culture here. If they need help, we will volunteer to help them."

Help with kindergarten fundraising activities

Table 22 shows parents' responses to the interview question on helping with kindergarten fundraising activities. Reasons for low involvement were captured in two categories: (a) language barrier, and (b) school commitment. Reasons for high involvement were captured in four categories: (a) types of fundraising, (b) role construction, (c) invitation from

teachers, and (d) being a committee member.

Table 22 *Volunteering - Help with kindergarten fundraising activities*

Category	Definition	Chinese	Non Chinese
Low involvement			
Language barrier	Having difficulty understanding English	2 (8%)	-
School commitment	Having to help at the school(s) other children attend	0 (0%)	2 (8%)
High involvement			
Types of fundraising	A range of forms of fundraising parents can help with	15 (60%)	18 (72%)
Role construction	Belief that it is parents' role to help	10(40%)	16 (64%)
Invitation from teachers	Invited and encouraged by teachers	5 (20%)	16 (64%)
Committee member	Being on the parent committee	0 (0%)	10 (40%)

Language barrier

Some Chinese parents mentioned that language barrier was the reason why they did not help with kindergarten fundraising activities often.

School commitment

Some non-Chinese parents reported that they did not help because they had to help in the school(s) other children were attending.

"Sometimes it gets a lot, especially with my daughter at school when you've got more than one child, there is all the fundraising for her school as well, and it can be a really big strain on the family."

Types of fundraising

Sixty per cent Chinese immigrant parents and over 70% non-Chinese parents described a range of different types of fundraising activities they helped with.

"We have a lot of fun with our fundraising so we have a lot of family things, we do family discos, picnics, barbecues and things like that, as fundraising activities, and also they introduced buying things through catalogues, calendars, we do tea towels all of those sort of things..." [non-Chinese]

Role construction

Believing that the parent had a role to play in fundraising was the most frequently mentioned reason for helping with kindergarten fundraising activities among both Chinese immigrant and non-Chinese parents.

"I always see this as an assignment or a task, maybe some parents do not care about it at all, but I take it seriously because I see that as my role, sometimes I put much pressure on myself. Whenever I get any letter from them I feel I must do I must do it. I have never thought about not doing it." (Chinese)

Invitation from teachers

Some Chinese immigrant and non-Chinese parents mentioned invitations from teachers to help with the fundraising activities as a reason for their involvement. This reason was given by a higher proportion of non-Chinese parents than Chinese immigrant parents.

"For raffle tickets, for example, each parent is expected to sell a certain number, and something very attainable, very easy, and they just encourage you to give your time really." [non-Chinese]

Committee member

Many non-Chinese parents emphasised that they helped with fundraising activities because they were on the kindergarten committee.

"A large reason is because of my role of chairperson of the committee, and that is primarily what we do as a group, is to fundraise. Our kindergarten has a shortfall each year of money that they get, so in order to provide the best resources at the kindy, we have a very good strong committee that is involved in fundraising, so that's primarily my job as the chairperson is to plan what we are doing and execute that."

In summary, in relation to volunteering to help at the kindergarten, reasons for low involvement included no time and energy, no knowledge and skill (Chinese parents only), language barrier (Chinese parent only), and having to help at the school where their other children attended (non-Chinese parents only). Reasons for high involvement were the availability of a range of ways to be involved, invitations from teachers, perceiving it is their role to be involved, invitations from their child to help at kindergarten, being rostered to help, following the role model provided by other parents (Chinese parents only), and being on the parent committee (non-Chinese parents only). There were some significant between-group differences in the frequency of reasons reported of low and high involvement. For low involvement, compared to non-Chinese parents, more Chinese parents reported lacking knowledge and skill, t (48) = 2.09, p =.042. For high involvement, fewer Chinese parents reported helping the teachers, t (48) = 2.65, t =.011, being invited by teachers, t (48) = 3.15, t =.003, and being on the parent committee, t (48) = 3.54, t =.001. There were no other significant between-group differences in the frequency of reasons reported for high or low levels of volunteering to help at kindergarten.

Participating in kindergarten decision making

Offer ideas and suggestions

Table 23 shows parents' responses to the question about the extent to which they offered ideas and suggestions to improve the kindergarten. Reasons for low involvement were captured in 3 categories: (a) no problem, (b) role construction, and (c) language/cultural barrier. Reasons for high involvement were captured in two categories: (a) invitation from teachers, and (b) being a committee member.

Table 23

Decision making - Offer Ideas and Suggestions to Improve the Kindergarten

Category	Definition	Chinese	Non Chinese
Low involvement			
No problem	Happy with teachers and the kindergarten	7 (28%)	8 (32%)
Role construction	Belief that it is not parent role	4 (16%)	3 (12%)
Language/ cultural barrier <i>High involvement</i>	Having language and/or cultural barrier	5 (20%)	-
Invitation from teachers	Invited and encouraged by teachers	0 (0%)	6 (24%)
Committee member	Being on the parent committee	0 (0%)	5 (20%)

No problem

Being happy with teachers and the kindergarten was the most frequently mentioned reason by both the Chinese immigrant and non-Chinese parents for not offering ideas or suggestions.

"Kimberley's kindy is really good, I'm quite happy with it, everything they do is just really good...I don't think there is anything I want to change." [Chinese]

Role construction

Not seeing it as their role to offer ideas or suggestions was mentioned by some Chinese

immigrant and non-Chinese parents as the reason for not offering ideas or suggestions.

"Yeah, I also think they are the professionals, yeah, they know what they are doing,

not me. So..." [non-Chinese]

Language/cultural barrier

Some Chinese immigrant parents mentioned language or cultural barriers as a reason why

they did not offer ideas or suggestions.

"Maybe at the moment we don't have many opportunities to offer them suggestions or

ideas because we always need to think whether this is their cultural practice, or our

former kindergartens have been outdated, maybe fall behind too much and too long

time ago, I'm not clear about what the current kindergartens in China are like, children

were born here, so you don't know whether your ideas or suggestions are really right."

Invitation from teacher

Some non-Chinese parents described that they offered ideas and suggestions because

teachers encouraged them.

"I think they are always open. They are just wonderful women, very open to ideas and

suggestions."

Committee member

Many non-Chinese parents described that they offered ideas and suggestions because they

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were on the kindergarten committee.

"That's probably more to do with my role. At kindy, we have regular meetings that the teachers attend, and that's always talking about what's happening at kindergarten, what we were doing in terms of fundraising, and what those fundraising money is going to be used for, and why we need to be doing it."

Participate in parent committee meeting

Table 24 shows parents' responses to the interview question about their participation in parent committee meetings. Reasons for low involvement were captured in 4 categories: (a) no opportunity, (b) language/cultural barrier, (c) role construction, and (d) lack of time and/or energy. Reasons for high involvement were captured in 3 categories: (a) invitation from teachers, (b) role construction, and (c) to help teachers.

Table 24

Decision Making - Participate in Parent Committee Meeting

Category	Definition	Chinese	Non Chinese
Low involvement			
No opportunity	No perceived opportunities for involvement	11(44%)	2 (8%)
Language/ cultural barrier	Having language and/or cultural barrier	11 (44%)	-
Role construction	Belief that it is not parent role	8 (32%)	0 (0%)
Time and energy	Having no time or energy	6 (24%)	8 (32%)
High involvement			
Invitation from teachers	Invited or encouraged by teachers	1 (4%)	8 (32%)
Role construction	Belief that it is parent role	3 (12%)	4 (16%)
To help teachers	Empathising with teachers who are in difficulty getting enough committee members	0 (0%)	4 (16%)

No opportunity

Having no opportunity was one of the two most frequently mentioned reasons for not participating in parent committee meetings for the Chinese immigrant parents.

"I haven't heard that there is a committee. I'd be quite happy to participate because I think getting involved in what your children are involved in is good, but I just haven't heard there is a committee in our kindy."

Language/cultural barrier

The other frequently mentioned reason for not participating in parent committee meetings for the Chinese immigrant parents was having a language and/or cultural barrier.

"It probably has a committee meeting, I know it used to have before, because my English is not good, I am afraid of communicating with them, so I didn't participate then, mainly because of the language. This kindy is small, the one we attended before had many Chinese children, and even had a Chinese teacher."

Role construction

About one third Chinese immigrant parents emphasised that they did not see it as their role to participate in a parent committee. However, no non-Chinese parents reported this reason for low involvement.

"In China, parents all see this as school's job and school should do it, they as parents are only responsible for children's eating and sleeping and things like that, apart from this, some parents may enrol their children onto various after school classes, and that's it."

Time and energy

Lack of time and energy was a reason for non-participation in parent committees for some Chinese immigrant parents, and the most frequently mentioned reason for non-Chinese parents.

"Mostly because I don't really have time to do the parent committee, they are usually in the evenings, and I don't always have a babysitter, I was also working on my daughter's school parent committee, so I don't have a lot of time to do two lots of meetings." [non-Chinese]

Invitation from teachers

Perceived invitation from teachers was mentioned reason for participating in parent committee meeting by nearly one third non-Chinese parents and one Chinese immigrant parent.

"They just put signs up to say we've got a meeting this week, come along, everyone is welcome, you know, they encourage it, they don't make you feel like you have to, but they encourage people, parents to do it, because that's how they fundraise." [non-Chinese]

Role construction

Among both Chinese immigrant and non-Chinese parents, a small number believed it was their role to participate in committee meeting.

"Yes...because...yeah, the parents' role is there to be able to be with the teachers, any problems which are arising, say we have the safety of the driveway, things like that, are a concern, so that's where as a parent, we have the time to be able to discuss our

concerns about those issues as well, in a proper procedure." [non-Chinese]

To help teachers

Some non-Chinese parents mentioned that they participated because they empathised with teachers who were in difficulty recruiting enough committee members.

"...because it's difficult to get parents who're willing to have that level of involvement. I'm not sure why people seem reluctant sometimes to be involved, same issue the primary schools have, so just because I can do I do it." [non-Chinese]

In summary, in relation to participating in kindergarten decision making, reasons for low involvement included not perceiving it is parent's role, language and cultural barrier (Chinese parents only), no opportunity, no time and energy, and no problem perceived. Reasons for high involvement were being invited by teachers, perceiving it is a parent's role, being on the parent committee (non-Chinese parents only), and to help teachers (non-Chinese parents only). There were some between group differences in the frequencies of reasons reported for low and high participation in decision making. For the low involvement compared to non-Chinese parents, more Chinese parents reported no opportunity, t (48) = 2.90, p=.006. For the reasons for high involvement, fewer Chinese parents reported invitation from teachers, t (48) = 2.58, p=.013. There were no other significant between-group differences in the frequency of reasons reported for high or low levels of involvement in kindergarten decision making.

4.2 Findings from teacher interviews

The findings for each teacher interview question are presented in the format as follows: (1) a table that contains the categories and category definitions summarising the steps taken by kindergartens, and the number and percentage of teachers from kindergartens with high and low Chinese enrolment; and (2) a summary of the key findings reported in each table illustrated by quotes to provide insight into category meanings. Independent sample *t*-tests were conducted to determine whether there were significant between-group differences in steps taken by kindergartens to encourage parental involvement in kindergartens with high Chinese child enrolments and kindergartens with low Chinese child enrolments.

Encouraging parents to talk about their child at kindergarten

Table 25 shows teachers' responses to the interview question on encouraging parents to talk about their child at kindergarten. Steps taken by kindergartens to encourage parents were captured in 4 categories: (a) invitations from teachers, (b) using the child's portfolio, (c) establishing expectations about communication, and (d) developing the teacher-parent relationship.

Table 25
Steps taken by kindergartens to encourage parents to talk about their child at kindergarten

Category	Definition	High Chinese	Low Chinese
Invitation	Being approachable, welcoming and encouraging	15 (100%)	15 (100%)
Portfolio	Using portfolio to communicate with parents about their child at kindergarten	9 (60%)	10(67%)
Expectation	Making parents aware that they are expected to talk	2 (13%)	3 (20%)
Relationship	Developing personal relationship with parents	0	4 (27%)

Note. "High Chinese" is kindergartens with high ratio of Chinese enrolment (5% and above); "Low Chinese" is kindergartens with low ratio of Chinese enrolment (below 5%).

Invitation

All teachers mentioned that they tried to be inviting, welcoming and approachable and always encouraged parents to talk about their child at kindergarten.

"Well I think Rachael and I try to be and probably are the type of teachers that parents feel comfortable coming and talking to. And I think that even does apply to people who don't have the language because they always say hi they have open expression on their faces, and even if they don't have the language they try to tell us, so I get the feeling that they feel they can approach us."

Portfolio

Most teachers emphasised that the child's portfolio was an important way of communicating with parents about their child at kindergarten.

"If you've seen our other kindergartens, I'm sure you've seen our portfolio system. We are very fortunate now we have the technology...Now we can produce a lot photograph evidence of what's happening for the child, so this is kind of our visual communication about our programme for children and for their parents...and the child will draw this to the attention of their parents, and in their first language will share with the parents their experience."

Expectation

Some teachers stressed that at the very beginning they made it clear to the parents that they were expected to talk to teachers about their child at kindergarten.

"That is in our package that we hand out at the beginning, and we say in it that we encourage them to talk to us, we would rather they do that than worry about it."

Relationship

Teachers from some kindergartens with lower Chinese enrolments emphasised that they encouraged parents to talk about their child at kindergarten through developing personal relationship with them.

"You need to build up those relationships with the families first so that you can say things like that, you can't just roar and tell them something is wrong with your child, 'I need to tell you something'. So we spend a lot of time with that informal chat and those informal little conversations every day just to say hey they're doing well, this is good, we noticed this...just to share information about children and about learning."

Encouraging parents to read newsletters and notice board

Table 26 shows teachers' responses to the interview question on encouraging parents to read newsletters and the notice board. Steps taken by kindergartens to encourage parents were captured in 5 categories: (a) reminders, (b) using diverse delivery methods, (c) pocket system, (d) notice board visible and attractive, and (e) expectation.

Table 26
Steps taken by kindergartens to encourage parents to read newsletters and notice board

Category	Definition	High Chinese	Low Chinese
Remind	Reminding parents to read	12(80%)	9 (60%)
Diverse delivery	Using alternative ways to deliver newsletter	9 (60%)	8 (54%)
Pocket system	Having a communication pocket for each child	8 (54%)	8 (54%)
Visible and attractive	Putting notice board in a prominent place, updating it regularly and keeping it visually attractive	6 (40%)	6 (40%)
Expectation	Making parents aware that they are expected to read	3 (20%)	4 (27%)

Remind

Almost all teachers emphasised that they reminded parents to read newsletters and the notice board including "holler out", directing, and pointing out something interesting or important to parents.

"We often direct them to it. There is someone always standing by the notice board every morning when we greet them so that we can remind parents of anything that might be going on, when their parent help day is, or things that are coming up, points of interest. So we encourage them by pointing to it."

Diverse delivery

In addition to the pocket system, most teachers reported that they used other ways to deliver newsletter to parents.

"Sometimes we email, we don't generally email our newsletters out, we put the paper copy out because then we know it's actually gone to the house...If it's an urgent notice we will put it out on the gate, so they have to basically open the gate and it's right in front of their face what we want to inform them about."

Pocket system

Most teachers reported that the main place where they put newsletters for parents to collect was the child's pocket on the wall.

"We put out individual newsletters, we have the pocket system, each family has the pocket, and newsletters will go into that pocket for that family."

Visual and attractive

Most teachers mentioned that they placed the notice board in the prominent place, updated it regularly and kept it visually attractive.

"We got a notice board in the front as you see it's quite bright, and that's just in simple language and easy to read, and changes daily, so mostly they read that while they're waiting to come in."

Expectation

Many teachers described that they let parents know at the very beginning that they were expected to read newsletters and notice board.

"I tell parents when doing enrolment the first session parents will stay with the child, so they settle in. I take the opportunity to show the parents around, I show them very clearly that's where you can find the newsletters, and to check that, anything for you will be in that pocket. So I show them that."

Encouraging parents to help with kindergarten sessions

Table 27 shows teachers' responses to the question on encouraging parents to help with kindergarten sessions. Steps taken by kindergartens to encourage parents were captured in 5 categories: (a) teacher invitation, (b) expectation, (c) roster system, (d) open door policy, and (e) helping parents gain knowledge and skills.

Table 27
Steps Taken by Kindergartens to Encourage Parent Help with Kindergarten Sessions

Category	Definition	High Chinese	Low Chinese
Invitation	Giving parents encouragements,	15	15
	invitations, and opportunities for involvement	(100%)	(100%)
Expectation	Making parents aware that they are expected to help with kindergarten sessions	10 (67%)	7 (47%)
Roster system	Having a roster system for parents to take turns to help	10 (67%)	8 (53%)
Open door policy	Having an open door policy that parents can come to help at anytime	6 (40%)	7 (47%)
Knowledge and skill	Helping parents acquire the necessary skill and knowledge	9 (60%)	0

Invitation

All teachers mentioned that they gave parents general and specific invitations and encouragement for involvement in sessions.

"Mainly at the moment this is done through talking. And when parents take a step in at any time, and say would it be alright to stay and we say that would be lovely. When they offer anything, we hope we convey to them that the feeling is of warmth and welcome and that we can let them see through our encouragement, verbal encouragement and our body language that yes they are very welcome."

Expectation

Most teachers reported that at the very beginning they let parents know that they were expected to help with kindergarten sessions.

"When parents enrol at kindergarten, we have a booklet we hand out, it is in English

only, and this explains what participation in kindergarten is, what expectations there are, and in there we explain that we have a parent help system or family help system where we appreciate parents taking some time to be here during a session."

Roster system

Most teachers reported that the kindergarten had a roster system for parents to take turns to help with kindergarten sessions.

"We have what we call a parent help roster we put up on the wall, and when the parents first start at kindergarten we explain that it's like a calendar with the days of the week, they can choose two or three days per term that suit their timetables and activities and put their name on the page and they can come and be part of that."

Open door policy

Many teachers reported that the kindergarten had an open door policy that parents were welcome to help with kindergarten sessions at any time they liked.

"We just say to parents come in when you feel like it, we have a open door policy for our parents to come and stay and be part of our kindergarten activities any day that is suitable for them, so they can just arrive in the morning and say I will stay today and that's fine too."

Knowledge and skill

Most teachers of the kindergartens with a larger number of Chinese children described that they helped parents to acquire the skill and knowledge they needed for parent help.

"One of the first jobs is making morning tea, so we have photographs on the wall, and

we have some Chinese notices to tell them how to cut the fruit, photographs showing what it should look like."

Encouraging parents to participate in parent committee meeting

Table 28 shows teachers' responses to the interview question on encouraging parents to participate in parent committee meeting. Steps taken by kindergartens to encourage parents were captured in 7 categories: (a) invitation, (b) expectation, (c) inter-parent influence, (d) informal, (e) no pressure, (f) no committee, and (g) relationship.

Table 28
Steps Taken by Kindergartens to Encourage Participation in Parent Committee Meeting

Category	Definition	High Chinese	Low Chinese
Invitation	Giving parents encouragement, invitations, and opportunities for involvement	15(100%)	8 (53%)
Expectation	Making parents aware that they are expected to participate	5 (33%)	6 (40%)
Inter-parent influence	Using the influence of some parent(s) to encourage some other parent(s)	4 (27%)	4 (27%)
Informal	Making the committee meeting informal to avoid discouraging parents	4 (27%)	1 (7%)
No pressure	Avoiding making parents feel that they have to participate	3 (20%)	1 (7%)
Relationship	Developing personal relationship with parents	2 (13%)	0 (0%)
No committee	Having no parent committee	3 (20%)	0 (0%)

Invitation

Almost all teachers described that they gave parents general invitations and encouragements for involvement in parent committee meeting although teachers from low-Chinese enrolment kindergartens reported less frequently.

"Encouraging all parents onto the committee is an ongoing challenge, it's something that parents are very shy about, all of our families are...we invite through our newsletter, we invite through our notice board."

Expectation

Some teachers described that they made it clear to parents at the very beginning that parents were expected to participate in parent committee meeting.

"We talk about the committee in pre-entry and the role of the committee when parents come along to the pre-entry, and the sort of work they do."

Inter-parent influence

Over a quarter of teachers spoke of the moment when they used the influence of some parent(s) on some other parent(s) to recruit more parent committee members.

"We have had a coffee afternoon, we've been inviting parents interested in the committee to come and stay and chat with other committee members and have a cup of coffee, and that sort of thing to try to get people to come too."

Informal

Over a quarter of teachers from kindergartens with a larger number of Chinese children described how they made the meeting less threatening.

"Some of them I think, it sounds a bit it's a group and it might be threatening that they will have to be involved in lots of roles and responsibilities, but we kindly ask them to just come and have a look for themselves and see how, we tell them it's a very friendly

and informal meeting, they get together and share their ideas towards improving the kindergarten's programme and the learning environment for children and share the fundraising ideas."

No pressure

Some teachers stressed that they ensured that they did not make parents feel that they had to participate.

"I have been in the past a parent at kindergarten so over twenty years ago where I was told that my husband was rostered to mow the lawns the next week, so that's that saying you will be doing although for a different aspect...and I really didn't like that, I felt uncomfortable, you know what I mean...when you start telling people they have to do things that's completely contrary to the whole ethos we try to promote here."

Relationship

Teachers from some kindergartens with high Chinese enrolment emphasised the importance of relationship building for recruitment of parent committee members.

"We try to develop relationships with parents so that we can invite through personal conversation."

No committee

There was no parent committee in some kindergartens with high Chinese enrolment.

"We don't actually operate committee any longer because of the 20 hour funding. The main function of the committee in the old system was fundraising and organising maintenance things and things like that...So actually for me it's much better not to

have a committee. I'm actually happy about that, I'd rather like my parents come in and join in with teaching and participating with the children on a day to day basis."

Involving Chinese parents

Table 29 shows teachers' responses to the interview question on specifically involving Chinese parents. Steps taken by kindergartens were captured in 5 categories: (a) acknowledge Chinese culture, (b) incorporate Chinese culture, (c) acknowledge language barriers, (d) overcome language barriers, and (e) help parents understand NZ education.

Table 29
Steps Taken by Kindergartens to Involve Chinese Parents

Category	Definition	High Chinese	Low Chinese
Acknowledge Chinese culture	Being aware of cultural characteristics of Chinese parents	7 (47%)	7 (47%)
Incorporate Chinese culture	Incorporating Chinese culture into the curriculum	11 (73%)	8 (53%)
Acknowledge language barrier	Being aware that English is a barrier to Chinese parental involvement	9 (60%)	6 (40%)
Overcome language barrier	Using strategies to help Chinese parents overcome their language barrier	9 (60%)	6 (40%)
Understand NZ education	Helping Chinese parents understand the NZ early childhood education system	7 (47%)	4 (27%)

Acknowledge Chinese culture

Most teachers reported that they were aware of and acknowledged cultural characteristics of Chinese immigrant parents.

"I do particularly here with the Chinese families they are terrified when they see that we have the saws and hammers out for the children that are something their children never...don't they hurt themselves, and they say to us you need to make them sit down and you make him write his name, he will learn, he will do it for you."

Incorporate Chinese culture

The majority of teachers described that they incorporated Chinese culture into the curriculum to encourage Chinese parental involvement.

"This year ...we are aware that the Chinese New Year is coming up, and we would like to do something to celebrate, and we are going to ask parents...we know it's coming up, we would like to do some scrap booking because the children are into scrap booking and if they got photos to share, please we love them to bring photos in to scrap book photos around Chinese New Year celebrations."

Acknowledge language barrier

Most teachers reported that English was a major barrier to parental involvement for the Chinese immigrant parents.

"We have people from 25 countries, it is mainly the Chinese families that have the most language difficulties, and the Chinese children actually here...we have found that all the other cultures, for whatever reason, value speaking English, obviously they speak their own mother tongue at home to each other, but the Chinese children don't, we find it really difficult to get them to speak English, really, really challenging."

Overcome language barrier

Most teachers described the strategies they used to help Chinese immigrant parents overcome their language barrier.

"Very often we can tell if what we've been saying has been understood, you know they may nod but we get the impression that perhaps it hasn't been understood. So then we will know to follow it up and find another way to address that. And of course one other things we can do now is things like email, even though the grandparents might be bringing the child in, we can email the parents."

Understand NZ education

A number of teachers, especially teachers from kindergartens with higher Chinese enrolments, emphasised they helped Chinese immigrant parents understand the New Zealand early childhood education system and teaching style in order for them to become better involved.

"We have to let Chinese families see that there is value in what we do here, we have to try and find a way mainly through the portfolio, the written way of letting families see what the learning is, by writing it down for them...and we have to let them see if they are going to be ready for the education at school, they have to be really as independent and as strong as they can be."

In summary, steps taken by kindergartens to encourage parental involvement included inviting parents (being approachable, welcoming and encouraging), having an open door policy, establishing expectations about involvement, reminding parents to read newsletters and notice board, using alternative ways to deliver newsletters such as email, having communication pocket to send notices home, using the child's portfolio to communicate with parents, building relationships with the parents, having a roster system for parent help, helping parents to acquire the necessary knowledge and skill for parent help, pointing out role models provide by other parents and making committee meetings informal. Steps taken to specifically involve Chinese parents were acknowledging Chinese culture, incorporating Chinese culture into the kindergarten programme, acknowledging and helping Chinese parents overcome language barriers and helping them understand the New

Zealand education system. There were not statistically significant differences in the strategies used to specifically engage Chinese parents between kindergartens with high than low Chinese child enrolment.

Chapter Five: Discussion

This thesis aimed to compare Chinese immigrant parents and non-Chinese parents on the level of parental involvement in early childhood, their parenting beliefs and practices, and the factors influencing specific aspects of parental involvement, including parent-teacher communication, involvement in decision making, helping at kindergarten and with their child's learning at home. The results of this study showed that Chinese immigrant parents reported a lower level of communicating with teachers, volunteering to help at the kindergarten, and participating in the kindergarten's decision making. For the sample as a whole, role construction and self-efficacy predicted communicating with teachers, volunteering to help at the kindergarten, and participating in the kindergarten's decision making; while communicating with teachers was also influenced by perceived opportunity for involvement. For the Chinese sample only, perceived opportunity for involvement predicted decision making, as well as communicating with teachers. Parents' level of education and perceived English language proficiency also predicted communicating with teachers. Findings from each of these areas are discussed in the following sections. Findings from parent and teacher interviews and implications for practice are also discussed

5.1 Level of parental involvement

Communicating with kindergarten teachers

Findings showed that the Chinese immigrant parents communicated less with teachers than non-Chinese parents across a range of situations, including talking to the teacher about how their child gets along with other children, their child's difficulties, activities, progress, and daily routine at kindergarten. This finding is consistent with those of others who reported that English language learner immigrant parents of preschool children from a mixture of ethnicities in Canada had a lower frequency of communication with the teachers

than parents who spoke English as a first language (Harper & Pelletier, 2010) and that Chinese immigrant parents of primary school children in Canada (Dyson, 2001) and the US (Li, 2006; Shin, 2009) communicated less frequently and had more difficulty comprehending the communication than non-immigrant European parents. This finding is also consistent with observations in elementary school age samples that Chinese parents do not typically seek frequent personal interaction with the teacher (Stevenson et al., 1990), and that in Asian cultures there is a clear separation between parents and teachers (Sui-Chu, 2000). Thus, this finding extends previous research on Chinese immigrant parents of school age children to a preschool sample. The interviews with the Chinese immigrant parents provide some insight into the reasons for the lower rates of immigrant Chinese parents' communication with teachers. In addition to two categories (i.e., no perceived problem, role construction) captured as the reasons for low involvement in parent-teacher communication for both Chinese immigrant and non-Chinese parents, the category "language barrier" was given as a reason for lower level of communication with teachers by some Chinese immigrant parents. Nine out of 25 Chinese immigrant parents reported that they had English language difficulty communicating with teachers. This was consistent with the quantitative results. The correlation and regression analysis revealed that English language proficiency was one of the three predictors of parent-teacher communication for the Chinese immigrant sample.

Volunteering to help at kindergarten

As predicted, Chinese immigrant parents reported lower rates of volunteering to help at kindergarten. The gap between the Chinese immigrant and non-Chinese parents was evident across all items of the construct including volunteering to help during kindergarten sessions, participating in planning kindergarten activities, volunteering to go on kindergarten trips, and participating in fundraising activities. This finding is in accordance with previous research findings that Asian American parents of primary school students (Shin, 2009) and pre-school children (Sy, Rowley, & Schulenberg, 2007) showed lower

rates of direct school involvement including volunteering activities such as volunteering in their child's classroom and attending school events. The finding also replicates another US based study which found that Chinese immigrant parents of preschool children volunteered less in schools than European American parents (Huntsinger & Jose, 2009). Possible reasons for the present findings were suggested by responses by Chinese parents when interviewed. Some Chinese parents regarded lack of necessary knowledge and skill as a reason why they did not volunteer to help at kindergarten. For those Chinese parents who did choose to volunteer, the kindergarten's roster system and the role model set by the European parents seemed to be the main factors influencing their decision to participate.

Helping with the child's learning at home

Contrary to what was predicted, there was no significant difference between the Chinese immigrant and non-Chinese parents in their reported level of "helping with their child's learning at home". However, a further examination of the individual items of the "learning at home" construct revealed that Chinese immigrant parents provided their child with more educational resources such as educational DVDs or computer games than non-Chinese parents. This is consistent with Huntsinger and Jose (2009) who found that Chinese American parents of preschool children were focused more on systematical teaching of their children at home than European American parents. Similarly, the finding also shares some similarity with the study by Parmar, Harkness, and Super (2004) who found that Asian American parents of preschool children were engaged in more pre-academic activities such as learning letters and numbers, learning math skills, playing alphabet and number games and playing and learning with computers. The finding from the present study is also consistent with the traditional Asian view that learning is about academically oriented activities, and that Asian parents of kindergartners are likely to endorse the importance of learning early academic skills and regulate their children's learning environments at home to a greater degree than do European parents (Chao, 1996; Huntsinger, Jose, Liaw, & Ching, 1997; Sy & Schulenberg, 2005). Further examination of the individual items also revealed that Chinese immigrant parents spent significantly less time with their child than non-Chinese parents working on creative activities at home, which is consistent with Parmar et al. (2004) who found that Euro-American parents of preschool children spent more time than Asian-American parents working with their child on pretend play, art and music and organised sports. The finding also suggests that non-Chinese parents in New Zealand, like Euro-American parents, may believe play to be an important vehicle for the early development and growth of the preschool children (Parmar et al., 2004). Further examination of the individual items did not detect difference between Chinese immigrant and non-Chinese parents in spending time working with their child on reading and writing skills at home, which is in contrast with Parmar et al. (2004) who found that Euro-American parents spent significantly more time than Asian parents on reading books at bedtime. This discrepancy was likely due to the different items used in each study; "reading or writing skills" were used in this study while "reading books at bedtime" was used by Parmar et al.(2004).

Participating in kindergarten decision making

As was predicted, the results showed that Chinese parents had a lower level of participating in kindergarten decision making compared to non-Chinese parents, including taking part in decisions about the kindergarten's programs and activities, offering ideas and suggestions on ways to improve the kindergarten, and taking part in parent committee meetings. There is little literature that has dealt with parents' participation in early childhood decision making in particular, and researchers tend to collapse this construct into the dimension of involvement at school. Therefore, the finding is only comparable to several studies which appear to have isolated decision making participation from other involvement activities at home. Adopting Epstein's (1995) typology, Shuang Ji and Koblinsky (2009) defined "decision making" as "attending a parent-teacher organization", and found that no Chinese immigrant parents of the elementary and secondary school students participated in school decision making in the US. Shuang Ji and Koblinsky's

finding is different to the finding of present study which showed that some Chinese parents did participate in decision making. However, in terms of Chinese immigrant parents' tendency to participate less in decision making than non-Chinese parents, the findings from the two studies were similar, and in this sense, the present study extends Shuang Ji and Koblinsky's finding to the preschool sample.

Possible reasons for the lower rates of Chinese parent participation in decision making were suggested in the parent interviews. In addition to the two reasons (no opportunity, having no time or energy) for low involvement in decision making reported by both Chinese immigrant and non-Chinese parents, the categories "language/cultural barrier" and "role construction" were captured as two other reasons for not participating in decision making among some Chinese immigrant parents. This was supported by the quantitative findings. Hierarchical multiple regression revealed that, for the Chinese immigrant sample, opportunity was positively and uniquely associated with decision making, and for the non-Chinese sample, role construction and self-efficacy were predictors of decision making.

Overall, findings showed that Chinese immigrant parents had a lower level of involvement than the non-Chinese parents on the majority of parental involvement dimensions assessed in this study. This aligns with previous studies which found a general lower level of parental involvement of minority/Asian/Chinese parents than mainstream parents in school settings (Hoover-Dempsey & Sandler, 1997; Wong & Hughes, 2006), and this research extends these findings to a NZ ECE setting.

5.2 Parental beliefs and parenting styles

The study findings supported the hypotheses that, compared to non-Chinese parents, Chinese immigrant parents would acknowledge less parental responsibilities for parent-teacher communication and helping with the kindergarten, feel less confident in their ability to fulfil parental responsibilities, and perceive less opportunities for ECE involvement. There was partial support for the hypotheses relating to parenting styles. These findings are discussed in the following sections.

Role construction

The findings for role construction were not in the expected direction. There were no significant differences in role construction between Chinese and non-Chinese parents. A possible reason for the different findings from this study could relate to the influence of traditional Chinese culture on parents' role construction. In this study, the scale of role construction measured parents' understanding of a number of responsibilities that can be categorised into two different subscales: education and care of their own child (e.g. helping the child with questions from the teacher the child may bring home from kindergarten, talking with the child about his/her kindergarten day) and helping the kindergarten and teachers (e.g. volunteering at kindergarten, making sure the kindergarten has what it needs, supporting decisions made by the teachers, contributing to improvements in the kindergarten). In the Chinese culture, as Chao (1994) revealed, children's learning is a major responsibility of parents and monitoring of children's activities is viewed as an act of love. Therefore, Chinese parents tend to acknowledge parental responsibilities in relation to education and care of their own child. On the other hand, Chinese parents tend to place a large measure of faith in authority and experts, which is an important heritage of Confucianism (Guo, 2004). It is possible that, influenced by such heritage, Chinese parents in this study might have drawn a clear-cut line between teachers' role and that of parents', and they might have felt that helping the kindergarten and teachers was not their role. Inspection of the Chinese parents' scores on the role construction subscales revealed higher scores on the subscale of education and care of their own child that may have been offset by their lower scores on the subscale of helping the kindergarten and teachers. This may explain why there were no significant differences in role construction overall between Chinese and non-Chinese parents. This finding highlights the potential importance of reconceptualising parental role construction from a cross-cultural perspective in future studies.

Self-efficacy

As it was hypothesised, this study found that Chinese immigrant parents were less confident in their ability to solve parenting problems than non-Chinese parents. This finding is supported by Pelletier and Brent (2002) who reported that parents of preschool children in Canada who spoke a first language other than English including Chinese were less confident in their parenting ability than English speaking parents. Ali (2008) explored the reasons for the "loss" of sense of self-efficacy of the new immigrant parents of young children including Mandarin speaking Chinese parents in Canada. According to Ali (2008), the early settlement experiences of immigrant parents of young children arriving in Canada make it difficult for them to meet their young children's physiological, social and emotional needs, or to help them navigate the structures of their environment. In the face of rapid reduction in their social, emotional, cultural and financial resources, they lose their sense of self-efficacy in their parenting role. Ali (2008) suggested that this loss of parenting self-efficacy was a consequence of systematic constraints on immigrant parents' ability to exercise agency in raising their children and lack of familiarity with the education system and the English language proficiency. Another possible explanation for the current findings is provided by Holloway, Suzuki, Yamamoto, and Behrens (2005) who attributed Japanese parents' low parenting self-efficacy to difference in cultural values, that is, self-confidence and self-esteem which were clearly positive and necessary determinants of success in North America were not as valued in Japan. These reasons may also apply to the Chinese immigrant parents in this study. Two of the explanations given by Chinese parents for lower level of involvement may be of relevance here; namely, language barrier and lack of knowledge and skill (e.g., storytelling in English for children, baking cakes, driving skills, familiarity with places for trips). Chinese immigrant parents' lack of English language proficiency and the knowledge and skill required for involvement may reduce their

confidence in their ability to be a parent in New Zealand.

Opportunities and invitations for involvement from teachers

This study included a range of opportunities and invitations for involvement from the teachers, and found that, compared to non-Chinese parents, Chinese immigrant parents generally perceived less opportunities and invitations for involvement that included feeling welcome when entering the kindergarten, feeling comfortable when talking to the teachers, and feeling encouraged to participate at kindergarten. According to Hoover-Dempsey and Sandler (1997) general invitations and opportunities for involvement are more of the outcome of parents' perception than of the reality. Although different schools may offer parents different invitations and opportunities for involvement, the same inviting message from the school could be perceived or interpreted differently by different parents with particular belief system or psychological traits. This description of the key characteristics of opportunity could also apply to the early childhood setting as illustrated by parent interview responses in this study. Among the reasons why parents did not participate in kindergarten committee meetings, 44% of Chinese immigrant parents mentioned "lack of opportunity" as the reason, compared to only 8% of the non-Chinese parents. Given the high correlation of opportunity with both role construction and self efficacy in the Chinese sample, it is likely that Chinese immigrant parents' perception of less opportunity for involvement is to a certain extent attributable to their lower level of role construction and self-efficacy. For example, Chinese parents who were less likely to believe it was their role to communicate with teachers and/or who were less confident about appropriate parenting practices in the New Zealand context were perhaps less likely to perceive opportunities for parent-teacher communication.

Authoritative parenting style

Unexpectedly, this research did not find a significant difference in authoritative parenting

style between Chinese immigrant and non-Chinese parents. A further examination of each of the three of authoritative parenting components (warmth/acceptance, reasoning/induction, democratic participation) also revealed no significant between group differences. This finding is in contrast with the study by Wu et al. (2002) who found that Chinese mothers of preschool-age children scored lower than US mothers on two of the authoritative parenting components (warmth/acceptance and democratic participation). In this study, Chinese immigrant parents scored as high as non-Chinese parents across all three authoritative parenting components. It may be that Chinese immigrant parents in this study accepted the values of their host country while continuing to value their childrearing practices at home (Liao, 2007). There could be other reasons for the lack of between-group difference in authoritative parenting. For example, it could be possible that New Zealand parents are more reserved in the expression of warmth (not that they are less warm), and that US parents are willing to put up with more "discussion" from their children. Both of these reflect expressiveness where New Zealand parents and US parents are possibly less similar. In addition, there could be a methodological reason. Although in both Wu et al. (2002) and this study, both non-Chinese and Chinese parents (mostly mothers) of preschool-age children with similar size of sample completed the self-report parenting questionnaires, and the questionnaire used in this study was the same as that of Wu et al. (2002) with only minor adaptations, the nature of Chinese parents in each study was different. In the present study, the Chinese immigrant parents were in New Zealand, while in Wu et al (2002), Chinese parents were living in mainland China. The study by Wu et al (2002) was cross-cultural and cross-national, whereas the present study was not cross-national. Both Chinese and non-Chinese parents in this study were in the same national context. This methodological difference may also have contributed to the difference in findings to those obtained by Wu et al.

Authoritarian parenting style

Unexpectedly, this study did not find that Chinese immigrant parents had significantly

higher scores on authoritarian parenting style than non-Chinese parents. This was inconsistent with findings by Wu et al. (2002) who found that Chinese mothers scored higher on physical coercion than US mothers, Chiu (1987) who found that Chinese and Chinese-American mothers of school age children were more restrictive and controlling than the Anglo-American mothers, and Lin and Fu (1990) who found that Chinese and immigrant Chinese parents of 6-7 year old children tended to rate higher on parental control than Caucasian-American parents. It was also inconsistent with similar patterns that have been found in samples that include preschool age children (Kelley & Tseng, 1992; Wang & Phinney, 1998). For example, Kelley and Tseng (1992) found Chinese immigrant parents of 3-8 year old children scored higher on physical punishment and yelling at children. One reason might be differences in the measures used in each of these studies, as they may have been tapping different aspects of authoritarian parenting. However, it seems plausible that the New Zealand social and political atmosphere might have had impact on Chinese parents' parenting style. Recent research based on a small number of NZ parents found that there is a link between parenting style and social policies. According to Page (2011), parents' attitudes toward physical punishment in New Zealand have been gradually changing over the last 50 years, especially after the Anti-Smacking Bill became law. It is possible that the self reported parenting style of some Chinese parents who participated in this study may have been influenced by the nation-wide debate on the Anti-Smacking Bill which happened immediately prior to the study.

Parenting styles emphasised in China

This research examined four of the five dimensions of parenting styles emphasised in China reported in Wu et al. (2002). As predicted and consistent with Wu et al. (2002), shaming/love withdrawal and directiveness were higher among Chinese immigrant parents than non-Chinese parents. Consistent with the hypothesis, this study also found that Chinese immigrant parents had higher scores on maternal involvement than non-Chinese parents, which is supported by several studies. For example, Stevenson and Stigler (1992)

found that Asian mothers had far more active involvement in their children's education, and Chao (2000) found that the traditional role of teaching their children was particularly important to Chinese parents. Inconsistent with the study hypothesis and in contrast with Wu et al. (2002), no group difference was found in encouragement of modesty between the Chinese immigrant and non-Chinese parents. The reason for the inconsistency was unknown. While it could be the case that the Chinese immigrant parents did not retain the practice (i.e., encouragement of modesty), it could also be possible that the non-Chinese parents in NZ were different to those in the US. Overall, this study showed that at least some of these Chinese specific parenting practices were retained when Chinese parents immigrated to New Zealand.

5.3 Variables uniquely associated with parental involvement dimensions

Parental involvement is multidimensional and it cannot be conceived as a unitary phenomenon (Grolnick et al., 1997; Galindo & Sheldon, 2012). Likewise, factors predicting parental involvement vary from dimension to dimension as results of this study indicate.

Communicating with teachers

The Hoover-Dempsey and Sandler (1997) model suggested three most influential psychological constructs as determinants of parents' making decision to be involved in their children's elementary and secondary education: parental role construction, parents' sense of efficacy for helping children succeed in school, and parents' perceptions of the general invitations and opportunities for involvement. In particular, Reed, Jones, Walker and Hoover-Dempsey (2000) found that role construction, efficacy and perceptions of teacher invitations accounted for 35% of the variance in parent involvement in American elementary school. In the present study, it was found that, for the whole sample, opportunity, role construction, and self-efficacy were the only variables that were uniquely

associated with and accounted for 35.4% of the variance in communicating with teachers. Therefore, this finding well supported the Hoover-Dempsey and Sandler (1997) model and extended it to a preschool sample. The finding is also consistent with the previous studies in preschool samples which found that parent's perceptions of invitations from teachers for involvement were positively associated with parent-teacher communication (Holloway, Yamamoto, et al., 2008; Pelletier & Brent, 2002; Chen, 2003).

For the Chinese sample only, the predictors of communicating with teachers were opportunity, parental qualifications, and English language proficiency. This finding is consistent with previous US studies which have shown lower educational qualifications to be a barrier to involvement in early childhood education (Sy, 2002; Davis-Kean & Sexton, 2009) as well as in Head Start (Waanders et al., 2007), elementary school (Hoover-Dempsey, Bassler, & Brissie, 1992) and high school (Lareau, 1987) education. Of particular relevance to this study, previous US research has shown that paternal education level was positively associated with the amount of parent-teacher communication in early childhood education for immigrant Chinese parents (Suizzo & Stapleton, 2007; Kohl et al., 2000). The study finding is also consistent with other research which has found that English language is a key barrier to school involvement among Asian American (including Chinese) parents (Shin, 2009) and recent Chinese immigrant parents in Canada (Dyson, 2001). The finding that opportunity was a key predictor, even when Chinese specific variables had been included, suggests the particular importance of the perception of being invited for minority parents, which has also been found in other studies with immigrant samples (Anderson & Minke, 2007).

Unlike qualification, household income, another indicator of SES, was not found to be associated with communicating with teachers. This is not surprising given that communicating with teachers, compared to other parental involvement dimensions such as volunteering to help at kindergarten and helping with the child's learning at home, might be less dependent on resources, time, and other income-related aspects. The lack of association between household income and teacher-parent communication is consistent

with Anderson and Minke's (2007) finding that parents' self-reported level of resources was unrelated to all types of involvement.

Volunteering to help at kindergarten

Results of the regression analyses revealed that for the whole sample, role construction and self-efficacy were the only significant contributors to volunteering to help at kindergarten, and there were no predictors that were specific to the Chinese sample. This finding is consistent with Sheldon (2002) who reported that parental role construction was related positively to parent involvement at American elementary school, and Hoover-Dempsey et al. (1992) who reported positive associations between efficacy and volunteering at school among parents of kindergarten through fourth grade children. However, the finding in this study is more consonant with the revised 1995 and 1997 Hoover-Dempsey and Sandler's theoretical model of the parental involvement process. According to Walker et al. (2005), the original model hypothesised that parents' basic involvement decisions were primarily influenced by what they believe they should and can do in the context of their child's education, and that these beliefs were reflected by two constructs: parental role construction for involvement and parental self-efficacy for helping the child succeed in school. In the revised model these two ideas are organised under one conceptual umbrella parents' motivational beliefs regarding their involvement. In terms of their effect on parental involvement, parental role construction and parenting self-efficacy seem to go side by side, which is reflected in the findings from this study. This finding may help to explain why Chinese immigrant parents in this study had a lower level of volunteering at kindergarten. Since ethnic minority parents are more likely than are majority parents to believe the school is responsible for creating opportunities for parent involvement (Chavkin & Williams, 1993) and often have lower level of self-reported parental self-efficacy (Ali, 2008), according to the present finding, it seems plausible that their level of volunteering to help at school was lower than majority parents.

The finding that SES factors did not uniquely predict volunteering to help at kindergarten was unexpected given that numerous studies have reported their effects on parent volunteering at school, especially for language minority parents (Grolnick et al., 1997; Mulligan, 2005; Arnold et al., 2008). Among SES factors, parents' education (Kohl et al., 2000; Palenchar, 2002; Yamamoto et al., 2006) and household income (Cooper, 2010; Anderson & Minke, 2007) have most frequently found to be associated with volunteering to help at school. Of interest in this study is that Chinese parents' education was not associated with volunteering to help at kindergarten whereas it was with parent-teacher communication. This may be attributable to the wide range of forms of helping at kindergarten which allow parents of all educational backgrounds to participate. In the parent interview, the categories "types of help" and "types of fundraising" were captured as two of the several main reasons for volunteering to help at kindergarten. Types of fundraising included: food stores, raffle stores, raffle tickets, Christmas raffle, etc. Types of help included: helping with activities, cutting up the food and the fruit, doing the dishes and helping with messy table. Over 50% of Chinese immigrant and non-Chinese parents were coded into the two categories. The many forms of helping at kindergarten may also explain the lack of effect of income in this study. Since the kindergarten has many kinds of work that parents can help with, financial resources may not influence parents' ability to volunteer at kindergarten. A reason could also be related to Walker's et al. (2005) finding that income has no relation to involvement when parents perceive that resources are at least moderately adequate, and the relationship exists only when income is below a certain threshold. Another reason could be that kindergarten was for few hours so that SES did not come in to play as parents did not typically rely upon it as a source of child care while they were at work.

Two other SES factors which have frequently been found to negatively relate to volunteering to help at school/kindergarten are employment status/work hours (Castro et al., 2004; Lamb-Parker et al., 2001; Shuang Ji & Koblinsky, 2009) and number of siblings (Mulligan, 2005; Lamb-Parker et al., 2001). Most of the studies that reported work hours as a significant or unique contributor were conducted in the Head Start programme settings

where low socioeconomic status and working families were targeted (Lamb-Parker et al., 2001). The characteristics of New Zealand kindergarten could have moderated the effect of work hours. For example, at the time when the survey was conducted, kindergartens were only running half day sessions, which might have already excluded many parents with long work hours or difficult working schedules. The insignificant effect of number of children on volunteering to help at kindergarten in this research is also explicable. While having larger number of children to look after might deter a parent from helping at the child's kindergarten, depending on individual circumstances, it might also facilitate the parent to volunteer at kindergarten because the parent might have more experience or motivation to help due to their older children attending the child's kindergarten before. As it was illuminated in the parent interviews, parents who had older children attending the kindergarten felt more familiar and comfortable with the setting, had a closer relationship with the teachers, and were more emotionally attached to the setting.

Inconsistent with the literature (Brooks, 2004; Pena, 2000; Johns, 2001), in this study, English proficiency was not a significant contributor to volunteering to help at kindergarten for the Chinese sample. The same finding was evident in the parent interviews. Three categories were captured as the reasons for low involvement and seven for high involvement, but none of these categories was related to English language. Again, it can be inferred, as the case with education and income, flexible forms of helping at kindergarten could probably be the reason why English language proficiency was not a unique contributor to this aspect of parental involvement.

Helping with the child's learning at home

Unexpectedly, authoritative parenting and number of children were found to be the only significant contributors to helping with the child's learning at home, with authoritative parenting positively and uniquely associated and number of children negatively and uniquely associated with helping with the child's learning at home. This finding is

consistent with Steinberg, Lamborn, Dornbusch, and Darling (1992) who found that parental authoritativeness was significantly correlated with parental school involvement among parents of high school students from different ethnicities in the US. The finding that the number of children in the family was a negative contributor to home-based involvement seems logical. As the parent interviews illuminated, when there were older siblings at home, parents tended to let the child spend time with their older siblings. The more children the parent had to look after, the less time and energy she/he had to spend with the child. The finding is also consistent with studies which ruled out the effect of role construction (Yamamoto et al., 2006; Anderson & Minke, 2007) and employment and income (Yamamoto et al., 2006) on helping with the child's learning at home.

The finding is not consistent with studies which reported significant effect of self-efficacy on helping with the child's learning at home (Holloway, Yamamoto, et al., 2008; Yamamoto et al., 2006; Sheldon, 2002; Waanders et al., 2007; Hoover-Dempsey et al., 1992; Anderson and Minke, 2007). When explaining the non-significant effect of self-efficacy, Anderson & Minke (2007) speculated that efficacy might be a more complex construct than had been assessed to date, and a more comprehensive measure of efficacy might allow relationships between efficacy and parents' involvement behaviours to emerge. This speculation may apply to this study. For example, if the Parental Sense of Competence Scale used in the present study had been expanded to include specific parental involvement areas in addition to the general parenting items, the result could have been different. Also, the finding is not consistent with studies advocating the function of SES. For example, Kohl et al. (2000) found that paternal education level was positively associated with parent involvement at home among American parents of kindergarten children, and Yamamoto et al. (2006) found that more highly educated Japanese mothers were more likely to report reading to their preschool children on a daily basis.

Participating in kindergarten decision making

For the whole sample, role construction and self-efficacy were found to be the only unique contributors to participating in kindergarten decision making. In contrast, for the Chinese sample, opportunity for involvement was a major factor that significantly influenced whether a parent would participate in decision making, which was also shown in the parent interview. "No opportunity" emerged as one of the two major reasons for Chinese immigrant parents' lower involvement in parent committee meeting, on a par with "language barrier", which was not the case for the non-Chinese parents. This finding highlights the importance of opportunity to Chinese immigrant parents in terms of participation in decision making, which echoes Anderson and Minke's (2007) comment that perception of being invited may be particularly important for disadvantaged parents.

The reason why opportunity is so important to some Chinese immigrant parents is intriguing. It is possible that Chinese immigrant parents need more explicit, constant, encouraging and considerate invitations because of their deference to teachers, and lack of cultural knowledge and language skills (Lai & Ishiyama, 2004; Galindo & Sheldon, 2012; Mulligan, 2005). Chinese immigrant parents might not be able to perceive invitations from teachers as effectively as their non-Chinese counterpart do, particularly when the perception involves understanding and interpretation of verbal messages (e.g., newsletters, notice board and oral communication) from teachers.

Huntsinger and Jose (2009) provided another explanation. In their study they suggested that teachers might inadvertently not send as many invitation messages to the Chinese American parents as they send to the European American parents because Chinese parents' perspectives might not be understood by teachers or might conflict with teachers'. However, findings from the teacher interviews in the present study did not seem to support Huntsinger and Jose's perspective. Over half of the head teachers from kindergartens with lower Chinese enrolment reported that they equally invited and encouraged Chinese and non-Chinese parents to participate in parent committee meetings, and all head teachers from kindergartens with higher Chinese enrolment emphasised that they offered invitations and encouragement to all parents equally. Until more focused further study (e.g., a study

specifically examining the consistency between the parent's and teacher's evaluation of specific parental involvement opportunities) is undertaken, the exact reason remains unclear. Contrary to the expectation, English language was not found to be a significant contributor to participation in decision making for the Chinese sample.

5.4 Implications for practice

Based on findings from this study, several recommendations can be made to enhance parental involvement practices in the early childhood education context in New Zealand.

Parents' motivational beliefs

Given the importance of parental role construction and parental self-efficacy in ECE involvement, and the findings that Chinese immigrant parents were less aware of their role in parental involvement and were less confident in their ability to fulfil parenting duties, the question arises about what kindergartens can do to change Chinese immigrant parents' relevant beliefs. According to responses from the teacher interviews, many kindergartens already put emphasis on enhancing Chinese immigrant parents' beliefs regarding their involvement. When asked about steps taken by kindergartens to encourage parental involvement, some head teachers described that they first of all made parents aware that they were expected to talk to teachers about how their child was getting on at kindergarten (17%), help with kindergarten sessions (57%), and participate in parent committee meeting (37%). The talking was usually carried out through pre-entry meetings when teachers shared with parents the kindergarten's expectations on their roles and responsibilities as a parent. It is possible that these activities may help to change Chinese immigrant parent's role constructions to be more consistent with ECE practice in New Zealand, and could be promoted as ideas more early childhood centres could adopt. Head teachers from a number of kindergartens also suggested some specific strategies that might help Chinese immigrant parents better understand the role of parental involvement in NZ ECEs, which might in turn boost their parenting confidence. For example, 60% interviewed head teachers of kindergartens with high enrolment of Chinese children reported that they helped Chinese immigrant parents to acquire the skills and knowledge that they needed for parent help, nearly 30% reported that they made the committee meeting informal to avoid discouraging parents, and nearly 30% reported that they used inter-parent influence such as inviting parents to chat with committee members, chairperson doing PR among parents and "word of mouth". Findings from the Chinese immigrant parent interviews endorsed these strategies. Some Chinese parents reported they did not help at kindergarten often because they had no required knowledge or skills, and some reported that they helped at kindergarten often because they followed the role model set by other parents.

Opportunities

This research, in line with many previous studies, has shown that general opportunities and invitations for involvement offered by teachers are as important as role construction and self-efficacy for parental involvement. Perceived opportunities for involvement are particularly important for Chinese immigrant parents, and some Chinese immigrant parents may have difficulty in perceiving the opportunities for involvement. Therefore, it may be necessary for early childhood services to make a conscious effort not only to offer opportunities for involvement that are relevant and meaningful to families from Chinese and other cultures, but also to help Chinese and other minority immigrant parents to "see" the opportunity. As the parent and head teacher interviews showed, some kindergartens in this study were already taking steps to help Chinese immigrant parents perceive the opportunities and are reaping the rewards. In the parent interviews, "invitation from teachers" emerged as a reason for communicating with teachers, helping with kindergarten fundraising, and participating in kindergarten decision making for both Chinese immigrant and non-Chinese parents. In the teacher interviews, the majority of kindergartens reported that teachers used strategies to help Chinese immigrant parents overcome language barriers and incorporated Chinese culture into the curriculum, which to a large extent served the purpose of helping the Chinese immigrant parents "see" the opportunities. Examples of these strategies are: "do professional development on cultural groups", "show them that we know their children well", "explain how the learning happens", "discuss with them about our teaching style", "extend the learning and interest they develop at home", "invite Chinese educators to speak about NZ education". All these examples of what these kindergartens were doing well could be used to inform practice in other kindergartens and childcare centres. In alignment with Te Whāriki, the Revised Statement of Desirable Objectives and Practices (DOPs) for chartered early childhood services in New Zealand provides specific indicators or "signposts" for good practices of delivering an inclusive and culturally sensitive early childhood education curriculum (Crown, 1996), which is particularly useful to help the minority parents "see" the "equal opportunities" for parental involvement.

English language

This study as well as many other previous studies has shown that English language proficiency is a major barrier to parental involvement for Chinese immigrant parents. In the interviews, head teachers described many practices, techniques and strategies to overcome language barriers, such as: ask another Chinese parent to translate, provide information in Chinese, seek help from their family members/friends, let the Chinese parent know by writing down instructions, allocate parent help which does not require much explanation, communicate by gestures, use pictures and photos, "slow down and keep it simple", use Google translator, use the services of Language Line, and have a multi-cultural team. One issue which seems worth addressing here is having bilingual staff at the early childhood centre. Literature has shown that having a bilingual teacher promotes the school-based involvement of families (Laforett & Mendez, 2010; Tang, Dearing, & Weiss, 2012). According to Tang et al. (2012), multilingual communication efforts alone may not fully remove barriers to school-based involvement if the classroom teacher is monolingual, speaking only English. In kindergartens with high Chinese enrolment, both

parents and teachers desired to have a bilingual staff in the kindergarten. Thus a recommendation from this study is, where possible, to employ bilingual staff in kindergartens which have large numbers of Chinese children on their rolls.

Parent-teacher relationship

Literature has shown that high-quality personal relationship between parents and educators is an essential element in family-school relationships (Anderson & Minke, 2007; Adams & Christenson, 2000; Laforett & Mendez, 2010). For the Chinese immigrant parents, there is a paradox in terms of building a high-quality parent-teacher personal relationship. On one hand, personal relationships are particularly important for the Chinese immigrant parents who come from a culture where personal relationships play an important role in business and social lives (Gold, Guthrie, & Wank, 2002). On the other hand, in traditional Chinese culture, the teacher has an absolute authority, and it is seen as disrespectful for students or parents to question the authoritative status of teachers (Watkins & Biggs, 2001), which inhibits establishment of close teacher-parent relationship. To complicate the issue, Chinese immigrant parents' language and cultural barrier makes it harder to build up high-quality and sustainable personal relationships between parents and teachers. Therefore, lessons could be learnt from kindergarten teachers who have been successful in establishing close relationships with Chinese immigrant parents. In the parent interview, "having close relationship with teachers" was captured as a category of reason why parents talked to teachers about how their child was getting along with other children at kindergarten, and 16% of the interviewed Chinese immigrant parents were coded into this category, showing that a close relationship between Chinese immigrant parents and teachers can be achieved in spite of the difficulties. The teacher interviews corroborated this point. The category "developing personal relationship with the parent" was captured as a step taken by kindergartens to encourage participation in parent committee meeting and to encourage parent-teacher communication for the Chinese immigrant parents.

Making portfolios accessible

In the New Zealand ECE setting, the portfolio is a way of assessment and record of children's learning. "Portfolios document children's belonging journeys and suggest possible ways forward for teachers, families, whā nau, and children" (Ministry of Education, 2007b, p.2). Te Whāriki prescribes that "Families should be part of the assessment and evaluation of the curriculum as well as of children's learning and development...observations and records should be part of two-way communication that strengthens the partnership between the early childhood setting and families" (Ministry of Education, 1996, p.30). Therefore, portfolios are an important medium of parent-teacher communication about the child's learning and development at kindergarten. In the parent questionnaire, both the Chinese and non-Chinese parents scored very high on the 5-point item "I read my child's portfolio" (4.21 out of 5 for Chinese, 4.33 out of 5 for non-Chinese), showing that portfolio is a popular medium of communication. In the parent interview, all of the non-Chinese parents and approximately three quarters of Chinese parents reported that they read their child's portfolio to learn about child progress, that is, to know about the child's learning activities and give the child feedback. In the teacher interview, some teachers reported that they let families see what the learning was mainly through the portfolio. Thus, these findings highlight the beneficial use of portfolios as a means of communicating with Chinese immigrant parents. It seems a good practice that teachers encourage parents to read their child's portfolio by making portfolios easily accessible to parents, for example, allowing parents to bring the portfolio home. In her masters thesis titled "Accessible portfolios: Making it happen in my centre - An action research study", Steele (2008) explored how she improved her portfolios assessment practices by making children's portfolios freely available to children, their parents and whā nau in the early childhood care and education centre where she worked. While the kindergartens participated in the present study generally embraced the idea of "accessible portfolios", it would be ideal if the concept of "accessible portfolios" is further reinforced among all kindergartens and its benefit for all parties (i.e., children, their parents and whā

nau, and teachers) be optimised.

Purpose of parental involvement

Arthur, Beecher, Death, Dockett, and Farmer (2008) contended that parent involvement should "be viewed as an opportunity for forming connections on behalf of the child, not as a way of getting tasks done" (p.43), and that asking parents to engage in "meaningless tasks such as cutting fruit or covering books, often in isolation from the children, does not build partnerships between educators, families and children" (pp.43-44). They asserted that this kind of parental involvement was "shallow, ineffectual, unrewarding and even frustrating to those involved" (p.44, cited Briggs & Potter, 1999, p.433). However it could be argued that one should not label any specific parental involvement activity as "meaningless task" since any activity can be meaningful as long as it serves the purposes as described in Te Whāriki. Te Whāriki highlights "family and community" as one of the four principles for the early childhood curriculum by stating that "The wider world of family and community is an integral part of the early childhood curriculum" (Ministry of Education, 1996, p.14). According to Te Whāriki, "Children's learning and development are fostered if the well-being of their family and community is supported; if their family, culture, knowledge and community are respected; and if there is a strong connection and consistency among all the aspects of the child's world" (p.42). It can be inferred from Te Whoriki that the purposes of parental involvement activities are to support the well-being of the child's family and community, respect the child's family and their culture, knowledge and community, and strengthen the connection and consistency among all aspects of the child's world.

5.5 Study limitations and future directions

There were a number of limitations to this study that need to be noted.

Sampling bias

Given the moderately low return rates of parent questionnaires in relation to the number of questionnaires sent out, it is possible the parents with low rates of ECE involvement were underrepresented in this study. Parents who took part in the study might have been more motivated and involved than parents who chose not to participate. This sampling limitation might have lessened the variability of parental involvement in the sample, and in turn led to an underestimate of the relations between involvement and other variables. Therefore, the findings of this study need to be interpreted cautiously. To address this limitation, increasing the response rates could be a focus of the design of future study. For example, response rates could be increased by reducing the number of questions. The length of questionnaire used in the present study appeared to be one possible reason for low response rate. According to some head teachers, some parents said they first attempted to complete the questionnaire but then gave up halfway because they felt that the questions were too many. Other recruitment methods could also be investigated. Another limitation concerning sampling bias was with the sampling of parents for the interview. There were a higher proportion of parents from high decile kindergartens for the non-Chinese sample compared to the Chinese sample. It was possible that the between-group (between the Chinese and non-Chinese groups) differences in some of the interview responses were influenced by the higher SES of the non-Chinese parents interviewed rather than by group. This issue could be addressed in the future study by encouraging more non-Chinese parents from low-decile kindergartens to be interviewed.

Quality versus quantity of parental involvement

Although the quantitative survey was complemented by the qualitative parent and teacher interviews, the study essentially only dealt with the quantity (frequencies) rather than both the quantity and quality of parental involvement. Research has found quality of parent involvement to be a more consistent predictor of early school functioning than amount of

parent participation (Reynolds, Weissberg, & Kasprow, 1992). Reynolds et al. examined the quality of parental involvement perceived by the teachers. In their study, teachers rated the nature of teacher-parent communication by responding to two 4-point items (from strongly disagree to strongly agree): "The amount of contact that I have with this child's parent is satisfactory" (p.606) and "Overall, my working relationship with this child's parent is constructive" (p.606). In the future study, similar approach can be adopted to examine the "nature" of all parental involvement aspects in addition to frequency. Also, in the future study, the responses to the interview questions about reasons for low involvement could be incorporated into a questionnaire measure to test with a larger sample. For example, the parent interviews captured three reasons for parents not talking to teachers about how their child gets along with other children (i.e., difficulty in communicating in English, no perceived problem with the child, and belief that it is teachers' role to approach parents). Among parents who had the same low frequency of communication with the teachers, the nature of their low involvement could be completely different because the reasons were different. Parents who did not communicate with teachers because of the language barrier might be affected more by low ECE involvement than parents who did not communicate simply because they believe there was not any problem with their child.

Measure of decision making

In spite of the satisfactory reliability of the "decision making" construct in the present study, the three-item construct is still questionable. Epstein's (1995) defined decision making as "participating in school decision making and becoming a parent leader or representative". Depending on the philosophy of an early childhood centre, this definition may not be applicable. For example, the parent and teacher interviews in the present study revealed that some kindergartens did not have a parent committee, and that, due to centralisation of the management, the function of the parent committee in most kindergartens had changed and the committee did not have a decision making function.

Therefore, the parent leaders or representatives attending parent committee meetings did not necessarily mean they participated in kindergarten decision making. Furthermore, it is unclear to what extent parents should be encouraged to participate in decision making. Te Whāriki does not provide specific information on the decision making aspect of parental involvement. The 1996 Revised Statement of Desirable Objectives and Practices in New Zealand Early Childhood Services states: "Educators should provide opportunities for parents/guardians and, where appropriate, whānau to feel welcome to spend time at the service, discuss concerns and participate in decision-making concerning their child" (Crown, 1996, p.55). It seems that an accurate interpretation of "participate in decision-making concerning their child" in the statement may clarify the meaning of the decision-making dimension of parental involvement in NZ early childhood setting. Future research could construct a new scale measuring "participation in kindergarten decision making" that incorporates scope of parents' participation in decision-making "concerning their child".

Invitation from the child

Hoover-Dempsey and Sandler's (1995, 1997) model of parental involvement process included another important determinant, that is, general invitations for involvement from the child, which was not addressed in this research, although some of the parent interviews mentioned "invitation from child" as a reason for high involvement in regard to reading the child's portfolio and helping with the kindergarten session. As preschool children can not be surveyed due to their limited ability to report, a possible way for the future research to measure the influence of the child as a predictor of parental involvement is to develop some parent questionnaires items based on the parent interview responses about child invitations for parent participation.

Parent-teacher relationship

As above mentioned, building and nurturing parent-teacher personal relationships appears to be an effective way to enhance Chinese immigrant parental involvement. Although the parent and teacher interviews in the present study showed that some kindergarten teachers had been successful in establishing close relationships with Chinese immigrant parents, factors that make for successful relationships between Chinese parents and teachers are unclear. Future research could examine factors influencing parent-teacher personal relationships to provide more insight into how effective parent-teacher relationships can be developed with Chinese immigrant parents.

Effectiveness of strategies boosting parental motivational beliefs

Some specific strategies were identified that might help Chinese immigrant parents better understand the role of parental involvement in NZ ECEs, which might in turn boost their parenting confidence. For example, 60% interviewed head teachers of kindergartens with high enrolment of Chinese children reported that they helped Chinese immigrant parents to acquire the skills and knowledge that they needed for parent help, nearly 30% reported that they made the committee meeting informal to avoid discouraging parents, and nearly 30% reported that they used inter-parent influence such as "invite parents to chat with committee members", "chairperson does PR among parents" and "word of mouth". Future research could investigate the associations between these practices and the changes in parental role construction and parenting self-efficacy, which may require a more complex research design.

5.6 Contribution of the study and conclusions

This study made a number of contributions. Firstly, findings on the differences between Chinese immigrant and non-Chinese parents in each of the four parental involvement aspects extended the overseas studies on the pattern of immigrant Chinese parents' parental involvement in elementary or high school samples to an early childhood sample in New

Zealand.

Secondly, designed in accordance with Hoover-Dempsey and Sandler's (1995, 1997) theoretical model of the parental involvement process, this research found that parental motivational beliefs (role construction and self-efficacy) and perceived opportunities for involvement from the kindergarten to be the three largest contributors to parental involvement in kindergarten, thus extending the seminal model based on the US school samples to a preschool sample in New Zealand.

Thirdly, based on Epstein's (1995) typology of parental involvement, this study conceptualised and measured four of the six types of parental involvement applicable to the early childhood education context, and identified the main factors associated with each of the four types of parental involvement. The application of a typology which was formulated using US elementary school samples into a New Zealand early childhood education setting not only corroborates the general applicability of the typology in a NZ ECE setting, but also provides a model which could be applied to future research in the NZ ECE setting such as the many items (e.g. spend time working with the child on numeracy skills, spend time working with the child on reading or writing skills, spend time with the child working on creative activities, etc) denoted by "helping the child's learning at home".

Fourthly, the findings from this research about the patterns of Chinese specific factors associated with each of the parental involvement aspects among Chinese immigrant parents of preschool children, may help to inform steps that ECE teachers can take to increase involvement among Chinese immigrant parents.

In summary, this study not only contributes to the literature on parental involvement in ECE among Chinese immigrant parents and mainstream parents in New Zealand, but also provides findings which may inform appropriate parental involvement practices that enhance the level of parental involvement, particularly for the Chinese immigrant parents.

Appendix A

Parental Involvement Scale

The following is a list of things some parents may do. Please indicate how often you do each of the following things. (1 = never; 2 = rarely; 3 = sometimes; 4 = often; 5 = always)

- 1. I talk to the teacher about how my child gets along with other children at kindergarten.
- 2. I talk to my child's teacher about my child's difficulties at kindergarten.
- 3. I talk to my child's teacher about my child's activities at kindergarten.
- 4. I talk to my child's teacher about my child's progress at home/kindergarten.
- 5. I talk to my child's teacher about my child's daily routines at home/kindergarten.
- 6. I read the kindergarten's notice board.
- 7. I read the newsletter provided by the kindergarten.
- 8. I read my child's portfolio.
- 9. I contribute to my child's portfolio.
- 10. I volunteer to help during my child's kindergarten sessions.
- 11. I participate in planning kindergarten activities with the teacher.
- 12. I volunteer to go on kindergarten trips with my child.
- 13. I participate in planning kindergarten trips for my child's kindergarten.
- 14. I participate in fundraising activities at my child's kindergarten.
- 15. I share my cultural knowledge with the kindergarten.
- 16. I bring special things from home to share at the kindergarten.
- 17. I talk with my child about his/her day at kindergarten.
- 18. I watch television with my child at home.

- 19. I spend time working with my child on numeracy skills at home.
- 20. I spend time working with my child on reading or writing skills at home.
- 21. I provide my child with educational resources such as educational DVDs or computer games.
- 22. I spend time with my child working on creative activities at home.
- 23. I ensure my child has a place for books and toys at home.
- 24. I play with my child at home.
- 25. I participate in decisions about the kindergarten's programs and activities that will impact my own and other children's educational experiences.
- 26. I offer ideas and suggestions on ways to improve my child's kindergarten.
- 27. I participate in parent committee meetings at kindergarten.

Appendix B

Parental Role Construction Scale

Please indicate how much you agree or disagree with each of the following statements. (1 = strongly disagree; 2 = disagree; 3 = disagree a little; 4 = agree a little; 5 = agree; 6 = strongly agree)

- 1. It is my responsibility to volunteer at kindergarten.
- 2. It is my responsibility to communicate with my child's teacher regularly.
- 3. It is my responsibility to help my child with the questions from the teacher she/he may bring home from kindergarten.
- 4. It is my responsibility to make sure the kindergarten has what it needs.
- 5. It is my responsibility to support decisions made by the teachers.
- 6. It is my responsibility to stay up to date with what is happening at the kindergarten.
- 7. It is my responsibility to talk with other parents from my child's kindergarten.
- 8. It is my responsibility to make the kindergarten better.
- 9. It is my responsibility to talk with my child about his/her kindergarten day.

Appendix C

Parenting Self-efficacy Scale

Please indicate how much you agree or disagree with each of the following statements. (1 = strongly disagree; 2 = disagree; 3 = disagree a little; 4 = agree a little; 5 = agree; 6 = strongly agree)

- 1. The problems of taking care of a child are easy to solve once you know how your actions affect your child, an understanding I have acquired.
- 2. I would make a fine model for a new mother/father to follow in order to learn what she/he would need to know in order to be a good parent.
- 3. Being a parent is manageable, and any problems are easily solved.
- 4. I meet my own personal expectations for expertise in caring for my child.
- 5. If anyone can find the answer to what is troubling my child, I am the one.
- 6. Considering how long I've been a mother/father, I feel thoroughly familiar with this role.
- 7. I honestly believe I have all the skills necessary to be a good mother/father to my child.

Appendix D

Opportunity for Involvement Scale

Please indicate how much you agree or disagree with each of the following statements. (1 = strongly disagree; 2 = disagree; 3 = disagree a little; 4 = agree a little; 5 = agree; 6 = strongly agree)

- 1. I feel comfortable talking to the teachers about my child.
- 2. The teachers listen to parents and have respect for the family's goals and preferences for the child.
- 3. The teachers and families work together positively on discipline/behaviour issues.
- 4. Parents are able to give the teachers ideas about meeting the needs of their children.
- 5. I personally feel welcome when I enter the kindergarten.
- 6. There are ways for parents, even those who work and/or are very busy, to take part in the kindergarten programme.
- 7. The teachers inform parents about day-to-day happenings and special events that affect children.
- 8. The teachers adapt or create opportunities for family involvement that take into account of a family's culture.
- 9. Parents and teachers work together to decide how to best help the child to develop and learn, or to talk about any problems that may arise.
- 10. The teachers offer opportunities for family involvement that are relevant and meaningful to families from a race or culture other than the teachers' race or culture.
- 11. Parent-teacher meetings are held to discuss children's progress, accomplishments, and/or difficulties at least once a year, and more often if parents want them.

- 12. Personally, I feel that communication between parents and the teachers show trust and respect.
- 13. Communication is frequent between parents and the teachers, such as when children are dropped off and picked up, or through notes, telephone calls, or email.
- 14. Personally, I feel that the teachers are sensitive to the feelings of family members.
- 15. The teachers offer opportunities for family involvement that are relevant and meaningful to our family.

Appendix E

Parenting Styles and Dimensions Scale

Please read the follow questions and indicate how often you exhibit certain behaviors towards your child. (1 = never; 2 = once in a while; 3 = about half of the time; 4 = very often; 5 = always)

- 1. I show sympathy when my child is hurt or frustrated.
- 2. I guide my child by punishment more than by reason.
- 3. I take my child's desires into account before asking him/her to do something.
- 4. I discourage my child from strongly expressing his/her point of view around others.
- 5. I supervise all of my child's activities.
- 6. When my child asks why he/she has to conform, I state: because I said so, or I am your parent and I want you to.
- 7. I overly worry about my child getting hurt.
- 8. I discourage my child from showing off his/her skills or knowledge to get attention.
- 9. I encourage my child to talk about his/her troubles.
- 10. I tell my child that I get embarrassed when he/she does not meet my expectations.
- 11. I apologise to my child when making a mistake in parenting.
- 12. I encourage my child to freely express himself/herself even when disagreeing with me.
- 13. I discourage my child from proudly acknowledging compliments or praise from friends or adults.
- 14. I give comfort and understanding when my child is upset.
- 15. I punish by taking privileges away from my child with little if any explanations.

- 16. I tell my child that I appreciate what the child tries to accomplish.
- 17. I make my child feel guilty when he/she doesn't meet my expectations.
- 18. I yell or shout when my child misbehaves.
- 19. I give praise when my child is good.
- 20. I tell my child that he/she should be ashamed when he/she misbehaves.
- 21. I express affection by hugging, kissing, and holding my child.
- 22. I explode in anger towards my child.
- 23. I give my child reasons why rules should be obeyed.
- 24. I expect my child to be close by when playing.
- 25. I explain the consequences of the child's behavior.
- 26. I punish by putting my child off somewhere alone with little if any explanations.
- 27. I tell my child what to do.
- 28. I allow my child to give input into family rules.
- 29. I demand that my child does things that I want or think he/she needs to do.
- 30. I grab my child when being disobedient.
- 31. I talk it over and reason with my child when he/she misbehaves.
- 32. I argue with my child.
- 33. I am less friendly with my child if he/she does not see things my way.
- 34. I scold or criticize when my child's behavior doesn't meet my expectations.
- 35. I use physical punishment as a way of disciplining my child.
- 36. I discourage my child from appearing overconfident to others about his/her abilities.
- 37. I help my child to understand the impact of behavior by encouraging my child to talk about the consequences of his/her own actions.

38. I am aware of problems or concerns about my child in school.

Please indicate how much you agree or disagree with each of the following statements. (1 = strongly disagree; 2 = disagree; 3 = not sure; 4 = agree; 5 = strongly agree)

- 39. Mothers primarily express love by helping their children to succeed, especially in school.
- 40. A mother's sole interest is in taking care of her children.
- 41. Children should be in the constant care of their mothers or family.
- 42. Mothers should do everything for their children's education and make many sacrifices.

Authoritative subscales:

Warmth/acceptance: 19, 21, 16, 14, 1, 38, 9.

Reasoning/induction: 31, 37, 25, 23.

Democratic participation: 11, 28, 3, 12.

Authoritarian subscales:

Physical coercion: 35, 30, 2.

Verbal hostility: 22, 18, 32.

Non-reasoning/punitive: 15, 26, 6.

Parenting practice emphasised in China subscales:

Encouragement of modesty: 4, 13, 36, 8.

Shaming/love withdrawal: 10, 17, 20, 33.

Protection: 24, 27, 5.

Directiveness: 34, 29, 27.

Maternal involvement: 39, 40, 41, 42.

Appendix F

Chinese Acculturation Scale

Please indicate how much you agree or disagree with the following statements. (1 = strongly disagree; 2 = disagree; 3 = hard to say; 4 = agree; 5 = strongly agree)

- 1. Compared to how much I negatively criticise other cultures, I criticise Chinese culture less.
- 2. Chinese culture has had a positive impact on my life.
- 3. I believe that my children should read, write, and speak Chinese.
- 4. I have a strong belief that my children should have Chinese names only.
- 5. I would prefer to live in a Chinese community.
- 6. I listen to Chinese music.
- 7. I celebrate Chinese holidays.
- 8. At home, I eat Chinese food.
- 9. At restaurants, I eat Chinese food.
- 10. Overall, I am Chinese.
- 11. I speak Chinese at home.
- 12. I speak Chinese at school/work.
- 13. I speak Chinese with friends.
- 14. I view and listen to Chinese on TV.
- 15. I listen to Chinese on the radio.
- 16. I read Chinese in literature.

Appendix G Parent Interview Questions

I'd like to follow up on some of the responses you gave to the questionnaires. Firstly, I am interested in finding out some more about how you communicate with the teachers at your child's kindergarten. In Question 1, you indicate that you [never/rarely/sometimes/often/always] talk to the teachers about how your child gets along with other children at kindergartens. Can you tell me more about this? Are there any particular reasons? (Possible prompts: Are the teachers approachable? Do the teachers talk to you about the topic? Are there any language difficulties?)

Now let's talk about volunteering at the kindergarten. In Question 10, you indicate that you [never/rarely/sometimes/often/always] volunteer to help during your child's kindergarten sessions. Can you tell me more about this? Are there any particular reasons? (Possible prompts: Do you have enough time to do this? Do you have opportunities to do this? How interested are you in helping during your child's kindergarten sessions? How much do you think parents can support teachers in helping during their child's kindergarten sessions? Are there any language difficulties?)

Lastly, I would like to discuss with you on parents' participation in kindergarten's decision making. In Question 25, you indicate that you [never/rarely/sometimes/often/always] participate in decisions about the kindergarten's programs and activities that will impact your own and other children's educational experiences. Can you tell me more about this? Are there any particular reasons? (Possible prompts: Do the teachers encourage you to participate in decisions about the kindergarten's programs and activities? How confident do you feel about participating in decisions about the kindergarten's programs and activities? How important do you think it is to take part in decisions about the kindergarten's programs and activities? Are there any language difficulties?)

Appendix H Teacher Interview Questions

I'd like to ask you some questions on your kindergarten's policy and procedures in relation to parental involvement at kindergarten. What steps does your kindergarten take to involve parents into the following activities? We will go through these activities one by one:

- (1) How does your kindergarten encourage parents to help at kindergarten sessions?
- (2) How does your kindergarten encourage parents to help with kindergarten trips?
- (3) How does your kindergarten encourage parents to serve on the kindergarten committee?
- (4) How does your kindergarten encourage parents to talk to teachers about how their child is getting on at kindergarten?
- (5) How does your kindergarten encourage parents to read the kindergarten's newsletter/notice board?
- (6) How does your kindergarten encourage parents to contribute to child's portfolio?

Are there any other ways that your kindergarten tries to involve parents in kindergarten activities and encourage parent/teacher communication?

Does your kindergarten take any other steps to specifically involve Chinese parents? Do you have any specific difficulties in involving Chinese parents in the activities we have just talked about? (Possible prompts: Do Chinese parents have language difficulties? Do you think Chinese parents have different beliefs about their roles in participating at kindergarten? If yes, can you explain and give some examples?)

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