Cultural Background and Parental Involvement in Children's Education:

A Mixed-Method Study Comparing Chinese and European New Zealand Parents

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Abstract

Background: During the last few decades, research investigating the cross-cultural differences in parent involvement (PI) in children's education has been an active domain. The current investigation extends this work by comparing and contrasting the style and degree of parental involvement in two small samples of New Zealand parents. *Participants:* A total of 22 Chinese New Zealand (CNZ) and 21 European New Zealand (ENZ) parents of primary school-aged children living in Christchurch, New Zealand, were recruited. Participants were primarily female (71.4% of ENZ and 81.8% of CNZ) with a mean age of 38 years (SD = 4.87). *Method:* A mixed methodology was employed in the current study to compare and contrast the ENZ and CNZ parents' differences in their PI behaviors, beliefs, perceptions of the effectiveness of their PI, perceived contextual barriers, as well as idiosyncratic experiences of PI. In addition, the acculturation of the CNZ participants and their children was also examined. *Findings:* CNZ parents reported a higher level of involvement in establishing a home learning environment and applying rules for media/technology use for children than ENZ parents. CNZ parents also held stronger parental expectations for their children's educational future and perceived greater positive receptivity from the school and child to their PI efforts than ENZ parents. Both ENZ and CNZ parents' level of involvement across all three types of PI support were highly associated with parental expectations of children's education future, and parents' perceptions of their children's receptivity to their PI effort. The path between ethnicity and parents' involvement in establishing a home learning environment was fully mediated by parents' expectations and parents' self-efficacy of PI skills and experiences. Likewise, the path between ethnicity and parents' involvement level in

applying rules for media/technology use for children was fully mediated by parents' expectations. Qualitative data showed that CNZ parents' beliefs in education are results-oriented, while the ENZ parents place more value on the learning process. Meanwhile, CNZ parents believe that parental instructions should be organized and structured, while ENZ parents consider PI more effective when it is innovative. *Discussion*: The results are discussed from Walker and colleagues (2005) and Hornby and Lafaele's (2011) theoretical models of PI. The results from the present study show that although PI expressions varied largely based on parents' ethnicity, these PI variances based on ethnicity can be fully explained by the discrepancies between ENZ and CNZ parents' psychological factors (parental expectations and self-efficacy) of PI. This suggests that cultural factors help shape parental expectations and beliefs concerning children's education, which then influences the extent and expression of parental involvement.

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Chapter One

Introduction

Background

Parental Involvement (PI) refers to the effort made by parents or caregivers in promoting children's academic performance and social skills development. Since the 1990s, research investigating parents' involvement in children's education has been an active domain. In some ways, this question of how parents get involved in and influence their children's education is a bit peculiar because until the state became heavily involved in education, apart from the wealthy, parents were their children's primary and possibly only educators. However, for several decades and across many countries, the state has largely assumed the responsibility for and taken control of children's education to such an extent that many parents report being reluctant to get involved or feel poorly equipped to assist with their children's education (Epstein & Van Voohis, 2001; Hornby & Lafaele, 2011).

Numerous studies have investigated how parents involve themselves in their children's education (Epstein, 1987; Reynolds, 1996) and also the predictors and outcomes of parental involvement (Hornby & Lafaele, 2011; Lau, Li, & Rao, 2011; Huntsinger & Jose, 2009). Thus, the research documenting the impact of effective parental involvement on children's developmental outcomes and learning performance largely confirms that parents are still very important to children's academic and social skills development. Nevertheless, debates on the most effective types of PI activities and PI styles remain active. While some parents, educators, and researchers believe that PI support expressed in more hand-on activities, such as supervising children's homework, is vital in facilitating children's academic

outcomes, others believe that PI support should take a more implicit form and a holistic view, such as parental monitoring through frequent communication with the school and teachers, and therefore produce a broader positive impact on children's general developmental outcomes (Gonzalez-DeHass, Willems, & Holbein, 2005). In terms of parenting styles, there are some who believe that learning should be spontaneous and learner-active, while others believe that children learn better when they are strictly instructed and supervised (Brasel, 2008; Fan & William, 2009; Kupzyk, McCurdy, & Burger, 2011). During the year 2009, the book *Battle Hymn of the Tiger Mother* by Amy Chua was published. Chua (2009) advocated that parents need to push their children very hard so that the children can keep exceeding their previous achievements. This provocative perspective about parenting popularised an Asian style to parenting and parental involvement in children's education and learning that was quite different from Western norms. In her book, Chua (2009) attributed her children's excellent school performance to the typical Chinese way of educating children, characterised by high requirements for children's learning performances and an intense level of home instruction. Despite a growing number of studies reporting the phenomenon of fast-learning Asian students, especially in math and science (Chen & Stevenson, 1989; Stevenson , Chen Lummis, Stigler, Liu& Fang, 1990), the question of whether authoritarian parenting really produces smart students or just rote learning machines remains active. This has led to a growing number of studies aiming to explore the linkages between the students' learning-related skills and performances, the types of PI activities, and the cultural/ethnic driven beliefs regarding education and parenting.

The initial chapter of this manuscript introduces the rationale of the study in terms of the shortage of research articles in the relevant areas. Given the complexity

of PI, the following sections will encompass a literature review on the conceptualisation of PI, the predictors of PI, and PI's impact on children's development. This will be followed by the second chapter's more in-depth literature review on cultural and/or ethnicity characteristics and its impact on expressions of PI and motivational factors for and barriers to PI.

Conceptualising Parental Involvement

Parental involvement in a child's education is multi-faceted and therefore covers a wide range of support activities. Epstein (1987) proposed a theoretical model that described PI support in six dimensions: parenting practices, communication, volunteering, home tutoring, involvement in decision making, and collaboration with the community. Epstein's (1987) work distinguishes itself from other PI models in that it considers PI to be the dynamic interactions between the family, school, and community. In light of Epstein's (1987) theoretical model, more recent research has suggested that PI is multidimensional and could be expressed from various aspects (Christenson & Sheridan, 2001; Hornby, 2000; Swap, 1993). For instance, Greenwood and Hickman (1991) proposed that parents could take five various roles when they participated in their children's education: parents as audience members, parents as learners, parents as teachers, parents as volunteers, and parents as decision makers. Green and Hickman's (1991) theory brought not only the typology of PI activities but, more importantly, also valued the importance of PI support with both a structured and unstructured style. While sometimes parental support can be structured and well planned, such as providing direct instructions for children, the more implicit and less structured PI activities, such as providing emotional encouragement, listening to children's needs, and appreciating children's hard work, might be helpful as well. Ho (1995) operationally categorised PI into two types: home based and school based.

School-based involvement includes parental support taking form in school communication and school participation; for instance, attending school events and regular meetings with school teachers. Home-based involvement refers to PI support of home supervision and home communication; for instance, helping children to complete their homework (Ho, 1995). Similarly, Reynolds suggested that the two subtypes of PI activities take the form of interactions between parents and children and of communications between the parents and the school (Reynolds, 1996). Regardless of the disagreement on PI typology, these theoretical models of PI offered a theoretical underpinning for the studies on the predictors of PI (Huntsinger & Jose, 2009) and the studies on PI's influences on children's developmental outcome (Lau, et al., 2011).

Predictors of Parental Involvement

The factors that shape PI activities tend to be considered collectively and are best summarised by two conceptual frameworks (Hornby& Lafaele, 2011; Walker, Wilkins, Dallaire, Sandler, & Hoover-Dempsey, 2005). Hoover-Dempsey and Sandler (1995) proposed a conceptual framework starting with the process of PI formation and ending with the pathways of how PI influences children's learning outcomes. With this model, Hoover-Dempsey and Sandler (1995) suggested that parents' basic involvement decisions depend on factors of parents' role construction, parents' self-efficacy for helping a child, and the school's and children's invitations for involvement. Parents' choices for how to be involved are influenced by parents' skills and knowledge, other demands on parents' time and energy, and the specific invitations from the child and school to be involved. After the validation of Hoover-Dempsey and Sandler's work (1995), Walker and colleagues (Walker, et al., 2005) proposed a revised model for predicting PI. The original factors shaping parents' PI

expressions were re-categorised into three domains: *parents' motivational beliefs* (which consists of factors of parents' role construction and self-efficacy for PI), *parents' perception of an invitation for involvement from others* (which consists of factors of the parents' perceived invitations from school, teachers, and children for PI), and *parents' perceived life context* (factors of the parents' self-perceived time and energy and parents' self-perceived skills and knowledge in helping their children learn). Each of these factors will be described in detail below.

The predictive power of Walker's model (2005) in predicting PI was tested in a follow-up study by Green, Walker, and other colleagues (2007). A cross-sectional study was carried out with a sample of 853 parents of children enrolled in a socioeconomically and ethnically diverse urban public school system in the mid-southern United States. Children ranged in age from 1st to 4th grade (5–10 years old) represented the primary school group, and the 5th and 6th grade children (10–12 years old) represented the middle school group. All of the PI activities were assessed based on parents' self-reported responses to 6-point Likert-type response scales. Measures of predictor constructs used an agree/disagree response scale, whereas the measure of parental involvement practises used a response scale of "never" to "daily". Multiple regressions were conducted separately for home-based PI and school-based PI to assess the ability of Walker's model to predict the level of PI expressed in a home-based environment and the level of PI expressed in a school-based environment. Results from the multiple regression indicated that as a whole model, the psychological constructs explained a significant amount of variance in both home-based PI and school-based PI. Introduction to each of the factors within Walker et al.'s (2005) psychological model of predicting PI are explained in the following sub-sections.

Parents' motivational beliefs. In Walker et al's revised model (2005), the motivational beliefs are defined by two factors: parental self-efficacy for helping children's learning and parents' role constructions regarding learning and education.

Parents' self-efficacy in Parental Involvement experiences. Parents' self-efficacy for PI experiences and skills refers to a parent's belief that he or she has the skills and experiences to help his or her children succeed in school. Educators believed that positive parental self-efficacy can increase the level of parental involvement in children's education (Bandura, 1997; Hoover-Dempsey, Bassler, & Brissie, 1992; Seefeldt, Denton, Galper, & Younoszai, 1998). The associations between parents' self-efficacy and the level of PI expressed in home-based and school-based environments were measured in Green's abovementioned follow-up study (2007). Parents' self-efficacy regarding their PI skills and experiences was assessed by the level of agreement with the statements about believing in their own ability to make a difference in the child's learning outcome. Results from multiple regressions on home-based PI indicated that as an individual factor predicting the level of PI expressed in home based environment, parents' self-efficacy largely accounted for the amount of variance in the level of parental support at home. Therefore, parents who believed PI effort could help their children to succeed at school were more likely to participate at home in children's learning. Similar patterns of association were suggested by other studies (Giallo, Treyvaud, Cooklin, & Wade, 2013; Desjardin, 2003; Grusec, 1994). Results from these studies indicated that the level of parents' self-efficacy could significantly promote their participation in their children's learning at home. Multiple regressions on school-based PI indicated that parents' self-efficacy for helping children's learning was negatively associated with the level of PI support in a school environment. Green and colleagues (2007)

attributed this negative association to the tendency of parents with higher confidence level in their PI skills to be less likely to ask for consultation from school and teachers.

Parents' role construction. Parents' role construction, or parental role activity beliefs, refers to parents' ideas of to what extent they should be involved in their children's education. This factor is assessed by the level of parents' agreement with statements about their need to join children's learning activities. Green and colleagues' (2007) study assessed the predictive power of parents' role construction of home-based and school-based PI. Results from the multiple regressions suggested that compared with self-efficacy and other related factors, the role model construction of parents explained only a small amount of variance in home-based and school-based PI. However, given the huge sample size (853 participants) of the study, Green et al. (2007) still concluded that parents' role constructions have a significant impact on the level of PI expressed in both home and school environments.

Parents' perception of receptivity for involvement from others . Parents' perception of invitations from others for PI encompassed three aspects; including, their perception of general school invitations for participation in school activities, their perception of their child's invitation to be involved by seeking their assistance, and the perceptions of specific teacher invitations to initiate parent-teacher communication. Parents' perception of general school invitations refers to the parents' perception that the school staff welcomed the parents to be involved in children's education at home and/or at school. It was assessed through the parents' self-reported level of agreement with statements of feeling welcomed by the school. The parents' perception of specific teacher invitations to involvement refers to the parents' feeling of being encouraged by the teachers to participate in their children's education. It is

assessed by parents' reported direct requests from the teachers for PI support at home and/or at school. The parents' perception of a specific child's invitation to involvement refers to parents' feelings of being welcomed by their children to participate in their children's education. It is assessed in Green et al. (2007) by the level of parents' agreement with the statement of feeling needed by their children to help their learning at home and/or at school.

In the aforementioned follow-up study by Green at al. (2007), factors of the perception of general school invitation, the perception of a specific child's invitation, and the perception of specific teacher invitation were tested in terms of their power to predict PI expression. The cross-sectional study between parents of primary school aged children and parents of middle school aged children for home-based PI showed only parents' perceptions of specific invitations from children predicted a significant variance in parents' participation in children's learning at home. Results from multiple regressions on school-based PI indicated that parents' perception of specific invitations from teacher and child for involvement explained a significant amount of variance in parents' PI at school. Therefore, parents who believed that their children welcomed their PI support were more likely to participate in their children's learning at home, and parents who believed that their children and the teachers welcomed their PI support were more likely to participate in their children's education at school, but these factors seemed to be domain specific and did not cross over.

While Walker et al's (2005) model addressed the importance of parents' psychological factors in shaping their PI and PI form decisions, they also noted that all of the above factors are socially constructed. Hence, the psychological factors are all under the influence of social and environmental contextual factors, such as the family socioeconomic status (SES) and the age of the children (Green et al., 2007).

Green and colleagues (2007) assessed parents' SES through the parents' and their partners' highest education level received, occupation, and family income. Surprisingly, results from the zero correlations between the SES variables and home/school based PI indicated that the parents' education level and family income were negatively associated with the level of home-based and school-based PI. Therefore, parents with higher income levels and more education were less likely to be involved in their children's education, both at home and at school. Green et al.(2007) further tested whether these factors could explain home-based and school-based PI support over and above the previously mentioned psychological factors. The SES factors were added in to the above multiple regressions. Results indicated that the SES variables did not predict parents' participation in their children's learning at home and at school over and above the psychological model.

Contextual factors shaping parental involvement activities. While acknowledging the importance of parents' psychological constructs on PI, Hornby and Lafaele (2011) suggested that there are many reasons behind the gap between what parents planned to do and what was done by parents; hence, he proposed a conceptual framework of barriers to PI. While Hornby and Lafaele (2011) integrated Walker, et al. (2005) psychological factors into his model of barriers to PI, he included a number of other contextual predictors. These predictors might work as facilitators of or barriers to parents' involvement in their children's education in the domains of *the individual parent and family factors, the child factors, the parent-teacher factors,* and *the societal factors*. Each of these elements will be described below.

The individual parent and family factors. The individual parent and family category explains how PI patterns are influenced by characteristics within the parental

and family environment. Hornby and Lafaele (2011) believed that the individual parent and family factors include not only the psychological constructs of parents (parents' beliefs about PI, parents' current life contexts, parents' perceptions of invitations for involvement) but also factors of family SES, ethnicity, and gender of the parents.

Cultural capital was first brought up by Bourdieu (1977a) to describe one's familiarity with the dominant culture of a certain society. Bourdieu's (1977a) theory reasoned that parents from socioeconomically advantaged backgrounds possessed more cultural capital and more familiarity with the advantages of high educational credentials. Therefore, they tended to hold higher educational aspirations for their children. Moreover, in light of Bourdieu's theory, more recent educators (Bastiani, 1989) argued that parents from the middle class shared the similar values with schools and teachers. Therefore, compared to working-class families, parents from the middle class are more willing to cooperate with teachers and to participate in their children's education.

In spite of the negative association between SES and PI found by Green and colleagues (2007) described above, the positive associations between SES and the level of parents' involvement in their children's education have been identified in several correlational studies (Tekin, 2011; Zhang, Hsu, Kwok, Benz, & Bowman-Perrott, 2011). For instance, Tekin's study (2011) aimed to examine the impact of demographic characteristics on parents' motivational beliefs about PI (their role construction and their self-efficacy). 374 parents of primary school aged children in an urban area in Turkey were recruited into the study. The participants' and their spouses' occupations, education levels, and family income data were collected. Multiple linear regression analyses were conducted separately on parents' role

construction and self-efficacy regarding PI; results revealed that compared with parents' age, gender, and marital status, family income was the strongest predictor of parents' role construction. Therefore, parents from socioeconomically advantaged backgrounds tend to believe that their involvement is vital to their children's education. It was also found in Tekin's study that parents' educational backgrounds influence their self-efficacy beliefs about helping their children succeed in school. Hence, parents who received high levels of education were more confident about their capability to help their children learn.

The impact of family ethnicity and the gender of those who participate in children's education was also noted by Hornby and Lafaele (2011), who suggested that ethnicity (at least within Western societies) is an important predictor of parental aspirations, although this relationship is not straightforward. Several studies have found that parents from "non-White ethnic groups" are more likely to set higher educational aspirations for their children compared to their White counterparts (Cao, Bishop, & Forgasz, 2007; Mau, 1997). Other studies have, however, found inconclusive evidence for the effect of ethnicity on parental aspirations if ethnicity is more finely defined. Spera, Wentzel and Matto (2009), for instance, found that while Asian-American parents had higher educational aspirations than all other ethnic groups in their study, both African-American and Hispanic Americans had lower aspirations than their White peers. There is also evidence to suggest that immigrant parents tend to hold higher expectations for their children's academic achievement than native-born minorities (Raleigh & Kao, 2010). Further, the effect of ethnicity on aspirations disappears when parental education and children's academic performance are accounted for (Spera, et al., 2009).

The gender differences in beliefs about education and PI contribute to the discrepancy between mothers' and fathers' typical practises of PI. Brantlinger, Majd-Jabbari, and Guskin (1996) suggested that the impact of class is robust when combined with gender differences. Brantlinger and colleagues (1996) argued that mothers from the middle class were the 'status maintainers for the family', and therefore their PI styles were more vigilant and sometimes could bring stress to their children. Meanwhile, the mothers' predominant role in taking care of the children heavily influenced the focus of their PI in their children's education.

Compared to other PI-related factors, gender differences in PI have been less studied. To compare the gender differences in PI and the mechanism behind the discrepancies in the mothers' and fathers' PI expressions, Sheng (2012) conducted a study in China and utilised semi-structured interviews among 50 parents in Beijing. Parents' opinions about education and parenting, together with their usual role in participating in their children's education, were covered during the conversations. Results from the study showed that because mothers in the family generally spent more time with the children, they tended to believe that support for children's academic learning could be done through their daily care of the children. Therefore, compared with fathers' roles in PI, mothers' PI styles are less distanced and involve more everyday supervision; fathers' roles were to plan the bigger picture for the children's futures and supervise mothers' PI activities (Sheng, 2012).

Characteristics of children in shaping parental involvement. This category encompassed features of children that could work as barriers to or facilitators of PI, such as children's ages and their learning-related advantages and/or disadvantages.

Numerous studies have suggested parents' may adjust their involvement in their children's education, depending on the age of their children (Coleman &

McNeese, 2009; Fan & Chen, 2001; Green et al., 2007; Jeynes, 2007). These studies found that as children's ages increased, the level of PI decreased. Hornby and Lafaele (2011) suggested that the negative association between PI and increasing children's age might be linked with the fact that younger children were more excited about their parents joining their activities, while the adolescents prefer more independence. For instance, Green and colleagues' (2007) cross-sectional study compared the difference across the level of home-based and school-based PI among elementary and middle school students' parents. Results from the independent t-tests showed that parents of primary school students reported a much higher level of PI in both home-based and school-based activities than did the parents of middle school students. Moreover, when the researchers divided the two samples (primary and middle school) into individual grade levels and assessed the corresponding level of PI, they found that the level of PI at home and at school decreased as the school grade level increased. However, to further examine the predictive power of children's ages on the level of home-based and school-based PI, the children's ages were added into the aforementioned multiple regressions alongside the psychological factors (parents' motivational beliefs, perceptions of invitations for PI, and perceived life context) predicting PI at home and at school. Results from both sets of the multiple regressions indicated that the parents' psychological model still explained a significant amount of variance in home-based and school-based PI.

Apart from children's ages, factors such as children's disadvantages related to their learning abilities, such as inadequate learning competencies, poor academic performance, and behaviour problems, can work as barriers that hinder the way parents may be involved in their children's education. On the contrary, children's talents and gifts in learning specific subjects can encourage parents to be more

voluntarily involved in their education. (Fan & Chen, 2001; Hornby, 2011; Jeynes, 2007; Sosu, 2014). For instance, Sosu (2014) gathered information from the Growing Up in Scotland (GUS) Survey and assessed the factors that influence maternal aspirations for preschool children. The GUS is an ongoing national longitudinal survey which explores a range of topics related to children's development. Parents' aspirations for their children's futures were reported during the face-to-face interviews in terms of the qualifications they wished their children to gain in the future. Children's rating on problematic behaviours, problematic emotions, and pro-social skills were measured. Together, 1,999 participants' answers were utilised in Sosu's study. Results from the bi-variate analyses indicated that the children's emotional and behavioural difficulties were associated significantly with the level of maternal aspiration: Mothers tended to have lower educational aspirations for children when their children had more behavioural and emotional difficulties. Also, parents tended to hold higher aspirations for their children if the children had more pro-social behaviour.

The characteristics within the parent-teacher interaction in shaping parental involvement. Within the third category, Hornby and Lafaele (2011) represented the characteristics of the parent-teacher interaction in shaping parents' PI decisions. According to Hornby, shared goals, agendas, and similar attitudes between parents and teachers can facilitate PI, while a lack of understanding of the school system and classroom activities can diminish or frustrate parents' motivation to participate, especially in children's schoolwork. This idea is in line with Walker's (2005) conceptual model of PI, where Walker considers parent–school cooperation as a primary facet of PI support. Many studies have found that positive parent–teacher interactions and communications can enhance parents' willingness to be involved

more in their children's education (Antonopoulou, Koutrouba, & Babalis, 2011; Epstein & Van Voohis, 2001).

Characteristics of the community and society in shaping PI. The fourth category of Hornby and Lafaele's model (2011) addressed the societal factors around the children, families, and schools. Both Hornby and Lafaele (2011) and Walker (2005) noted that parents' beliefs and values about education and parenting are socially constructed. Therefore, one cannot fully understand the mechanisms behind parents' PI decisions and their choices of PI expressions, without considering the broader picture of the social policies, government decisions, and ethnic/cultural background (Cozier, 1997; Engel, Kinston and Mleczko, 2013; O'Bryan, Braddock II and Dawkins, 2006; Rosenberg and Jing, 1996). For instance, Engel, et al. (2013) retrieved data from longitudinal data over 15 years from 2 schools in England. Results from the study indicated that government's social policies regarding subsidies on children's education could largely promote level of PI of parents from socioeconomically disadvantaged families.

Parental Involvement and Educational Outcomes

Based on Epstein's (1987) typology of PI, empirical studies suggested that different types of PI had unique impacts on particular aspects of children's educational outcomes (Fan & Williams, 2010; Parker, Boak, Griffin, Ripple, & Peay, 1999). The following part of the literature review encompassed the PI impact on children's education in aspects of children's learning readiness, their motivation to study, their engagement behaviour, and their academic achievement.

Parental involvement and children's school readiness. School readiness is a multidimensional concept which includes children's physical, cognitive, language, and social/emotional development (Pelletier & Brent, 2002; Pianta & La Paro , 2003).

It distinguishes itself from the concept of learning readiness, as learning readiness refers to students' general capacity to undertake the learning of material, usually at the age which the average group of individuals achieves the specified capacity. Studies suggest that only certain types of parental involvement have a positive impact on children's school readiness (Lahaie, 2008; Lau, et al., 2011). For instance, Lau and colleagues (Lau, et al., 2011) conducted a cross-cultural study and closely assessed Chinese and Hong Kong preschool aged children's school readiness through their early literacy and cognitive abilities and their associations with different types of PI support. A total of 431 kindergarten students with a mean age of five from five kindergartens in Hong Kong and five kindergartens in Mainland China and their parents were recruited. All of the recruited children's readiness for school was assessed in terms of how well they could read a word aloud (in Chinese) when they saw a picture, their abilities to tell the difference between various shapes and colours, and their positive interactions with peers. Their parents were asked to complete the surveys reflecting their most frequent types of parental support. The researchers conducted correlational and regression analyses examining the relationship between PI and children's readiness for school. The results from the multiple regression suggested that PI in general was highly correlated with overall readiness for school. However, as individual predictors, only PI support in the forms of providing instruction, joining children's language and cognitive activities, and participating in homework were shown as positively associated with children's overall readiness for school. PI support in the forms of maintaining regular involvement with school and keeping regular communication with children does not impact children's overall school readiness. Nevertheless, in terms of children's specific cognitive skills, the reading competency of children was found to be influenced largely by parents'

support in joining children's language and cognitive activities, as well as by regular meetings between parents and school teachers.

Parental involvement and children's autonomous motivation to learn. Autonomous motivation to learn refers to children's behaviours that are motivated purely by their inherent benefits, rather than by the parents' direction (Ryan & Deci, 2000). Previous studies suggested that compared with PI support in supervising and/or instructing, which can have a negative impact on children's motivation to learn, PI in mental support has more positive impact on children's autonomous motivation (Cheung & Chang, 2008; Fan & William, 2010; Gonzalez-DeHass, Willems, & Holbein, 2005). For instance, Villiger, Wandeler, & Niggli (2014) conducted cross-sectional analyses across the associations between PI and reading motivation among the native German children and children living in the same area but from immigrant families. A total of 891 primary school aged children, with an average age of ten years, and their families from the German-speaking part of Switzerland were recruited. The study took place from 2006/07 until 2007/08. Most of the PI support was reported at the beginning of the school year, and the actual reading grades and the reading motivations were measured during and at the end of the school year. Children's reading motivation was surveyed in terms of their reading enjoyment, reading curiosity, and reading anxiety. Children's *reading comprehension* was measured with a standardised reading comprehension test in terms of their reading comprehension at the word level, the sentence level, and the text level. Parents' PI support was reported by both the student and parent in the dimensions of emotional support (the positive relation between the parent and the child) and interference (the extent to which parents helped their child complete homework without being asked). Results from the multiple regressions indicated that parental interference could reduce

children's reading enjoyment while leading to reading anxiety. The multiple regressions also suggested that parents' emotional support facilitated the children's reading enjoyment and curiosity. Another study conducted by Cheung and Chang (2008) in Hong Kong recruited a total of 91 fifth-grade Hong Kong Chinese students (age range 11–12 years old), with 49 boys and 42 girls. Children were assessed on their perceived maternal parenting practices, maternal parenting styles, and their own learning motivations, perceived academic competence and actual academic achievements. Results from Cheung and Chang's study (2008) indicated that maternal practices of support and encouragement perceived by children was positively related to children's learning motivation.

Parental involvement and children's academic achievement. Previous studies suggested that the impact of parental involvement on children's academic achievement is mixed (Jeynes, 2012; Milne, Myers, Rosenthal, & Ginsburg, 1986). Some studies suggested that PI support has positive associations between PI and children's academic performance, especially in reading (Brasel, 2008; Kupzyk, et al., 2011; Xu, Kushner, Mudrey-Camino & Steiner, 2009). Kupzyk and her colleagues conducted a case study (Kupzyk, et al., 2011) to assess the relationship between parental involvement and the oral reading fluency of children. The study examined the reading fluency of two children before and after they had been given a tape-recorded intervention. Both of the children were identified as at risk of developing a reading disorder. The tape-recorded intervention was a two-month reading remediation programme involving parents' intensive participation in home tutoring. The improvement after the intervention indicated that the taped learning strategy involving the parents' participation significantly improved reading achievement for these two students (around 8–9 years old).

Some of the studies found no association between PI support and the academic skills of children (Nokali, Bachman, & Votruba-Drzal, 2010; White, Taylor, & Moss, 1992). For instance, Nokali, Bachman, and Votruba-Drzal (2010) conducted a non-experimental study . Data for this study were drawn from the National Institute of Child Health and Human Development Study of Early Child Care and Youth Development (NICHD SECCYD), an ongoing longitudinal study of 1,364 children and their primary caregivers from 10 U.S. data collection sites (NICHD Early Child Care Research Network [ECCRN], 1993). Information on parent involvement and children's academic achievement was obtained from mean values of first, third, and fifth graders' responses. Parental involvement was assessed through parents' own and teachers' reported level of PI support in cooperation with the school (such as attending PTA meetings), valuing education (such as believing PI matters in children's developmental outcomes), and holding similar opinions about education as children (such as having the same goals for exam results as children). The academic achievement of children was measured in terms of three domains: comprehension and receptive vocabulary, symbolic learning and reading skills, and mathematical skills. The authors utilised multilevel growth models to analyse the parents' and teachers' reported level of PI support and associations with the children's achievement in vocabulary, reading, and math. Results from the multilevel growth models of parents' reports of PI predicting achievement suggested no significant associations between the level of PI and children's achievement in any of the vocabulary, reading, or math domains. Results from the multilevel growth models of teachers' reports of PI predicting achievement also showed similar patterns.

On the other hand, some studies suggest that PI is very efficacious when it is performed appropriately and utilised in targeting domains of skills. These authors

have argued that null associations between PI and learning outcomes may be due to the lack of assessment of specific domains of PI (Sheldon & Epstein, 2005). Jeynes (2012) conducted a meta-analysis including 51 studies assessing PI and the academic achievement of children from 3 to 18 years old. Results showed that PI involving only homework checking was less likely to improve children's achievement. Parents joining children's reading activities have better impact on children's reading outcomes when parents can get guidance from teachers. These findings indicated that cooperation between parents and school teachers maximised the impact of PI on enhancing children's academic outcomes (Jeynes, 2012).

Based on the evidence from these studies, it appears that the aspirations of parents, emotional support, and encouraging communication between parents and children promote children's learning-related skills and achievement. Conversely, PI support that is characterised by unrealistic expectations of academic performances and intense instruction actually seems to hinder educational engagement and may be detrimental to student academic achievement. However, the assertive parental participation and parental demandingness on children's academic achievement were not always found as negatively associated with children's learning outcomes. The aforementioned study by Cheung and Chang (2008) in Hong Kong also assessed the association between maternal parenting style perceived by children and children's actual academic achievement. Results indicated that Chinese parents' demand on children's academic achievement and restrictive (controlling) parenting style were positively associated with children's satisfactory academic achievements. Cheung and Chang argued that these associations should be considered within the particular cultural contexts: The positive association between Chinese parents' high demandingness on children's academic success and children's actual academic

success may be due to the fact that Chinese children tend to avoid negative consequences from their parents and teachers (Cheung & Chang, 2008).

In order to facilitate the PI expressions which were found to be most helpful in enhancing children's learning, we need to explore how expressions of PI and PI-related factors are influenced by the broad social environment, that is, the cultural and social characteristics that shape PI. The next chapter reviews the previous research on cultural and/or ethnic background and its impact on parents' participation in their children's education.

Chapter 2

Cultural Background and Parental Involvement

The term "cultural background" is used to describe the context of one's life experience as shaped by membership in groups based on ethnicity, race, gender, religion, socioeconomic status and social class, and other forms of social-cultural distinctions (Randle and Dolnicar, 2009). According to Lazar and Slostad (1999), parents' beliefs about their own effectiveness as teachers or tutors in their children's learning can be shaped by the circumstances and norms of particular cultures. In the present study, cultural background will be confined to ethnically linked beliefs, values, expectations, and traditions around education.

Recent research has documented differences between parents in their level of educational involvement based on ethnicity (Cheung & Pomerantz, 2011; Kung, 2003). However, it is difficult to determine how cultural background fits within the models described above in predicting PI activities. At one level, cultural background could certainly be conceptualized as a predictor within Walker's (2005) psychological factors of PI. In relation to Hornby and Lafaele 's (2011) contextual model, cultural background could either represent a more distal underlying factor that predicts both individual parent and family factors, such as parents' beliefs about PI and current life contexts as well as societal factors. Conversely, cultural background might represent a fifth contextual factor that independently predicts PI. More in-depth studies suggested that the cross-cultural differences in PI were mainly influenced by two forces: the cultural beliefs about education that were characterised by one's original ethnic group and the changes in these beliefs after one has migrated to other cultural settings (Huntsinger & Jose, 2009). The following literature review will first review the impact of the traditional cultural/ethnic background on the psychological factors of PI,

then the impact of the traditional cultural background on the expression of PI, and finally the changes in the PI-related factors associated with one's migration to other cultural settings. Despite the initial attempt to compare and contrast many different ethnic backgrounds, due to the scope of the current study, the majority of the present review will focus on the distinctions of PI between Asian and European parents.

Cultural Impact on Motivational Factors of Parental Involvement

Several studies suggest that ethnicity is an important predictor of parental expectations for children's academic achievement and their education future (Cao, et al., 2007; Ji & Koblinsky, 2009; Mau, 1997; Tsui, 2005; Yao, 1995). For example, Cao, et al. (2007) conducted a study in China and Australia aiming to examine the cross-cultural differences in parental expectations of children's mathematics learning. Primary school students were recruited from urban cities in both China (n = 114) and Australia (n = 120). Participating students were assessed for their perception of their parents' expectations for their mathematics learning. Results from the independent sample t-tests indicated that students in China perceived that their parents held higher educational expectations than students in Australia.

Similarly, Tsui (2005) examined differences in students' mathematics achievements and their parents' involvement also in China and the United States. Standardized tests and surveys were utilized to assess parents' educational expectations for their children, the level of regular communications with children about schoolwork, and students' mathematics achievement. Results from the independent t-test indicated that Chinese students had better mathematics achievement than American students. Meanwhile, Chinese parents held higher expectations for their children's mathematics achievement and talked more frequently with them about schoolwork and school activities. Moreover, results from the zero-

order correlations suggested that the associations between parental expectations and mathematics achievement were stronger for Chinese students than for American students. Besides parental expectations, there is a lack of research on the other motivational factors of PI in other cultural contexts. Although studies have suggested that parents' self-efficacy were relatively high in urban areas of America (Reed at al., 2000; Green and Hoover-Dempsey, 2007), parents' self-efficacy of PI, and their perceived feedback from school and children about their PI have not been compared cross-culturally.

Cultural Background on Expressions of Parental Involvement

The previous cross-national research conducted in various countries has found considerable diversity in the forms of PI among parents living in different countries (Kung, 2003). A number of studies have suggested that compared with parents living in the United States, parents living in mainland China or Taiwan were more involved in their children's home-learning activities such as private tutoring and checking homework (Cai, 2003; Chen & Stevenson, 1989; Cheung & Pomerantz, 2011; Lau, et al, 2011). For instance, Cheung and Pomerantz (2011) conducted a cross-national study to examine the level of PI in children's academic learning across parents lived in China and the United States. Participants were 374 American children attending local junior high schools in suburbs of Chicago and 451 Chinese children attending local junior high schools in the suburbs of Beijing. Results indicated that American parents were reported by their children as less involved in academic learning than did their Chinese counterparts. Moreover, Cheung and Pomerantz (2011) also examined the patterns of associations between PI in children's academic learning, parents' psychological control (the extent to which their parents used psychologically controlling practices) and parents' autonomy support (the extent to which their

parents used autonomy-supportive practices) among US and Chinese parents. Results from the independent-correlation comparison revealed that American parents' intensive involvement in children's academic learning was associated with their heightened autonomy support to the children. In contrast, as Chinese parents became more involved in their children's academic learning, they tended to become more psychologically controlling to their children.

However, most of above studies were conducted among middle school or pre-school students; there is a shortage of research studying the cross-cultural PI differences among parents of primary school students. One study by Chen and Stevenson (1989) assessed Chinese, Japanese and American parents' levels of home-based involvement in their children's education. Participants were recruited from five different cities: Beijing, Chicago, Minneapolis, Sendai (Japan), and Taipei. Over 3500 primary school students, together with their parents, teachers, and siblings were interviewed to examine the amount of time the children spent on homework, the level of help the children received from their parents on homework, and their parents' beliefs and attitudes about homework. Results from the one-way ANOVA indicated that Chinese children spent more time on homework than Japanese children, who in turn spent more time on homework than American children. In terms of parental assistance, Chinese parents spent more time helping their children with homework than did American and Japanese parents.

While most of the researchers and educators believed that parents from Asian cultural backgrounds tend to be more involved with their children's education, especially in home-based activities (Cai, 2003; Chen & Stevenson, 1989; Lau, et al., 2011), some other studies suggest that Chinese parents living in western societies face greater barriers to becoming involved in their children's learning and therefore

provide a poor level of PI. Ji and Koblinsky's (2009) exploratory study examined the involvement of Chinese immigrant parents in children's elementary and secondary education. Twenty-nine participants living in urban areas of America were recruited. Parents were interviewed about their educational expectations for their children, their parent involvement, and perceived barriers to involvement. The results suggested that although participants reported high educational expectations for their children, they rarely participated in school activities, homework help, and communication with school. Ji reasoned that this was because most of the families in the study were from socioeconomically disadvantaged backgrounds and had limited language skills, busy work schedules, and a poor understanding of the school system, which became major barriers to involvement.

The cross-cultural PI differences were also reflected in parents' preferences to apply structured or unstructured instructions to facilitate their children's learning (Huntsinger & Jose, 2009; Lau, et al., 2011). Huntsinger and Jose's (2009) longitudinal study examined the differences in parental involvement among European American (EA) and Chinese American (CA) parents and their culturally driven beliefs regarding education and parenting. Forty Chinese American and 40 European American parents were recruited for the four-year longitudinal study. Data were collected at three time points, when their children were 6, 8, and 10 years old. Parents' responses to the open-ended questions regarding their daily participation in their children's learning were rated on the informal/spontaneous vs. systematic/formal basis. Results from the one-way ANOVA analysis suggested that European American parents utilize the informal way of teaching and instruction (such as using card games to familiarise children with maths concepts) more than Chinese American parents, to encourage their children's autonomy and spontaneous learning. Chinese American

parents tend to employ structured coaching (such as setting up strict hours in practicing the calculation skills) to help their children practice curriculum-related knowledge more at home. In addition, Chinese American parents believed more in constructive criticism. They wanted to communicate more with the children and teachers regarding what their children need to improve on, rather than simply providing children with praise.

Studies (Pan, Gauvain, Liu, & Cheng, 2006; Parmar, Harkness, & Super, 2004; Lau, 2014) also suggest that Chinese parents' attitudes towards their children's education are more academically orientated, while the European parents believed more in life education. In Pan and colleagues' study (2006) of the cross-cultural differences in PI between American and Chinese parents, the authors compared the parental instructions provided by 32 American and 40 Chinese mothers of children aged between 5 and 7. Mothers' focus on daily support to their children's mathematics learning were categorized as either school-oriented (activities of practicing school exam-required skills such as calculation) or general concept-orientated (such as reading numbers and counting). Results of the chi-square analysis indicated that Chinese mothers were more likely to practice their children's mathematics calculation skills (which is school-oriented) than American mothers.

Most of the above cross-cultural PI research were conducted in the United States, Europe and Australia, few research have been conducted in New Zealand to assess the diversity of PI across Chinese immigrant parents and European New Zealand parents. The most recent project by Zhang, Keown and Farruggia (2014) investigated the role of parenting beliefs, parenting practices, and demographic variables on the level of parental involvement among Chinese immigrant and European New Zealand parents based in Auckland. 120 Chinese immigrant and 127

English speaking non-Chinese (mainly European) parents of kindergarten aged children were recruited. Similar to Ji and Koblinsky's (2009) study, results from Zhang and his colleagues' study (2014) also indicated that on average, Chinese parents tended to involved less in communicating with teachers, volunteering to help at the kindergarten, and participate in kindergarten decision making than European parents. The level of PI in home-based environment of Chinese and European parents were comparable. Moreover, Chinese parents perceived less self-efficacy and opportunities to involve in children's education than did European parents. Zhang *et al* (2014)'s study were contrasting with most of the findings from other cross-cultural studies, where most Chinese immigrant parents were shown to be more involved than their European counterparts, especially in home based learning activities(Cao et al., 2007; Lau, 2014; Pan, et al., 2006; Parmar, et al., 2004;). More studies need to be conducted in New Zealand to examine the PI forms and intensity differences among Chinese and European New Zealand parents.

In a nutshell, the above studies suggested that Chinese parents tend to hold higher educational expectations for their children than European parents do. The high expectations of Chinese parents motivated them to be involved more systematically in their children's academic learning at home. On the other hand, European parents tended to offer more unstructured and spontaneous support to promote their children's learning, given that most of the European parents believed more in holistic education; that is, every aspect of life in education. Researchers (Huntsinger & Jose, 2009; Parmar, et al., 2004) have proposed that the above discrepancies between Chinese and European parents were based upon their beliefs of what is more important during children's early years of development. Whereas European parents believe that learning experiences are more important than actual test results, Chinese parents do

not value the learning process very much. Asian parents seem to judge the success of learning primarily on children's academic performance. These contrasting beliefs were then instantiated in *how* they become involved in their children's education.

Acculturation and Expressions of Parental Involvement

When the focus is shifted from comparing PI across different cultures through inter-country comparisons, to comparing PI across cultures within a specific country, one of the most important dimensions to consider is acculturation. A number of studies have revealed that the acculturation of immigrant parents is associated with both the level of PI and expression of PI (Buki, Ma, Strom R., & Strom S., 2003; Costigan & Koryzma, 2011; Moreno & Lopez, 1999). Results from these studies suggest that parents' acculturation level is associated with their confidence in communicating with teachers using English, their understanding of school systems in the United States, and their familiarity with classroom activities. These factors can in turn influence immigrated parents' self-perceived skills in assisting their children's learning in a foreign country. In other words, parents who are more acculturated towards the mainstream western society usually have a higher level of English proficiency, a better understanding of western culture, and more confidence in their ability to communicate with school teachers. These parents are therefore more likely to be involved in their children's education (Buki, et al, 2003).

In light of such evidence, there is still a lack of adequate studies examining the changes in parental involvement after one's moving to another cultural setting. To assess the influences of cultural assimilation and preservation processes on parents' expressions of PI, comparisons are required between participants with the same ethnicity but different cultural settings. In the aforementioned study of Cao and

colleagues (2007) on the cross-cultural differences in parental expectations, four groups of participants were recruited: Chinese children living in China, children of Chinese immigrant families living in Australia, foreign language-speaking children living in Australia, and English-speaking children living in Australia. Cao and colleagues compared and contrasted the perceived parental expectations among these four groups of children from their parents. Results from the Scheffe post hoc tests suggested that children in China perceived the highest level of parental expectations among all four groups. Among all the children living in Australia, children from Chinese immigrant families perceived the highest parental expectations of any group. Moreover, Cao's study also suggested that foreign language-speaking students in Australia also perceived higher expectations than English-speaking students in Australia.

Another cross-national study of Chuang and Su (2009) examined the parenting styles (authoritative vs. authoritarian) of Chinese parents living in Canada and China. Sixty-seven Chinese Canadians and 59 mainland Chinese parents were recruited. Results from the post hoc analysis of variance revealed that Chinese Canadian parents tend to use authoritative practices while the Chinese parents used more of the authoritarian practices. These findings revealed that due to cultural assimilation, the Chinese parents living in other western cultural settings tended to adopt more of the western families' PI beliefs than the Chinese families living in China. On the other hand, due to the cultural-preserving process, Chinese families living in other cultural settings still hold their original beliefs to some degree, which in turn keeps their PI practices in the middle between those of traditional Chinese families living in China and those of European families.

Rationale of the Current Study

In light of the previous studies on cultural aspects of PI, there is a need to explore the mechanisms behind the differences associated with culture and PI. More detailed studies are needed to discover the specific beliefs, values, expectations, and traditions that might explain how culture is linked with PI. The specific explanations for the varied PI expressions across different ethnic groups, in terms of ever-changing psychological factors (such as self-efficacy or role construction) and contextual factors, and differences based on cultural groups need to be explored.

In addition, the majority of previous studies of PI and cultural groups have been conducted in the United States across European American, Asian American and Latino American parents. Given the rapid increase in the number of immigrants to New Zealand and the diverse ethnic groups here, there is a need to study PI across the various ethnic groups found in New Zealand. This study will focus the cultural comparisons across Chinese New Zealand and European New Zealand parents in the Christchurch community.

Finally, only a few studies in the relevant area have employed a mixed methodology to measure the aspects associated with parents' cultural background (Huntsinger & Jose, 2009). In order to obtain more detailed information on how parents' cultural attitudes influence their PI, more studies should be conducted through mixed-method research approach. Hence the quantitative analyses could be used to measure parents' PI actions and perceptions PI, while the qualitative analyses are employed to explore more subjective and idiosyncratic experiences of PI, as well as to capture parent's unique perspective around the values, expectations, and cultural traditions that might motivate and guide their involvement in their children's education.

Research Objectives

In light of the above discussion and evidence to date, the objectives of the current research are as follows: (1) examine the possible significant group differences across European New Zealand (ENZ) and Chinese New Zealand (CNZ) parents in PI expressed in the following areas: establishing a home learning environment, maintaining regular communication with children and applying media/technology rules to children; (2) examine the possibility of significant group differences in the psychological factors of PI between ENZ and CNZ parents, in terms of parents' expectations for children's future, their perceived invitation from schools and children to participate in children's education, and their self-efficacy of PI experiences; (3) explore the possible significant associations within and between PI expressions, the psychological factors, the barriers of PI and demographic characteristics factors in shaping PI across ENZ and CNZ parents; (4) to examine the possible associations between CNZ parents' acculturation, PI expressions, the psychological factors, and the contextual factors in shaping their PI; (5) to examine the possible mediators in the pathway from ethnicity to PI expressions; and (6) explore how cultural beliefs, values, and traditions regarding education shape parents' PI attitudes and behaviours.

Chapter 3

Methodology

This chapter introduces the design and methodology of the present study, including the detailed descriptions of the participants, procedures, and measures. Since this study was conducted in both Chinese and English, a thorough description of the translation process is also included.

Research Design

A cross-sectional mixed methodology design was employed in the current study. According to Johnson and Onwuegbuzie (2004), mixed methodology research allows investigators to acquire a variety of information types around the research topic. In the present study, a mixed method approach provided a way to examine quantitative group differences in PI beliefs and behaviours and the degree of associations across study variables, while also considering more subjective and idiosyncratic experiences of PI at the individual level. This qualitative dimension attempted to capture parent's unique perspective around the values, expectations, and cultural traditions that might motivate and guide their involvement in their children's education.

Ethics

Ethical approval was obtained from the University of Canterbury Human Ethics Committee (please see letter of approval in Appendix A). In addition, informed consent was gained from each participant prior to their participation. Within the consent form, participants were informed that their participation was completely voluntary, that participation in the project had no bearing on their children's education

or relationship with their school or the University of Canterbury, and that all information would be kept confidential. The information sheet and consent form are included in Appendix A and Appendix B.

Targeted Sample and Recruitment

The participants targeted for the current study were parents with children who at the time were attending local primary schools in Christchurch. Previous studies suggest that parental involvement shows most variety in its forms and intensity during children's primary school years (Eccles & Harold, 1993; Hornby & Lafaele, 2011). As children enter middle school and secondary schooling, parents' self-perceived resources for PI diminish and PI continues to decline through secondary school (Walker, 2011). Therefore, parents whose children were at the time attending kindergarten or preschool and secondary school were excluded from the sample. As stated in the introduction chapter, up to now the majority of previous studies regarding PI and cultural groups have been conducted in the United States across European American, Asian American and Latino American parents. Given the rapid increase in the number of Chinese immigrants to New Zealand and the diverse ethnic groups here, this study focuses the cultural comparisons across Chinese and European parents in Christchurch.

Participant recruitment was facilitated in three ways. First, local state primary schools all located in the South West of Christchurch were asked to facilitate parental participation by including an advertisement in their school newsletter. These three schools were selected based on the high degree of their cultural integration. According to recent Ministry of Education estimates (2012) the ratio of Asian students ranged from 13% to 31% among these three schools, and the SES diversity

of the students' families (decile rating ranged from 2 to 9 among these three schools; Education Review Office, 2013). The contact details for the primary investigator were provided for parents via announcements made in school newsletters and/or mass emails. Secondly, to facilitate greater involvement of parents from Chinese ethnic backgrounds, the primary investigator for this study networked with a number of local Chinese community groups, parent groups, and specialist Chinese schools. Thirdly, snowball recruitment was also employed. Participants were asked if they would be willing to distribute a few study advertisements to their contacts in the Chinese community (friends, acquaintances, colleagues), who they thought might be interested in participating.

Participants

A total of 43 parents completed the surveys and interviews. Among these participants, 21 identified with a European New Zealand (ENZ) ethnicity, and 22 identified with a Chinese New Zealand (CNZ) ethnicity. As reported by both groups of participants, all of the children referred to in the questionnaires and the interviews were their eldest biological child at the primary school ages. All of the children were living at the time with both of their parents. In addition, all the participants reported their child's schools as multi-cultural environments.

This study included 33 female and 10 male participants. 21 of the target children were female and 22 were male. Among the parent participants, eighteen were working in an education-related field and 25 were working in other fields, such as marketing, hospitality and engineering. The average age of the current parent sample was 37.5 years (SD = 4.87) and the average age of their identified children was 7.7 years (SD = 2.44). Participants and their partners in the study were generally well educated with 86% of all the participants and 86% of their partners achieving at least

a bachelor's degree (or equivalent). Please see Table 1 and 2 in the results section for a description of the demographic characteristics of the sample and comparisons across the two groups of parents (CNZ and ENZ).

Procedure

All participants were asked to read a detailed information sheet explaining the study, the voluntary nature of their involvement, and the confidentiality of their responses, and sign a consent form before any data was collected. As a gratuity, participants were given a $10 gift card. Contact details were collected at initial contact with parents via their consent forms, and the investigator made follow up calls or sent emails to schedule the interviews and have the questionnaire completed.

As study participation involved completing a short questionnaire and a semi-structured interview, parents were encouraged to structure their participation in a manner that was most convenient for them. In general, most of the New Zealand European participants preferred to complete the questionnaire and the interview all at once. The investigator read the questions from the questionnaire and the interview script to the participants. Responses to the questionnaires were quantitatively coded according to the specific scale for that measure and open-ended items or qualifications of scale items were noted. For the semi-structured interview, participants' consented to audio recording the conversation. The questionnaire normally took 20 minutes to complete. The semi-structured interview took between 10 to 30 minutes to complete.

In general, most of the Chinese parents collected their questionnaires either at the first time they registered their interest with the researcher, or the questionnaires were mailed to them. Parents contacted the researcher once they had finished, usually one week after the initial contact with the investigator, to arrange the interview. All but one of the 22 CNZ participants were interviewed at the participant's home. Five

CNZ participants and two European participants chose to answer the interview questions in written form instead of having the conversation audio-recorded.

The interviews were conducted in two languages. When interviewing CNZ participants who felt more comfortable talking in their first language, they were welcome to speak with the investigator in Mandarin. Nineteen participants spoke in Mandarin during the interviews and the rest of the participants spoke English throughout.

Measures

Questionnaires. The following paragraphs describe the scales employed in the questionnaires. For the purpose of later data analysis, composite variables were constructed across the individual items of each specific scale. The questionnaire used in the current study contained seven sections for CNZ participants and five sections for ENZ participants. A variety of scales were used to assess parents' PI behaviours, parents' perceptions of their skills and experiences in PI, parents' perceived receptivity to their PI efforts from school and children , perceived barriers to PI, and the demographic information. The two sections containing questions regarding the acculturation level of participants and their eldest child were examined among CNZ participants only. The three versions of questionnaires (Survey for English speaking CNZ participants, Survey for ENZ participants and Survey for Mandarin/Cantonese speaking CNZ participants) are included in Appendix D, Appendix E and Appendix F.

Parental involvement in children's education. Parental involvement (PI) in children's education was assessed using the scale validated in Xu and colleagues (2010)'s analyses. As validated in Xu and colleagues (2010)'s analyses, 27 items were retained to examine PI in forms of communication between parents and children, TV

watching rules, support in school activities, homework help, homework frequency, parents' expectations of children's education achievement, and support in extracurricular activities. Feedback from the volunteers of the pilot study of the current project reflected that the original scale was too lengthy, and also the section of homework supervision and homework frequency seemed to be overlapping. Therefore, the original scales were shortened for the current study. The current study employed three scales assessing the level of PI expressed in such areas: establishing a home learning environment for children, applying media/technology rules to children and initiating regular communication with children.

(1) *Establishing a home learning environment.* Six items were included in this scale to identify the amount of effort parents made at home, in facilitating children's learning and education. Sample items include "I spend time with my child on maths" or "I review my child's homework". Participants answered the statements on "Yes" (1) or No (0) basis. Studies from Walker (2005) and Xu (2009) suggested good to modest reliability of this subscale (alphas ranged from 0.84 to 0.66). The subscale used in the current study had a satisfactory internal consistency reliability (alpha = 0.77). The composite variable of "Establishing a home learning environment" was the summed score of the participants' answers to the six items, and ranged from 0 to 6. The higher scores indicated higher involvement of parents' in a home learning environment.

(2) *Applying media and technology rule.:* Four items assessed parental rules regarding watching television and the use of video games, computers, and other electronic media and entertainment. For instance*:* "In the past semester, does your child have a TV in his/her room?" and "Are there family rules for how many hours he/she may watch TV on weekdays?"All items were rated with "Yes" (1) and "No" (0) responses. Items asking about the rules of exact TV time and TV programs were deleted from

further analysis, due to the poor internal consistency. The previous study from Xu and colleagues (2009) suggested acceptable reliability of the subscale (alpha = 0.76). The adapted subscale in the current study suggested that the internal consistency reliability for this measure was rather modest (alpha = 0.62); however, the corrected item-total correlations among the 4 items were all positive, ranging from .27 to .57. Therefore, these items were retained and the composite variable was created by summing the four items. The composite variable of "applying media/technology rules for children" ranged from 1 to 4, with higher score representing stronger rules of media/technology use.

(3) *Communication with children.* Two items queried parents' everyday communication with their child (usually the eldest one at the primary school age) regarding children's school and friends activities in the past month. The two items included were "How often do you talk with your child about his/her day at school?" and "How often do you talk with your child about what he/she does with his/her friends?" Both items were rated on 4 point scales ranged from 1 (Not at all) to 4 (Everyday). A previous study by Xu and colleagues (2009) reported that the communication subscale had an alpha of 0.75. In the present study, there was a rather strong association between these two items ($r = .58$; $p < .001$), therefore, for the present analysis the composite variable was made based on the summed score of participants' answers to these two items. The composite variable, ranged from 4 to 8 with higher scores indicating more frequent communicating with children.

Motivational factors of parental involvement. The following sections encompassed items assessing the motivational factors of PI in terms of parental

expectations towards their children, parents' self-efficacy of their PI skills and experiences, and their perceived receptivity to their PI effort from school and children.

(1) *Expectations for children's education.* Xu and colleagues (2010) revealed in their study that rather than considering parental expectations as one elements of PI performances, parental expectations should be considered as an independent factor which motivated parents' actual PI participation. Therefore the original subscale from Xu and colleagues' analyses (2010) examining parental expectations for children's education future were retained in the current study. Three items assessed parents' expectation towards children's current academic results, achievement in the future, and participation in extra-curriculum programs. Sample items include: "What are your expectations regarding your child's course marks/grades?" and "What is the highest academic level you expect your child to complete?" All three of the items were coded from 1 to 4, with 1 representing the lowest expectation and 4 representing the highest expectation. The composite variable "Parental expectations" was the summed score of the three items which ranged from 4 to 12. The results from the current study indicated that this scale also had acceptable internal consistency (alpha = 0.73).

(2) *Parents' perceived receptivity to parental involvement efforts.* Walker's (2005) model generated three subscales that assessed parents' perceptions of receptivity to their PI effort from schools, teachers and children. In the current study, only subscales assessing the parents' perception of the school and their child's response to PI were included. The subscale containing the items regarding parents' perceived receptivity from the teachers was not used in the present analysis, due to the poor item-total correlations and very poor internal consistency (alpha less than 0.6).

(2.1) *Parents' perceived child receptivity to parental involvement* Five items were included in the current study to examine parents' feeling of being encouraged by their child to be involved in their children's education. Sample items include: "My child had asked me to supervise his or her homework" and "My child had asked me to help out at school". Items were coded the same as the *School response to PI* measure. Previous studies (Walker & Hoover-Dempsey, 2001; Walker, Wilkins, Dallaire, Sandler & Hoover –Dempsey, 2005) suggested poor to acceptable reliability (alpha ranged from 0.37 to 0.75).The subscale used in the current study showed acceptable internal consistency (alpha = 0.78). given that a few data were missing, the composite variable of "Child response to PI" was the average score of the five items, ranged from 1 to 5, with higher numbers indicating that parents perceived their child to be more receptive to PI in their education.

(2.2) *Parents' perceived school receptivity to parental involvement*. Five items were included in the current study to examine parents' feeling of being encouraged by the school to be involved in their children's education. Sample items include: " I feel welcome at this school" and "Parents' activities are scheduled at this school so that I can attend." The scale was coded from "totally disagree" (1) to "completely agree" (5). The subscale was tested in a previous study (Walker & Hoover-Dempsey, 2001) and showed excellent reliability (alpha = 0.88). The analysis of internal consistency in the current study indicated a good reliability (alpha = 0.78). Since there were a few missing data on some of the items, a composite variable of "School response to PI" was the average score of the five items and ranged from 1 to 5. Higher

numbers indicated that parent's perceived a better response from the school to their PI efforts.

(3)*Self-efficacy for parental involvement skills and experiences.* As one of the components of the motivational factors of PI, Hoover-Dempsey and his colleagues (1992) included parents' self-efficacy regarding their ability to facilitate their child's education, as a primary predictor of PI. Although Hoover-Dempsey (1992)'s model was modified through later studies by Walker (2005 and 2007), parents' self-efficacy was retained as one of the significant factors in predicting PI. Walker and colleagues (2005) summarized that the scale of self-efficacy had alphas ranging from 0.78 to 0.81. The current study applied all of the seven items used by Walker's model, to examine parents' level of confidence and efficacy for their involvement in their child's academic and social development. Sample items include: "I know how to help my child do well in school" and "I feel successful about my efforts to help my child learn". The scale was coded from "totally disagree" (1) to "completely agree" (5). The internal consistency of the seven items was acceptable (alpha = 0.77). Due to some missing data on a few items, the composite variable of "PI self-efficacy" was the averaged score of the seven items and ranged from 1 to 5.

Parents' perceived life context. The current study developed three items about parents' commitment to work, family and other issues that could work as barriers of their involvement in their children's education. The three items were: "How much does your work interfere with your ability to participate in your child' education?", " How much does your family commitment interfere with your ability to participate in your child's education?" and "Does other responsibilities interfere with your ability to participate in your child's education?" All items were rated on 3 point scales ranged

from “Not at all” (1) to “Very much” (3). The subscale had an alpha of 0.75, indicating acceptable internal consistency. The composite variable of “Barriers to PI” was conducted base on the summed score of these three items, ranged from 3 to 9 with higher scores indicating more barriers hindering parents from being involved in their child’ education.

Acculturation of parents. The scale used in the present study to assess parents’ acculturation was based on the Suinn-Lew Asian Self-Identity Acculturation Scale (Suinn, Ahuna & Khoo, 1992). Twenty one items of the original scale assessed the acculturation level of Asian immigrants in their language ability, food, music and social network preferences. Coefficient alphas were reported in the previous studies ranged from a low of 0.68 to a high of 0 .91 (Suinn et al.'s ,1992; 1987). The current scale included several adjustments to the original version. For instance, “preferred food at home” and “preferred food at restaurant” was combined into one item, in order to shorten the time completing the questionnaire. Minor adjustments to the wordings were also made to fit the targeted population of the current research. Original options of “American” and “Anglos, Blacks, Hispanics” were replaced by “New Zealander” and “Maori, Pacific Islanders and other non-Asian ethnic groups”. After the adaptations, 13 items were used in the current questionnaire (see Appendix B for the full list). Sample items include “What language do your prefer to speak?” and “Whom do you now associate with in the community? ” Items were scored on a 5 point Likert scale with all items scored in the same direction with higher numbers representing greater acculturation to New Zealand compared to Asian cultures. For example, questions about language use and preferences were coded from “Asian only” (1) to “Only English” (5)”. The 13 items showed good internal consistency (alpha =

0.81) and the average score of the 13 items made up the composite variable “Parents’ acculturation”, which ranged from 1 to 5.

Acculturation of children perceived by parents. All of the CNZ parents were also asked to report their children’s level of acculturation. In this section, seven items in this section were adapted from Suinn (1992)’s acculturation scale and assessed children’s language ability, food, music and social network preferences. Items such as “What language can your child speak?” or “ what is the ethnic origin of the friends and peers your child has currently? ”were included. Items were scored on a 5 point Likert scale with all items scored in the same direction with higher numbers representing greater acculturation to New Zealand compared to Asian cultures. For example, questions about language use and preferences were coded from “Asian only” (1) to “Only English” (5)”.. Due to the missing data on a few of the items, the composite variable “ children’s acculturation” (alpha = 0.81), were the average score of the 7 items.

Demographics. Thirteen items in the demographic section were included to identify participants’ and their eldest child’s age, participants’ and their eldest child’s gender, the current school year of the children, the parents’ and their spouse’s highest education level, participants’ ethnicity and occupations, and the current household status (including single parent versus dual parent families, indication of child as biological, adopted, or step-child), and if the child’s school is a multiethnic environment.

Semi-structured Interview

The key objectives of the semi-structured interviews were to gauge parents’ perceptions of the degree to which their involvement in their child’s education was

related to their cultural beliefs and values. Different from the questionnaires, the questions prepared in the script of the interviews were only used to elicit participants' reflection of their PI actions and the motivations behind these. The following topics were covered in the interviews: (a) Participants' typical direct and indirect involvement in their children's education. For example… (b) Parents' perceptions of the reactions of their child when the parents tried to be involved with their child's education. (c) The parents' perspectives about the similarities and differences between their own parenting and the parenting of friends from the same ethnic group, and the parenting of friends from other ethnic groups. Finally, parents were asked about the obstacles which they considered to hinder their involvement in their child's education. Please see Appendix D, for a sample script of the semi-structured interview.

Language Translation

Since the study was conducted across both English and Chinese speaking participants, the original English questionnaire and script for the interview were translated into simplified Chinese by the principal researcher. In order to make sure that there was no bias in the process of translation, the translated Chinese version of the study materials was back translated again to English (referred as Eng. Version B). The translation work from Chinese to Eng. Version B was completed by a fluent bilingual translator from Lincoln University. Then, the original English version and Eng. Version B were compared and contrasted. There were no substantive differences between the two English versions. The specific analysis to the qualitative data will be explained in the next chapter, followed after the analysis to the quantitative data.

Chapter 4

Data Analyses

This chapter introduces the procedures for the quantitative and qualitative data analyses leading to the Results chapter. The analyses for the quantitative data are explained first, followed by the description of the qualitative data analyses.

Quantitative Data Analysis

The purpose of the quantitative part of the study was to compare the differences in parents' expressions of PI across ENZ and CNZ parents. The quantitative study was also aimed at examining the degree of association between and within PI expressions, motivational factors to PI, barriers to PI, acculturation of parents and children, and other demographic characteristics of parents. The outcome variables in the following analyses were the expressions of PI as measured by establishing a home learning environment, maintaining regular communication with child, and in applying media/technology rules. The primary predictor variable was the ethnic group. Secondary predictor variables of the current study included the motivating and facilitating factors for PI (parental expectations towards the child's future, the perceived receptivity from the school and child to PI effort, and parents' self- efficacy of their PI experiences) and the perceived barriers to PI in terms of parents' commitment to other aspects of their life. For CNZ parents, independent factors also included their self-reported acculturation level and their perceived acculturation level of their child. These variables, together with the demographic characteristics of the participants (age and education level), were transferred into SPSS version 20 (Statistical Product and Service Solutions) and analysed in following steps:

Step 1. The first step of the quantitative data analysis aimed at examining substantive group differences across ENZ and CNZ participants. Chi-square tests were employed to analyze the degrees of similarity and differences across ENZ and CNZ parents and their children in terms of their gender, the children's gender and their occupation (please refer to Table 1 in the results chapter). Variables where there were significant differences between the two sample groups were considered as covariates in the multivariate analyses.

Step 2. As the second step in the data analysis, demographic characteristics of the sample were compared across the two ethnic groups of parents employing multivariate analysis of variance (MANOVA) for continuous and ordinal data (please refer to Table 2 in the results chapter). These analyses examined the ENZ and CNZ parents' demographic characteristics in terms of their age, their children's age, participants' and their spouses' highest educational achievement. Same as in step one, variables with significant group differences were considered as covariates in the multivariate analyses.

Step 3. In responding to the first research question of the current study concerning group differences in expressions of PI, across ENZ and CNZ participants, multivariate analysis of variance (MANOVA) was employed with the composite variables of the three PI dimensions (PI expressed in establishing a home learning environment, in maintaining regular communication with child, , and in applying media/technology rules). The PI expressions with significant group differences across ENZ and CNZ participants were further examined in with multiple regression analyses to determine if ethnic group continued to predict PI over and above the motivational and self-efficacy variables.

Step 4. To examine the group differences in the motivational factors of PI (the parental expectations for children's future, the perceived receptivity from school and children to PI efforts and parents' self-efficacy for PI), a series of multivariate analyses of variance tests were employed. Same as above, the ENZ and CNZ parents' mean scores across these four dimensions were compared and contrasted (see Table 4). The motivational and efficacy factors with significant group differences across ENZ and CNZ parents were further examined in the multiple regression studies.

Step 5. To address the third aim of the study and examine the degrees of associations between and within the PI expressions, the motivational factors, barriers to PI and other demographic characteristics (parents' age and education level) of ENZ and CNZ parents, correlational analyses were carried out. Due to the significant differences between the two groups of participants in Step 3 and 4, the zero-order correlational analyses were conducted separately for ENZ and CNZ group (please refer to Table5). The degrees of associations between the predictors of PI (motivational factors, the barriers to PI, age and education level) and the various types of PI expressions were reviewed first. This was followed by the review on the degrees of associations within each set of variables.

Step 6. The current study also aimed to examine the associations between the acculturation of CNZ parents and their children and the PI related factors. Correlational analyses were conducted among CNZ group only and the degrees of associations between acculturation level of parents and children, PI expression, motivational factors to PI, barriers to PI, parents' age and education level were shown in Table 6.

Step 7. The final step of the quantitative analysis aimed to examining the role of ethnicity as a predictor of PI when including the covariates which were found in the above steps to also be associated with PI. Results from the multivariate analysis are shown in Table 7. Specifically, a hierarchical linear regression model examined the role of ethnicity as a single predictor of PI, and then in subsequent steps, additional covariates were included. Follow-up analyses were planned to examine the role of individual covariates as mediators of the link between ethnicity and PI, if ethnicity was no longer significantly associated with PI after the multiple regression analyses. These follow-up analyses were based on the procedures recommended by Preacher and colleagues (2007) incorporating a Sobel test from the results of simple regression models of the PI dependent variable regressed on the significant covariate, and the significant covariate regressed on ethnicity.

Qualitative Data Analyses

Translation. Since the questionnaires were conducted in both English and Chinese, all of the 19 Chinese interviewing transcriptions were translated into English by the researcher. To make sure that the principal researcher's own interpretation was not directing the wording of the translation, the translated English files were back translated to Chinese (referred as Chinese Version B). Backward translation was completed by a fluent bilingual translator who did not have any knowledge about the objects of the study. Then, the original Chinese version and Chinese Version B were compared and contrasted to make sure that there were no substantive differences.

Coding. After the completion of the translation, all of the transcripts were entered into Microsoft Excel for the purpose of coding and categorisation. A thematic analyses strategy was employed in the coding process of the current study, because it allows the researcher to control the variability of the coding strategy that is applied to the data. Thematic analysis was originally conceptualized as one foundational tool of searching, analyzing and reporting the thematic meanings, which was usually utilized in the coding process among different types of qualitative analyses (Boyatzis, 1998; Ryan & Bernard, 2000). Rather than seeing it as a tool of processing qualitative themes, Braun and Clarke (2006) argued that thematic analysis on its own could firmly stand as one independent qualitative analysis, which was characterized by its flexibility in manifestations of the coding process. According to Braun and Clark (2006) thematic analysis requires continued exploration between the raw data and emerging codes. Therefore, with this recursive coding process, the current author could move from detailed micro-coding of individual responses to broader categorization of responses across participants. To avoid the risk of "anything goes"

in searching and confirming of the themes, the current study followed Braun and Clarke's (2006) 6-phase guide in applying thematic analysis. The detailed description to the processes of arriving the themes and the broader categories are as follow:

(1) Familiarising with the data: During this phase I repeatedly listened to the audio records of each interview and make the transcription carefully. Once the entire qualitative data set were completed, I re-read all the transcriptions, and highlighted key terms relating with the PI expressions or the associated events. (2) Generating initial codes: I completed this phase by making notes besides each of the transcriptions and circling the representative phrase of participants. For instance, for the participant's statement of "I remember how I was when I was little, so I wouldn't push my child too hard", the key words of "remember how I was when I was little" and "would not push too hard" were extracted from the full sentences and noted in the separate cells besides the transcription, in Excel sheets. All of the interview conversations were coded for content and categorized according to major and minor themes, for the purpose of later analysis. This phase ended by generating the list of all the initial codes. (3) Searching for themes: After making sense to the list of the initial codes, I started to identify some data patterns based on these codes. This process involved grouping similar codes together, based upon the use of common key terms or conveyed meaning. Therefore participants' statements such as " I don't think pushing children would make them learn faster, well ..I certainly didn't enjoy those years when I was attending the local primary school in China" and "My parents had high expectation towards me when I was little, so now I wish my child to be nothing but a happy, kind person" were assigned to the same theme name of "Being reflective, using one's own experience to adjust their PI expressions". (4) Reviewing Themes: For the fourth phase I looked for the degrees of the similarities between each theme's

explanation. All of the themes and their coverage of the initial codes were reviewed, to check if certain themes could be combined together. The last step of phase four was entering the themes into each of the transcriptions, to determine if the themes summarized the participants' experiences. Several themes and codes were re-worked to increase representativeness of the participants' experiences of their PI and the related events. (5) Defining and naming themes: The final main themes that emerged were: PI Beliefs, Individual and Contextual factors that shape PI, PI Expressions, and Barriers of PI.

In order to check the reliability of the coding system, the primary author, a PHD student in psychology, and a master's thesis student reviewed the coding and categorizing process. The researchers initially worked independently on the same set of data and categorized from over 70 themes into four domains. Once completed, discussion ensued to determine agreement. An inter rater reliability estimate was calculated through Cohen's Kappa , which produces a coefficient between zero and one, with a higher score indicating greater reliability (.70 or above is considered good agreement; Fleiss, 1973). This analysis revealed reasonably good inter-coder reliability ($\kappa = .73$), suggesting general agreement for the categorization strategy.

Chapter 5

Results

Quantitative Findings

Descriptive statistics and subsample comparisons. The purpose of the first part of the quantitative analyses was to determine if there were significant group differences between ENZ and CNZ parents' across their demographic characteristics. Results shown in Table 1 and Table 2 indicate the degrees of the similarities of the categorical and ordinal characteristics between ENZ and CNZ participants.

In order to examine the substantive differences across the demographic characteristics between ENZ and CNZ group, I employed Chi-square analyses to compare the demographic characteristics across ENZ and CNZ parents and their children. The results shown in Table 1 indicate that there were no significant group differences across gender ratios of the participants and their children, between ENZ and CNZ participants. Within both ENZ and CNZ participants, the numbers of female participants were three times of the numbers of male participants. In terms of the children's gender, the numbers of male and female were equivalent. The only considerable group difference found between ENZ and CNZ participants was across their occupations. ENZ participants recruited in the current sample were much more likely to be working in education-related field, than were CNZ participants.

Table 1

Examination of significant group differences across categorical demographic characteristics of ENZ and CNZ participants

		European New Zealand Parents (n=21)		Chinese New Zealand Parents (n=22)			
Variables		Frequency	%	Frequency	%	X^2	*P*
Participants' gender	Female	15	71.4	18	81.8		
	Male	6	28.6	4	18.2	0.65	.42
Eldest child's gender	Female	10	47.6	11	50		
	Male	11	52.4	11	50	0.02	.88
Participants' occupation	Not education related	6	28.6	19	86.4		
	Education related	15	71.4	3	13.6	14.75	$<.01$

This has two implications for the current study. First, while neither of the small sub-samples would be considered representative of their larger ethnic population within the Christchurch region, this would be especially true of ENZ parents. Secondly, interpreting group differences across ethnicity should be treated with caution as the reports of PI for the ENZ parents may be rather high due to their professional involvement in the education field. These issues will be addressed further in the discussion.

Table 2

Examination of the continuous demographic characteristics of ENZ and CNZ participants

Characteristics	European New Zealand (N=21)		Chinese New Zealand (N= 22)		t	p
	Mean	SD	Mean	SD		
Age of participants	40.00	3.15	34.95	5.03	-3.90	＜0.05
Age of children	8.90	2.34	6.55	2.34	-3.54	＜0.05
Participants' highest educational achievement	3.29	.84	3.86	.71	2.43	0.07
Spouse' highest educational achievement	3.86	.71	3.76	.89	0.90	0.80

Table 2 displays four demographic characteristics of ENZ and CNZ participants (their age, their eldest child's age, the highest education level of the participants and their partners) that were examined with a MANOVA to test for significant group differences. The mean differences between the two groups across the age of parents and children were 5.05 and 2.35, when the average standard deviations were 4.09 and 2.34. The Cohen's effect size value of the age of parents (d = 1.23) and the age of children (d = 1.00) suggested a strong effect size, respectively. This indicates that on average, CNZ parents of children at primary school age tended to be younger than ENZ parents of the children at the similar age level. Meanwhile on average, CNZ children in the current sample were younger than the ENZ children. As stated previously, most of the participants have gained at least bachelor degree or equivalent . There was a small marginally significant group difference in participants'

level of education, with CNZ parents having gained slightly higher educational qualifications than ENZ parent. However, this difference was not seen for participants' partners.

Expressions of parental involvement and motivational factors. The purpose of the following part of the quantitative analyses was to determine if there were significant differences between Chinese New Zealand (CNZ) and European New Zealand (ENZ) parents' reflections on their own parental involvement - expressions and motives. More specifically, Table 3 and Table 4, shown below, display the descriptive statistics and mean comparisons between CNZ and ENZ parents' reflections of their PI expressions, their perceptions of their expectation towards children, efforts to be involved in their children's education, and the efficacy of their PI and perceived receptivity of PI from their child and their child's school.

The three indicators of PI expressions shown in Table 3, were the summed scores of the related subscales. For PI in establishing a home learning environment scores ranged from 0 to 6; and for the PI communication with children scale, scores ranged from 4 to 8. Table 3 shows that both ENZ and CNZ participants' group mean scores were greater than the scale midpoints for these expressions of PI. This indicated that in the current sample, on average both ENZ and CNZ participants acknowledged themselves as moderately involved in establishing their home learning environment and initiating communication with the children. Both ENZ and CNZ groups' mean scores in applying media/technology rules were well below the midpoint of the scale, given that the scale was scored from 0 to 4. Hence the sample tended to report themselves as rather low in applying media/technology rules in comparison to other forms of PI.

Table 3

MANOVA results examining group differences across the PI activities of ENZ and CNZ participants

Variables	European New Zealand Parents (n=21)		Chinese New Zealand Parents (n=22)			
	Mean	St. Dev	Mean	St. Dev	*F*	*P*
PI establishing a home environment	3.24	1.81	4.90	1.54	10.64	＜0.01
PI media/technology rules	0,51	0.30	0.70	0.30	4.31	＜0.05
PI communication	6.61	1.40	7.04	1.36	1.03	0.32

In order to examine the substantive differences within the PI expressions based on ethnicity, I employed a multivariate analysis of variance (MANOVA) to compare self-reports of parental involvement between the ENZ and CNZ parents. The results, shown in Table 3, indicated that there were significant differences between ENZ and CNZ participants' PI of establishing a home learning environment, initiating day to day communication with children and applying rules about children's use of media/technology. There was no significant difference between ENZ and CNZ parents in their reported communication with their children about education. The mean differences for PI in establishing a home learning environment and PI in

applying rules of media/technology use were 1.66 and 0.16, when the average standard deviations were 1.68 and 0.3. The Cohen's effect size value of PI establishing home learning environment ($d = 0.99$) and PI applying media/technology rules ($d = 0.53$) suggested a strong to medium effect size, respectively. This indicated that on average, CNZ parents perceived themselves as being much more involved than ENZ parents when they were at home. Also on average, CNZ parents considered themselves as more willing to apply rules about their children's using of media/technologies than did the ENZ participants.

Table 4 displays four composite variables of the motivational and self-efficacy factors of PI, namely the parental expectation for their children's education, parents' perceptions of their eldest child's and the child's school response toward PI effort and their attributions of the efficacy of their PI . The composite variable of parental involvement was the summed score of the related subscales. The scores for parents' expectations towards their child's educational achievement ranged from 3 to 12. All of the other three composite variables were the average values of the subscales' scores (scales ranged from 1 to 5). On average the ENZ parents' expectations of their child's educational achievement was well below the middle of the scale, while the CNZ parents' expectations were just above the midpoint of the scale. The other three variables' scores were ranged higher than the midpoint of the scale scores. This indicated that both of ENZ and CNZ participants considered receiving better than average responses from school and the eldest children about their PI efforts. In addition, all of the participants felt fairly confident about their PI skills and experiences.

Table 4

MANOVA results examining group differences across the psychological constructs of PI for ENZ and CNZ participants

	European New Zealand Parents (n = 21)		Chinese New Zealand Parents (n = 22)			
Variables	Mean	St. Dev	Mean	St. Dev	*F*	*p*
Expectations for children's education	4.57	1.29	7.60	2.02	33.90	＜0.01
Perceived Child receptivity to PI effort	2.53	0.75	3.50	0.95	12.12	＜0.05
Perceived school receptivity to PI effort	3.36	0.65	4.25	0.52	24.14	＜0.01
Self-efficacy for PI	3.90	0.59	3.73	0.89	0.54	0.47

The MANOVA analysis in Table 4 compared CNZ and ENZ parents' scores across the parental expectation, participants' self-reported responses from their children's schools to their PI efforts, their eldest children's responses to their PI, and their sense of self-efficacy concerning their PI. The mean difference between the CNZ and ENZ participants' expectation towards their children's future were 3.03 when the average standard deviation was 1.66. The Cohen's effect size value (d = 1.83) suggested a very strong effect size. Therefore, on average the Chinese parents held much higher expectation towards their children's future than did ENZ parents. There were significant group differences between ENZ and CNZ parents across their perceptions of school and children's receptivity to their PI effort. Compared with ENZ parents, CNZ parents' considered that their children and the schools responded significantly better towards their PI effort. The mean difference between ENZ and CNZ participants' perceived School receptivity to PI was 0.89, which was greater than the combined standard deviation (0.59). The group differences across the perceived eldest children's receptivity to PI was 0.97, which was also greater than the combined standard deviation (0.85). Thus, Cohen's effect size values indicated that these significant group differences across school (d = 1.51) and children's responses (d = 1.14) was quite strong. It also shows in Table 4 that although ENZ parents' average self efficacy were slightly higher than CNZ parents, this result was not statistically significant and the Cohen's effect size value (d = 0.23) suggested a rather weak effect. Therefore, ENZ and CNZ parents were on average more comparable in their level of confidence about their skills and experiences in PI.

Comparison of the associations between parental involvement related variables among ENZ and CNZ parents

Table 5 *Correlation matrix of ENZ and CNZ Participants' PI activities, perceptions and self-efficacy, and demographic characteristics (N = 43)*

Variables	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. PI home environment	1	.26	**.51***	**.58****	.28	**.40**	**.61****	**-.30**	.182	**-.56****
2. PI media/technology rules	**.34**	1	-.018	**.69****	**.59****	**.42**	-.08	-.24	.28	-.05
3. PI communication	**.50***	.08	1	.15	**.33**	.29	**.49***	**-.56***	.22	-.25
4. Expectations for children's education	**.41**	**.51***	.23	1	**.56****	**.34**	**.37**	-.15	.25	-.24
5. Perceived eldest child response to PI effort	**.31**	.05	.22	**.37**	1	**.58****	.10	-.20	.14	-.27
6. Perceived school response to PI effort	.078	.041	**.40**	**.39**	**.67****	1	**.33**	-.13	.19	-.14
7. Self-efficacy for PI	**.38**	.26	.13	-.07	-.09	-.18	1	-.19	**.38**	-.20
8. Barriers to PI	.16	.12	-.28	.18	.09	**-.44***	-.13	1	.18	.09
9. Parents' education level	**.51***	**.47***	**.59***	**.35**	**.31**	.12	**.39**	.18	1	.05
10. Parents' age	.05	.03	.02	.01	-.10	-.09	-.28	**.43***	-.07	1

Note. Coefficients for European New Zealand (ENZ; *n*=21) participants are located to the top-right of the diagonal, and coefficients for the Chinese New Zealand (CNZ; *n*=22) participants are located to the bottom-left of the diagonal.

**Correlation is significant at the 0.01 level (two-tailed).

The following part of the quantitative study examined the associations between and within the PI expressions and other related variables. Table 5 above displays a zero-order correlation matrix across the three forms of PI and related variables. Given that the acculturation were assessed among CNZ participants exclusively, the associations between the acculturation factors with other PI related variables were analyzed separately, as shown in Table 6.

Due to the significant differences between the two groups of participants in the first set of analyses, the correlation coefficients for the CNZ parents are displayed to the bottom-left of the diagonal in Table 5, while the coefficients for the ENZ parents are displayed to the top-right of the diagonal in the same table. In addition, due to the very small sample sizes of each group, correlations above .30 have been displayed in bold font, and correlations that are statistically significant at the standard 5% threshold and below are indicated with asterisks (*). Finally, variables that showed a substantial difference (≥ .30) in the correlations between the two groups are underlined to highlight the distinct patterns of associations for each group of parents. Taken together, there were 11 correlations that showed substantive differences among the two groups. Due to the small sample sizes, only those correlations that showed quite large differences (>.45) were significant when tested with the Fisher r-to-z transformations for independent samples.

The correlations across the first three variables shows the manner in which parental involvement expression variables are associated with one another. For both groups, PI in establishing a home learning environment was associated with increased PI in applying technology/media rules and PI keeping regular communication with children .

The next set of correlations were between the predictive factors (perceived receptivity from the eldest child and school to PI effort, parents' self-efficacy for PI and social factors to PI) and the three PI expressions. In terms of parental expectations for their children's future, results from the current study indicated that parental expectation was largely associated with higher level of PI in children's education: For both groups, PI in establishing a home learning environment was associated with increased parental expectations. PI in technology/media rules were also positively associated with parental expectations. These findings indicated that for both groups, parents with higher expectations were much more likely to involve in their children's learning at home, as well as to apply stronger rules for media/technology use with their children.

For both groups, the perceived eldest child receptivity to PI were positively associated with PI in establishing home leaning environment and PI in communication with children. One substantive between group differences were found across ENZ and CNZ parents. The association between perceived eldest child receptivity to PI and PI in applying media/technology rules among ENZ participants was much stronger when compared to this association among CNZ parents. ENZ parents who perceived better receptivity from their children to their PI were more likely to apply media/technology rules.

For both groups, parents who perceived their child's school to be more receptive to PI showed higher levels of PI communication. There were substantive group differences across ENZ and CNZ participants in terms of their associations between the perceived receptivity from school to PI and PI in establishing a home learning environment as well as PI in applying media/technology rules. Among CNZ participants there was virtually no association between perceived school receptivity to

PI and their PI in creating a home learning environment and media/technology rules. In contrast, for ENZ parents increased perceptions of school receptivity to PI was moderately associated with increased PI in the home study environment and increased use of media/technology rules.

In terms of parents' self-efficacy, both groups of parents' self-efficacy were positively associated with their PI in establishing home learning environment. Parents tend to involve more in their children's education at home when they felt confident about their PI effort. . The patterns of associations between parents' self-efficacy and other PI activities beyond home learning however differed substantively between the two groups. For ENZ participants, increased self-efficacy regarding their PI efforts was associated with more frequent communication with their children. For CNZ parents, this association was quite weak.

As for the perceived contextual barriers to PI, namely parents' other responsibilities from work and family, it had a negative association with PI in establishing home learning environment and in applying media/technology rules among the ENZ participants. Hence, the more barriers parents had in their life to PI, the less likely it would be for them to involve at home and to apply media/technology rules for their children. For CNZ participants, these associations appeared to be small. For both groups of parents, those who had more barriers to PI in terms of work and family commitments were less likely to maintain communication with their children about their education.

The last set of correlations were within the demographic characteristics of parents (education level and age) and the above variables. For CNZ participants, their PI in establishing a home learning environment and in communication with the

children were strongly associated with their own level of education. Parents with higher qualifications were more likely to establish a home learning environment and to communicate with their child regarding their education. These associations with parental education were weak among the ENZ parents. In terms of parents' age, All three types of PI activities were not associated with age among CNZ parents. For ENZ parents, these associations were also weak, expect for PI in establishing a home learning environment: ENZ parents were more likely to be involved at home in their children's education when they were younger.

The current study also examined the relationships between all of the predictive variables of PI. Results indicated that the patterns of associations intra-psychological motivators of PI across ENZ and CNZ participants were quite similar: For both groups, the perceived eldest child receptivity to PI were positively associated with parental expectations. For both groups, parents who perceived their child's school to be more receptive to PI showed higher levels of parental expectations. Only one discrepancy was found between ENZ and CNZ groups: For ENZ participants, increased self-efficacy of their PI skills was associated with higher parental expectations. For CNZ parents, this association was quite weak. Beyond this, both ENZ and CNZ participants' perceived receptivity from child were strongly associated with their perceived receptivity from school.

The social factors (parents' perceived contextual barriers and their demographic characteristics) were found associated with their psychological motivating factors of PI. Parents were less likely to perceive positive school receptivity if they perceived that they had more barriers of PI. This negative association was particularly strong among CNZ parents. For both groups of parents,

increased educational achievements were associated with increased confidence about their PI skills and experiences.

Associations between acculturation of parents and children and parental involvement - related variables. Table 6 below lists the correlations between the acculturation variables (the self-reported acculturation level of all CNZ parents and their perceived acculturation level of their eldest child), with all the PI variables and the motivating factors to PI. The composite value of parents' and their children's acculturation were the average score of the related subscales. A paired-sample T-test showed that on average, parents judged themeselves to be significantly less acculturated than their children (mean difference = 1.86, t (1,21) = 16.39, $p < 0.01$).

Table 6

Zero-order correlations between the acculturation levels of parents and eldest children, with PI expressions and motivators of PI (N = 22)

Variables	Parents' Acculturation Level M (SD) 2.02 (0.42)	Eldest Child Acculturation Perceived by Parents M (SD) 3.89 (0.47)
PI home environment	-.019	**-.393**
PI media/technology rules	**.354**	**-.403***
PI communication	.095	-.066
PI expectation	-.123	-.232
Perceived child receptivity to PI effort	-.190	**-.442***
Perceived school receptivity to PI effort	.064	-.109
Parents' self-efficacy for PI	.211	-.130

Due to the very small sample sizes of CNZ participants, correlations above .30 have been displayed in bold font, and correlations that are statistically significant at the standard 5% threshold and below are indicated with an asterisk (*). As shown in Table 6, the acculturation level of CNZ parents was not associated with most of the variables, expect for PI in establishing media/technology rules. Therefore CNZ parents tended to apply stronger rules to their children on their use of media/technology, if they considered themselves more acculturated to New Zealand society. In comparison, the eldest child's acculturation level had stronger associations with most variables. Furthermore, most of these associations with the child

acculturation level were negative, suggesting that a greater Asian acculturation (lower New Zealand acculturation) was associated with increased PI and other educational expectations and perceptions of PI. Moreover, Table 6 shows that the child's acculturation level reported by parents was negatively associated with PI in establishing a home learning environment and in applying media/technology rules. More importantly, the association between the perceived receptivity from children to PI and children's acculturation level was found as statistically significant. This indicated that parents were less likely to perceive a positive response regarding their PI efforts from their children, if they believed their child was more acculturated to New Zealand society. Although not statistically significant, children's lower acculturation level was also associated with higher parental education.

Multivariate analyses testing ethnicity as a predictor of parental involvement and possible mediating pathways. Table 7 shows the results of two hierarchical multiple regression analyses that examined the role of ethnicity as a predictor of PI in establishing a home learning environment and applying media/technology rules. The hierarchical modelling strategy first examined the role of ethnicity as a single predictor of PI, and then in subsequent steps additional covariates were included. For both analyses, step two included parental expectations, the parent's perceptions of the school and child's receptivity to PI, and parental self-efficacy. In the third step of the analysis both education level of parents and their age were included.

Table 7

Multiple regression analyses examining parental ethnicity and covariates as a predictor of PI establishing a home learning environment and applying media/technology rules (N = 43)

	PI Home Learning Environment (n = 43)				PI Media/Technology Rules (n = 43)			
Variables	B	S.E	Beta	*p*	B	S.E	Beta	*p*
Step 1. Ethnicity	1.56	0.53	.43	**< .01**	.19	0.09	0.31	***p*< .05**
Step 2.								
Ethnicity	.21	0.61	.06	0.73	-.14	0.12	-.22	0.25
Expectations	.45	0.15	.53	**< .01**	.11	0.03	.76	**< .01**
Eldest child receptivity	.13	0.33	.07	0.70	-.00	0.06	-.01	0.97
School's receptivity	.16	0.46	.07	0.73	.01	0.08	.04	0.84
Parents self-efficacy	1.02	0.29	.41	**< .01**	.05	0.06	.11	0.34
Step 3.								
Ethnicity	-.30	0.71	-.08	0.69	-.14	014	-.22	0.3
Expectations	.47	0.16	.55	***p*< .01**	.10	0.03	.69	**< .01**
Eldest child receptivity	.05	0.34	.03	0.89	-.01	0.07	-.03	0.90
School receptivity	.16	0.46	.06	0.73	.02	0.09	.05	0.82
Parents self-efficacy	0.91	0.33	.37	***p*< .01**	.02	0.06	.05	0.72
Parents' educational level	.01	0.31	.01	0.97	.07	0.06	.18	0.26
Parents' age	-.09	0.06	-.21	0.18	.00	0.01	.03	0.85

Note. PI Home Learning Environment: Step 1 R^2 = .18; Step 2 R^2 = .36; Step 3 R^2 = .57.

PI Media/Technology Rules: Step 1 R^2 = .09; Step 2 R^2 = .33; Step 3 R^2 = .45.

Results from the first analysis shown in Table 7 indicated that, as the sole predictor, ethnicity was a significant predictor of PI in establishing a home learning environment. As indicated in the earlier MANOVA results, compared to ENZ parents, CNZ parents were more involved in establishing a home learning environment. In the second step of the analysis, after controlling the effect from other factors, parents' ethnicity had no association with establishing a home learning environment. Rather, parental expectations and parents' self-efficacy were significantly associated with establishing a home learning environment. Parents' perceived responses to their PI efforts from the school and their eldest child had no impact on the level of PI in establishing a home learning environment. In the final step of the analysis, the demographic variables of parents' age and education level were added; however this did not substantively change the association of the other variables in the model. Of these two variables, parental age was a small (but non-significant) predictor of PI in establishing a home learning environment. Younger parents were slightly more involved than older parents. These results suggest that the initial significant ethnic differences in PI between ENZ and CNZ parents were completely explained by the covariates in the model. Parents tended to be more involved at home if they held higher educational expectation towards their children and if they were more confident about their PI skills and experiences. Overall, the results of the multiple regression showed that the final model explained just over half of the variance for PI in establishing a home environment, with a significant change in variance explained with each step.

Given the great effect of parental expectation and parents' self-efficacy on PI in establishing a home learning environment, Sobel tests were employed to examine if

these two factors were each mediating the link between ethnicity and home environment PI. Results from the Sobel test suggested that parental expectations fully mediated the link between ethnicity and the PI in establishing a home learning environment (Sobel Test = 2.89 (SE = 0.48), p <0 .001). However, parents self-efficacy did not act as a mediator of the link between ethnicity and PI in establishing a home learning environment (Sobel Test = 0.71 (SE = 0.25), p = 0 .47) and should be considered as an additional significant predictor of establishing a home learning environment.

In terms of PI in applying media/technology rules, results from the first step of the analysis suggested that, as the sole factor, ethnicity was a significant predictor of PI in applying media/technology rules. As suggested in the earlier MANOVA analysis, CNZ parents tended to apply stronger rules regarding their child's media/technology use then did ENZ parents. In the second step of the analysis, after adding the other variables, parents' ethnicity no longer had a significant association with their involvement in applying media/technology rules (although this association was not as dramatically reduced as in the first analysis predicting PI in establishing a home environment). Rather, parental expectations was the only variable found in the second step of analysis with a significant association with applying media/technology rules. After adding the demographic characteristics (parents' age and education level) in the final step of the analysis, the associations remained the same between each of the variables and PI in applying media/technology rules and neither of these demographic variables contributed significantly to predicting this form of PI. These results suggested that the initial significant ethnic differences in PI in applying media/technology rules between ENZ and CNZ parents were explained by the covariates in the model. CNZ parents applied more strict rules for using media or

technology because they held high educational expectation towards their child. Overall, the results of the multiple regression showed that the final model explained nearly half of the variance for PI in applying media/technology rules, with a significant change in variance explained with each step. Results from the Sobel test further suggested that parental expectations fully mediated the link between ethnicity and the PI in applying media/technology rules. (Sobel Test = 3.48 (SE = 0.09), $p < 0.001$).

Qualitative Findings

The first objective of the qualitative part of the analyses was to explore the subjective experiences and evaluations of participants' involvement in their children's education. In responding to this question, the data analysis organised participants' responses into four broad domains, including: (a) parents' beliefs about PI and the specific ways these beliefs shape parents' expressions of PI, (b) the individual and contextual characteristics and the specific ways these characteristics influence the expressions of PI, (c) the parents' expressions of PI, and their associations with the related factors, and (d) the barriers of PI. These domains are discussed as below, with themes and sub-themes included for each where relevant.

The second research question of the qualitative study aimed to explore the specific ways that the cultural/ethnic impact on parents' PI choices. Thus responses from ENZ and CNZ parents within each domain are compared and contrasted, to reflect their similar/different perspectives of the influence of ethnic or cultural values, traditions, and practices. To minimise bias from the author's own interpretation, summaries or key words from participants were retained and are presented in the description of the results below. When quoting from the participants to illustrate common themes, the ethnic group is identified with an 'E' for ENZ participants and a 'C' for CNZ participants along with the participant ID number.

Parental involvement beliefs. This category includes the themes regarding parents' values, philosophies, and attitudes towards their children and education, which were conceptualised by parents as the foundational beliefs that shaped their PI behaviours and styles. The following paragraphs introduce firstly the beliefs of PI as life education, which were associated with the more innovative, less structured type of

PI behaviours and styles, then the beliefs of PI as academic achievement, which were associated with the more structured, less innovative type of PI behaviours and styles.

Parental involvement as life education. These values and beliefs were more common among ENZ participants. Nearly 80% of them believed that PI should be less rigid, less structured, and involve more active learning. These parents tended to believe in holistic education. For instance, one ENZ parent mentioned that *"I believe everything in life is education*" (E12). Therefore, when they mentioned the value of the learning experiences, these parents tended to value the learning process more than the learning results. One of the ENZ participants reflected that "*We (ENZ parents) would stay on the same task for longer, to make sure that the child really understands the task*". Another ENZ participant (E10) who worked as an ECE teacher observed that "*Chinese parents tend to move on to the next task very soon, so that their children can learn faster; while we (European schoolteachers and other parents) would like to really make sure the child knows how to learn*". As a result, based on such PI beliefs, they considered that children could learn better from life experiences, rather than learning programs. Therefore the more active parental support, such as attending social or cultural events with children and participating in outdoor experiences, were commonly reported by these ENZ parents. More detailed discussions on the PI actions will be introduced in later sections.

Compared to the ENZ participants, fewer of the CNZ participants believed in the less structured and more innovative PI. Less than 30% of all the CNZ participants reported that PI doesn't have to be well-structured. Despite the fact that they claimed the practical skills were more important than the academic learning, their PI activities were mostly academic-focused. Arranging after school activities and supervising

homework were two of the most frequently mentioned PI activities among CNZ participants.

Parental involvement as academic achievement. Beliefs associated with more structured, less active learning PI were found mostly among the CNZ participants. 50% of the CNZ participants judged that the successfulness of their children's future depended entirely on the intensity of the parental support. They believed that children's positive development, especially in academics, needs carefully structured training activities and well-designed parenting strategies. "*As if our child is going to be in a battlefield, his father and I would like to 'arm' him with not only advanced knowledge of math or writing, but also extracurricular activities, so that he could be superior to the others*", mentioned one of the CNZ parents (C19). Based on this, CNZ parents in the interviews reported a high level of involvement in home-based supervision and extracurricular programs. Moreover, parents' high sense of competition was not limited to children's achievement, but also included their own mentoring skills and experiences. Two of the CNZ participants mentioned that "*I can't let my child fall behind from the start, just because I didn't provide him/her the best resources*" (C20 & C21). Three CNZ parents (C19, C20, & C21) reported that they read the child education books and took notes from these books almost every night, to make sure that they provided the most appropriate support to their children.

There were relatively less ENZ participants (30% of the ENZ participants) believing that PI should be well-structured and carefully designed. For ENZ parents who reported themselves as offering their children the more structured PI support, *"vigilant"* (E02 & E06) was how they described their PI styles. PI activities of these ENZ parents include the daily reviewing of children's homework and setting up reading or math quizzes every week. These parents also reported that they would like

their children to gain at least a bachelor degree in the future. This further reflects the results from the quantitative analysis, that when parents held higher expectations of their children, they tended to be more involved in establishing a home learning environment.

Individual and contextual factors that shape parental involvement. This major category encompasses the factors influencing PI that parents considered as coming from themselves, their children, or SES-related factors. The following sections discuss the patterns of associations between factors such as age, occupational background, and parents' PI decisions.

Parents' characteristics that shape parental involvement. Half (50%) of the CNZ and 30% of the ENZ parents reflected in the interviews that their age had a substantial impact on their level of involvement in their children's education. Participants reported that as they grew older, their PI style in general became less stressful and more flexible. Some of the parents attributed this to the perception that as they grew older, their expectations of themselves and their children both became more realistic. "*I feel like there are not so many 'musts' in life; children are allowed to make mistakes, as long as they learn the right things later*", said one of the participants (C06). Another ENZ parent reflected that "*As you (as a parent) grew older and became more mature, you started to realise that sometimes children have to make mistakes to learn. As parents you can't do this for them*" (E09). The age of the parents also seemed to impact their willingness to become involved in their children's education. Around 30% of ENZ and 40% of CNZ participants reasoned that as they grew older and became more mature, they were more willing to sacrifice for their children's education. "*Sacrificing your movie time for your children is not just about taking responsibility; it's also about your personal maturation and learning to*

compromise", reflected one participant during the interview (C18). This contrasted slightly with the quantitative findings, where there were small negative associations between age and parental involvement for the ENZ parents, and very few associations with age for the CNZ parents, except for their ratings of barriers to PI. In the quantitative part of the study, older CNZ parents perceived greater barriers to PI.

Also in contrast to the quantitative results, there where were few associations between the parents' occupational background and their PI. Participants in the interviews considered that their occupational backgrounds were influential for PI. Around 70% of ENZ and 15% of CNZ participants were working in an education-related field. These participants acknowledged that working in this field encourages them to pay more attention on their children's development and to participate more in facilitating their children's learning.

The experiences from one's childhood is another factor shaping one's PI expressions. Around 50% of ENZ and 60% of CNZ participants addressed the importance of being reflective and using their own experiences from their childhood to adjust how they were involved in the children's education. Parents reflected on some of the negative experiences from their childhood and decided not to make the same mistake with their children. One CNZ participant said that "*I remembered that I felt always under my parents' pressure when I was little and I was not happy at the time, so I won't repeat the same mistake with my child*" (C10). This was found to be especially common among CNZ participants when they explained their expectations of their children. 30% of CNZ participants talked about the pressures brought up by their parents' high expectations when they were young; therefore, they did not want to hold unrealistic expectations of their children.

Children's characteristics that shape parental involvement. Both ENZ and CNZ participants reflected that their child's age was one of the factors they considered when deciding the focus of their PI. During the interviews, the ENZ and CNZ parents of children attending early years of primary school believed that the practical skills development of children was more important during this age period. Therefore, during the early years of primary school they focused less on promoting academic learning and more on social skills development and emotional competency. One participant believed that "*I think at this age, her priority is to learn how to take care of herself, instead of memorising what 6 times 6 is*" (C08). Furthermore, the child's age can also impact parents' self-efficacy regarding their educational skills. 60% of the ENZ and 70% of the CNZ parents admitted that they were more willing to directly participate in their children's learning, when the children were younger. They reflected that when their children were older, the children may be less willing to take suggestions from their parents.

Half (50%) of the ENZ and 30% of the CNZ parents also admitted that their enthusiasm for being involved in their child's education was encouraged by their children's positive feedback to their PI efforts. Both ENZ and CNZ participants described how their child's positive attitude was a more powerful indicator for them to judge their PI efficacy than satisfying test results. One CNZ parent (C14) remembered that "*I felt frustrated when my son expressed that he hates practicing piano for long time. At those times I usually talk with him. If he really needs a break then we would stop for the day."* These parents reported that when their children showed poor receptivity to one type of PI support, even if it led to better achievement, they would feel discouraged and would try some other type of PI instead.

SES factors that shape parental involvement. Almost all of the ENZ and CNZ participants believed that their involvement in their child's education was largely influenced by their socioeconomic status. Around 60% of the ENZ and 80% of the CNZ participants considered that the available time and resources of parents were a much more powerful predictor of the level of PI support than was ethnicity. "*It's not about how much you are willing to be involved; it depends on if you have it (resources and awareness) or not*" was reasoned by both CNZ and ENZ participants (E03 & C21). One of the CNZ participants observed that *"It's NOT about if you are Kiwi or Chinese; it's always about the time and money. I looked around at my Kiwi neighbors and they were the same: They also have their children go to the private schools and send their children to all kinds of after school activities*" (C19).

Expressions of parental involvement. This major category encompassed the variety of ways participants described their involvement in assisting their children's education and learning. PI expressions are classified according to their form (direct versus indirect) and orientation (academic orientation versus non-academic orientation). The following sections introduce three types of PI actions: The direct PI behaviours in assisting children's academic learning, the indirect PI behaviours in assisting children's academic learning, and the PI behaviours in assisting children's non-academic development.

Direct parental involvement behaviours in assisting children's academic development. Direct PI behaviors are conceptualized in the current study as parents' explicit supporting behaviours in improving their children's learning. The most frequent action mentioned by both ENZ and CNZ participants is their involvement in improving children's reading and writing. Close to 95% of the ENZ participants and 70% of the CNZ participants described their daily activities such as reading books

with their child and listening to the stories written by their child. Facilitation of children's mathematics learning was also reported by both group of parents (40% of the ENZ participants and 50% of the CNZ participants). When describing their specific support in facilitating their children's mathematics learning, these participants tended to help only when their child had difficult homework questions. Supervising children so that they would stay on task was rarely (less than 10%) mentioned by either ENZ or CNZ parents.

Indirect parental involvement behaviours in academic learning. This category includes the implicit PI support in promoting those aspects of their children's academic learning performance that do not require direct participation from parents. For example, one of the frequently reported PI actions was keeping daily communication with children. A large majority of ENZ and CNZ participants (around 90% of each group) reported that they talk with their children every day about their schoolwork and the activities their children engage in with their friends. This corresponds with the findings from the quantitative analysis, where both groups of parents reported comparable levels of regular communication with their children.

Another frequently mentioned PI action was regular communication with the school and teachers. CNZ participants in the interviews reflected a much higher communication level with schools and teachers than did the ENZ participants. 70% of the CNZ participants listed "*keeping regular communication with the school and teachers*" as their primary way of implicitly supervising their children, while only 40% of the ENZ participants reported the same. There are two possible reasons behind this discrepancy: Firstly, most of the CNZ participants admitted that they were not confident about their understanding of the NZ school system, and therefore they needed more consultation from the school staff and teachers. Secondly, the relatively

high expectations of CNZ parents towards their children also led to parents' higher expectations towards schoolteachers' tutoring involvement. Two of the ENZ participants who worked as primary schoolteachers noticed that compared with ENZ parents, CNZ parents expected the teachers to pay more attention to their children. For instance, two of the CNZ participants mentioned similar concerns that *"Teachers in New Zealand are not strict enough with the children. They sometimes could be a little too positive"* (C19). These parents wanted more constructive criticism about their children's academic performances from the schoolteachers. Several CNZ parents admitted in the interviews that they sometimes asked for more homework exercises from the teachers. Also 30% of the CNZ participants in the interviews claimed that no one understood their children's needs and talents better than they did, and therefore their role in their children's education was more a matter of actively taking the lead, rather than passively following the instructions from the teachers.

Another discrepancy across the implicit PI support to children's development in academic areas between the ENZ and CNZ parents was their arrangement of extracurricular activities for their children. 80% of the CNZ participants reported that their children were attending at least two kinds of extracurricular activities each week, such as ballet, piano, and Chinese classes. Only 20% of the ENZ participants reported their children were attending regular after school classes. Instead, 60% of the ENZ parents preferred to provide learning materials (books or online learning games) to their children.

Apart from the above, some even more implicit ways of encouraging children to learn include providing children with personal space and seizing the moment to push the children. Both ENZ and CNZ participants mentioned that "*Sometimes you need to leave them alone* (E3)."and *"All you need to do is to let the child know you*

will be there when he/she needs you" (C6). Around 30% of the ENZ and CNZ parents talked about the importance of knowing their children's limits, so that they know when it's a good time to keep their children on task and when to take a break.

Parental involvement behaviours in promoting children's development in non-academic areas. In this sub-category, parents' support, either explicit or implicit, to support children's social/emotional development is discussed. As opposed to the results suggested by the quantitative study, where both ENZ and CNZ participants reported a relatively low level of PI in applying rules for media/technology to children, in the interviews, 40% of the ENZ participants and 60% of the CNZ participants mentioned their family rules to prevent children from using the TV/iPad/smart phone for long periods of time. However, the main motivations were different between the CNZ and ENZ participants. Most of the ENZ participants were concerned about the lack of opportunities for children to interact with their family members, while the CNZ parents worried about the impairment of children's eyesight when using the TV/iPad/smart phone for too long.

Intentional modeling of positive behaviours for children was reported by 30% of ENZ and around 20% of the CNZ participants. These parents believed that instead of applying strict rules and punishments, their children could learn better by observing parents' behaviour. For instance, some of the CNZ parents mentioned their way of educating their children to be "*xiao*" (treating seniors with respect and obedience). They believe that if parents treated the older generations nicely, children would watch and learn. Similarly, some ENZ parents used reading as one example. They usually chose to read, rather than watch TV in their leisure time, and this was observed by their children. Parents hoped that children would also start to appreciate the joy from reading.

Barriers to parental involvement. This category included the themes identified by both ENZ and CNZ participants as barriers that interfered with their involvement in their children's education.

Given the fact that more than 80% of the participants in the current study were working at the time, either full-time or part-time, the biggest barrier that both ENZ and CNZ participants identified was their commitment to work. In addition, for CNZ participants, a lack of understanding of the New Zealand primary school system and the learning materials was considered a substantial barrier. 70% of the CNZ participants reported that although their English level was sufficient for them to communicate with the school and teachers, they still felt confused and sometimes powerless when they tried to get more involved in their children's learning. Another common barrier identified by CNZ participants was the opinions from the older generation about educating (grand)children. In contrast with the ENZ families in the current study, none of whom were living with their parents, close to 30% of the CNZ families in the current study were living together with the older generation. The disagreement between the younger and older generation's beliefs in children's education made it difficult to be consistent when educating the children. The biggest argument that the older generation had with the young parents was that encouraging children to be brave and independent was irresponsible, since children should be protected all the time.

Cultural influences. The above comparisons of the ENZ and CNZ parents' view of PI beliefs, motivational factors, barriers of PI, and their actual expressions of PI reflected the explicit ways that the ethnic background shapes PI. The more

unspoken linkages between cultural background and PI choices need to be further described. The following sections discuss the cultural impact on PI related factors from two aspects; the social/educational policies of the country where the family used to live (for a few ENZ families, they had spent considerable time in the UK), and the changes brought by the acculturation after the family immigrated to New Zealand.

Cultural impact on parental involvement associated with social policies.

ENZ parents who used to live in other countries such as England and CNZ parents originally from Singapore and China reflected that their expectations for their children were much higher before they lived in New Zealand. Yet compared with the typical Kiwi parents, they still believed that their expectations for their children were higher. These participants speculated that this was largely to do with the different social and educational policies. The participants felt that in Britain and in China people in unskilled employment or with no educational qualifications were stigmatised and this led to people's high sense of competition.

Two ENZ participants (E04 & E08) had lived with their family in London for more than three years, and they admitted that their way of educating their children was much more strict during that time. These participants mentioned that the whole society in England was at the time under the influence of the "education priorities" from Tony Blair's government during the late 1990s. Hence in England people with better education had more access to well-paid job opportunities, while the New Zealand society does not judge one's success solely from his/her qualifications. Similarly, 50% of the CNZ participants compared their PI styles before and after they came to New Zealand. They felt that their expectations in terms of their children's academic performance became more realistic after they immigrated to New Zealand. CNZ parents also mentioned that in New Zealand, people in unskilled employment

could still experience life satisfaction, but they believed this was not possible in China. The bursary exam, in most Chinese parents' opinions, has become a crucial contest, which almost decides one's entire future. *"Being superior to others in the bursary exam is the only way to get a good life, if you were not born rich"*, said one of the CNZ participants (C10).

Cultural impact on parental involvement associated with acculturational factors. It contrast slightly with the quantitative findings, where the acculturation level had little associations with the expressions of PI and other related factors, around 65% of the CNZ parents reasoned that their acculturation or Westernization after they immigrated to New Zealand had substantive influence on their PI activities in their children's learning. *"As now we moved to Christchurch, I'm under less pressure to push my child"*, reported one of the CNZ participants (C5). 60% of the CNZ participants reflected that their PI style now is more active. Interestingly, despite the fact that most of the CNZ participants (65%) believed their PI styles were *"Kiwi-ised"* (C5) and *" Now I keep in mind that it's important to offer your children a relaxing and happy learning environment"* (C10), their children still attend at least two kinds of after school activities.

The acculturation of ENZ parents after they lived in New Zealand was associated with the motivational factors and barriers of PI as well. 30% of all the CNZ parents reported that their acculturation encouraged the self-efficacy of their PI experiences and skills. *"I felt more confident when I discovered that my beliefs about parenting are quite similar with those of the Kiwi parents from my daughter's school"*, reported one of the CNZ participants (C5). 20% of the CNZ parents admitted that as they became more familiar with the NZ school system and the learning

materials used by the school, they were more confident to communicate with schoolteachers and other Kiwi parents to facilitate their children's learning.

Chapter 6

Discussion

Review of the Current Study

Most of the previous studies on factors associated with PI examined either the associations between the psychological motivator's impact on PI (Hoover-Dempsey, Bassler, & Brissie, 1992; Seefeldt, Denton, Galper, & Younoszai, 1998) or the associations between cultural and social factors and PI (Zhang, Hsu, Kwok, Benz, & Bowman-Perrott, 2011). As addressed in Bronfenbrenner's ecological theory (1979), the development of behavioral patterns can be shaped by a number of factors at different contextual levels including the broader social and community environment. Therefore, parents' self-perceived motivational factors of PI ought to be examined collectively with parents' personal characteristics and their contextual factors, such as their cultural or ethnical background, in predicting how PI is expressed and the level of engagement.

To address the above issues, the current study examined the PI expressions and perceptions of motivational factors across ENZ and CNZ parents, as well as their perceived contextual barriers, their demographic characteristics, and the acculturation status of CNZ parents and their children. The following sections will compare and contrast the findings from the quantitative and qualitative analyses along with the findings from previous research. In responding to the research aims stated in the introductory chapters, the following sections will first summarize similarities and differences between ENZ and CNZ parents' PI expressions and their perceived motivational factors of PI, and the association patterns between all the PI-related variables will then be discussed. After that there will be discussion of the predictive

power of ethnicity to PI and the mediators. Finally, I will describe how PI expressions and attitudes were associated with their culturally driven beliefs, values, and traditions.

Group Differences in Expressions of Parental Involvement Across ENZ and CNZ Parents

The first aim of the present study was to assess the significant group differences in PI in establishing a home learning environment, applying rules for media and technology use for children and maintaining regular communication with children across ENZ and CNZ parents. Results from the quantitative analyses indicated that on average, CNZ parents of primary school-aged children tend to perceive themselves as more involved in facilitating their children's home learning environment. Compared to CNZ parents, ENZ parents of primary school-aged children on average were less likely to interfere in their children's learning at home. This is in line with findings from the qualitative data analyses of the current study, where most CNZ parents addressed the necessity of parents' intense home tutoring. Although the level of PI in the non-home environment was not measured in the quantitative analyses, the differences between ENZ and CNZ parents' PI in this area were revealed through the qualitative findings. Nearly all of CNZ parents in the present sample mentioned their arrangements of more than two types of after-school or weekend learning programs for their children. In comparison, most of the ENZ parents' PI in the non-home environment was shown to be less structured.

These findings are highly consistent with findings from previous studies assessing the level of parental engagement in home-based vs. non-home environment activities among Asian and/or Chinese and Western parents. (Cai, 2003; Chen & Stevenson, 1989; Cheung & Pamerantz, 2011).Chen and Stevenson (1989) assessed Chinese, Japanese and American parents' levels of home-based involvement in their

primary children's education. Their results showed that apart from parents' own self-reflections of their PI, the school teachers and their children also reported that Chinese parents spent significantly more time helping their children with homework than did American and Japanese parents. Japanese parents were reported as involved relatively less than Chinese, yet more than American parents in home-based activities. This is in line with previous cross-cultural PI studies conducted among parents of preschool or high school students (Cai, 2003; Pan et al. 2006), that Asian, and especially Chinese parents, are more involved more in home-based activities than European parents.

In terms of PI in applying media/technology rules, the results of the current study suggest that compared with ENZ participants, CNZ parents reported significantly higher levels of involvement in applying rules for children's media/technology use, indicating that on average Chinese parents tend to set up more explicit rules than European parents. However, this finding does not indicate that ENZ parents are not aware of the problem of children spending too much time using iPads, smart phones, and other media technologies. The results of the quantitative analyses indicated that there were comparable amounts of ENZ and CNZ parents showing concerns that their children were spending too much time with modern technologies. Taking both quantitative and qualitative analyses together, the current study suggested that both ENZ and CNZ parents were reasonably aware of the problem, but their forms of interference were shown to be different. While the CNZ parents tended to apply more explicit rules regarding hours spent on media/modern technology, ENZ parents tended to encourage their children to become more engaged in outdoor and social activities. This difference between the two groups of parents in the quantitative analyses is also reflected in the qualitative findings. In order to promote children's social skills development, ENZ parents believe that parental persuasion will be more

effective if it is less rigid and less assertive, while CNZ parents believe more in systematic training and strict guidance. These distinctive forms of PI instructions are well documented in previous research examining PI style differences across cultures (Huntsinger & Jose, 2009; Lau, et al., 2011). Both studies suggested that Chinese parents, regardless of living in a Western culture, Hong Kong, or mainland China, reported themselves and school teachers as using more structured coaching to help their children practice academic related skills than American parents. In comparison, American parents were shown to utilize an informal way of teaching and instruction more than Chinese American parents, to encourage their children's autonomy and spontaneous learning.

The quantitative results of the current study showed that there were no substantive group differences in PI expressed in maintaining regular communication with children about their school, friends, and other activities. This finding is in line with the qualitative analyses in which a majority of ENZ and CNZ parents admitted that they talk with their children every day about their schoolwork and peer activities. Findings from the quantitative and qualitative results are also in line with most of the previous findings showing that Chinese parents from immigrant families tend to communicate more with their children to assure better parental monitoring (Lau et al., 2011; Tsui, 2005). Yet, in Ji and Koblinsky's (2009) study, the results suggested otherwise. Ji and Koblinsky indicated that within their sample, only a few Chinese parents actively maintained communication with their children, and these parents also rarely engaged in their children's learning at home. A possible explanation of the discrepancy between the current finding and Ji and Koblinsky's (2009) study may be that Ji and Koblinsky's study was conducted among parents from a low socioeconomic background. Only 15% of all the participants in their sample had

received a college education, and more than 60% of the parents were working at non-skilled occupations. Compared to Ji and colleagues' sample population, the participants (both ENZ and CNZ) recruited in the present study mostly worked at skilled occupations, and a large majority of them had received tertiary education. As suggested by previous researchers and educators, parents from a socioeconomically advantaged background possess more resources to participate in their children's education (Arnold et al., 2008; Biedron, 2012; Tekin, 2011; Zhang et al., 2011). Therefore, CNZ and ENZ participants in the current study represent middle-class parents and hence embrace more social and cultural capital to assist their children's future success.

Group Differences in Perceived Motivational Factors of Parental Involvement Across ENZ and CNZ Parents

The second research aim of the current study was to explore the possible significant group differences across ENZ and CNZ parents' psychological motivating factors of PI, including parental expectations for their children's education future, parents' perceived receptivity from the eldest child and the school to their involvement effort, and parents' self-efficacy of their PI skills and experiences.

Results from the MANOVA analyses showed that CNZ parents reported a significantly higher level of parental expectations than did ENZ parents . This indicated that on average, Chinese parents had much higher expectations for their children's current academic achievement and future education outcomes. This finding is highly in line with suggestions from the previous cross-cultural studies on parental expectations (Cao, et al., 2007; Ji & Koblinsky, 2009; Tsui, 2005; Yao, 1995). Cao and his colleagues (2007) recruited primary school-aged students who lived in China and Australia and assessed their perceptions of their parents' expectations for their

mathematics achievement. The results indicated that students who lived in China perceived much higher expectations from their parents than did students who lived in Australia. Interestingly, findings from the current qualitative analyses suggest that most CNZ parents were well aware that unrealistic expectations could bring stress to children and have a negative impact on their learning motivations. However, while claiming that they try not to put too much pressure on their children, they still expected that their children could be superior to others. The disparity between parents' awareness of the impact of unrealistic expectation and their requirement of their children to be superior to others are thought to be partially caused by immigrant parents' acculturation, in terms of their traditional Chinese value preservation and Western-leaning cultural assimilation. More discussion of this area will be conducted in later sections.

The results of the current study suggest that compared to ENZ parents, CNZ parents reported a much higher level of receptivity from their eldest child and the school to their PI. This is in line with the finding that ENZ and CNZ parents' self-efficacy of their PI skills and experiences were at a comparable level. Hence in the current sample, Chinese and European parents on average are equally confident in participating in their children's learning. The above findings are astonishing at some level, given that Chinese parents' instructions are more assertive and strict while European parents' support is more active. Meanwhile, most of the previous findings suggest that parents from immigrant families tend to have less confidence in being involved in their children's academic learning (Buki, et al, 2003; Ji & Koblinsky, 2009). There are two possible reasons for this. First of all, the current study assessed only parents' perception of receptivity from school and children. The actual feedback from schools and children toward their PI effort needs to be further investigated.

Secondly, 70% of the CNZ parents of the current sample stated in the interviews that they received their tertiary education in New Zealand. Some of them started to receive their education in New Zealand as early as high school. Hence, the current sample population is much more likely to be more acculturated by the mainstream society of New Zealand.

Correlates Among Predictors and Parental Involvement Variables Across ENZ and CNZ Parents

The current study aimed to examine the patterns of the associations between the PI expressions and the predictor variables of PI expressions across the ENZ and CNZ groups. Results from the zero-order correlations revealed that the degrees of associations between the predictors of PI and PI expressions differed substantively between the two ethnic groups. Generally speaking, European parents' participation in their children's education is more likely to be influenced by predictive factors including all of the psychological motivators, their perceived contextual barriers, and their age. In comparison, these predictors had less impact on CNZ parents' forms of involvement. Out of all the predictive variables, parental expectations of children's education future were the most significant correlate found as it was associated positively with PI expressions. Both European and Chinese parents were more likely to be involved in their children's education, across all types of PI, if their expectations for their children are high. This is in line with the positive correlations found between the parental expectations for children's education future and parents' self-efficacy of PI. Both ENZ and CNZ parents who held higher expectations for their children's education future were more likely to feel confident about their skills and experiences to promote their children's learning. The positive association between parental

expectations and high level of PI support in children's education was well documented in most previous research (Cao et al., 2007; Tsui, 2005). Cao et al. (2007)'s indicated that parents tended to provided more emotional support regarding children's academic learning, if their aspirations to their education future were high. However, Ji and Koblinsky's (2009) study findings indicated that although Chinese American parents in the sample population reported above average expectations for their children's academic and future career success, these parents possessed only limited time, means, and confidence to join their children's learning activities and thus their participation in communication with children and other home-based support activities are low. Hence, parents' expectations for their children's academic achievement are not always associated with their level of PI engagement, especially among socioeconomically disadvantaged families.

In terms of demographic characteristics of parents, education level was significantly associated with only CNZ participants. Results indicate that Chinese parents with a higher education background tend to become more involved in establishing a home learning environment and communicating with their children. The high correlations between parents' education level and their involvement level and perceptions among CNZ parents was supported by Ji and Koblinsky's (2009) study indicating that parents from lower education background tended to be less involved in their children's learning. Meanwhile, Sheng's (2011) exploratory study conducted in Beijing also revealed that parents' who received tertiary education were more likely to involve in their children's education, in helping their children with decision making and home tutoring. For European parents, education level of parents did not impact their level of PI across all three types of expressions. The Finding of no association between European parents' level of engagement and their education

level was surprising, yet still in line with Green et al.'s (2007) study conducted among American families living in the United States. Results from their study indicated that compared to parents' psychological motivational factors of PI, family SES variables only accounted for a small amount of parents' PI level variance.

It's important to mention that although the associations between parents' education level and PI variables were rather weak in the quantitative analyses, results from the qualitative analyses of the current study reflected that both ENZ and CNZ parents acknowledged that both parents' education and income level were influential in shaping their PI involvement. These qualitative observations were in line with findings from previous work conducted across different ethnic groups of parents, which all supported that parents' education and income level were important factors associated with parents' level of involvement across various PI expressions (Arnold et al., 2008; Biedron, 2012; Zhang et al., 2011). For instance, a study conducted by Biedron (2012) suggested that parents' education level is one of the key predictors of parents' support for children's extracurricular activities and timetable arrangement. Same as the qualitative finding from the current study, Biedron (2012) also suggested that parents from socioeconomically advantaged background tend to arrange more activities for children's after school routines. The contradictory findings between the qualitative and quantitative analyses may be due to the average high education level of the current sample population and the high percentage (80%) of ENZ parents working in education-related fields; therefore, the associations between education level and PI level were biased and hence minimized.

The only obstacle found to be significantly associated with both groups' parents' involvement was their perceived contextual barriers of PI. When there were too many work/family/other interferences that parents needed to attend, both

European and Chinese parents were less likely to communicate with their children. Results from the qualitative analyses also suggested that for both ENZ and CNZ parents, the biggest obstacle to becoming more involved in their children's education was lack of time and energy. The negative association between busy time schedules and the enthusiasm to join conversations with children has previously been well documented (Hornby & Lafaele, 2011; Ji & Koblinsky, 2009; Sheng, 2012). Ji and Koblinsky's exploratory study showed that despite the willingness of parents' to become more involved in their children's learning, their peak business hours conflicted with their children's school meetings time.

Association Patterns Between Parental Involvement-Related Variables and Acculturation of CNZ Parents and Children.

The current study also explored the patterns of the associations between CNZ parents and their children's acculturation status and CNZ parents' involvement expressions and their psychological motivators. Compared to parents' acculturation, children's acculturation was found to be more influential in predicting PI expressions and motivations.

Contrary to parents' acculturation level, children's acculturation was found to be negatively associated with most of the PI expressions and motivators in the current study. This indicated that as parents perceived their children to have a higher Western acculturation, the less they would participate in their children's education. These negative associations were expected, given that previous research (Buki et al., 2003; Costigan and Dokis, 2006; Kim, Shen, Diana, Chen & Wang, 2013; Moreno & Lopez, 1999) conducted among Asian immigrant parents living in Western societies revealed a very similar tendency. It is worth noting that different from the previous studies, where children's acculturations were self-reported, the acculturation level of children

in the current study were derived from their parents' reports, considering that primary school aged children were not mature enough to answer the cultural identity questions. The previous studies (Costigan & Dokis, 2006; Crane, So, Larson & Hafen, 2005) were able to address the significance of the acculturation gap between parents and children. When parents perceived themselves as oriented more to a Chinese acculturation while their children had developed more of a Western acculturation, then Chinese parents were less likely to be involved in their child's education (Costigan and Dokis, 2006). This was attributed to increased conflict between parents and children regarding education as children's acculturation shifted from that of their parents to that of their peers. Thus, parents felt less welcomed by their children in their educational involvement (Costigan & Koryzma, 2011; Kim, Chen, Wang Shen &Orozco-Lapray , 2013; Farver, Xu, Bhadha, Narang & Lieber, 2007).

The results of the current qualitative analyses also indicated that changes of parents' PI were associated with parents' Western cultural assimilation or preservation of traditional Chinese cultural involvement. As mentioned previously, despite that most of the CNZ participants believed their PI styles were to some extend "Kiwi-ised" , their children still attend at least two more kinds of after school activities than ENZ children. Also, CNZ parents' expectations for children's future and their own PI skills and efficiency were shown to be much higher in the interviews, compared to ENZ parents'. The contradiction between Chinese immigrant parents' willingness to lower their parental pressure and their actual high level of intense parental instructions are thought to be partially attributable to these parents' process of cultural assimilation and preservation between the Chinese and Western mainstream value systems. The phenomenon of Chinese immigrant parents considering their PI actions and attitudes somewhere between Chinese and Western

traditions are supported by previous research (Cao, et al., 2007; Chuang & Su, 2009). These studies indicated that Chinese parents living in a Western cultural setting usually chose less assertive forms of PI than those parents living in China, and yet their PI actions were considered more vigilant than those of most of the European parents.

Ethnicity as a Predictor of Parental Involvement Expressions.

The above findings and the previous research (Cai, 2003; Cheung & Pamerantz, 2011; Huntsinger & Jose, 2009; Ji & Koblinsky, 2009; Lau et al., 2011) suggested that the level of PI expressed in establishing a home learning environment and in applying rules for media/technology use for children differed greatly based on ethnic group. However, past research so far has been unable to demonstrate whether ethnicity can explain the parents' PI level as an individual predictor, along with other psychological motivators and social factors (education level and age of parents). The next section of the discussion chapter will describe the role of ethnicity as a predictor of parents' level of PI expressed in establishing a home learning environment and in applying media/technology rules for children. The mediators of the pathway from ethnicity to PI will also be discussed.

Results from the hierarchical regression models indicated that in terms of PI expressed in establishing a home learning environment, parents' ethnicity could not predict parents' level of involvement when controlling the effect of motivating factors. Instead, parental expectations for their children's education future and parents' self-efficacy of their PI skills were identified as the key predictors of PI expressed in establishing a home learning environment. Further, a Sobel test suggested that parental expectations fully mediated the link between ethnicity and PI expressed in establishing a home learning environment. These findings revealed that parents were

more likely to join their children's learning at home if they held higher expectations for their children's education future and if they felt more confident about their PI capabilities. Likewise, ethnicity could not predict the level of PI expressed in applying media/technology rules after controlling the effect of parental expectations for their children's education future. A Sobel test suggested that parental expectations fully mediated the link between ethnicity and PI expressed in applying media/technology rules. Hence, parents tend to apply stronger rules of media/technology use for children if they have higher expectations for their children's education future. These findings are also well supported by the qualitative analyses of the present study, where both ENZ and CNZ parents who hold higher-than-average expectations for their children's education future admitted that their PI style was much assertive and vigilant.

Specific Cultural Beliefs, Values, and Traditions Regarding Education Shape Parental Involvement Attitudes and Behaviors.

Previous studies discovered a range of differences in PI behaviours (Cai, 2003; Chen & Stevenson, 1989; Cheung & Pamerantz, 2011) and PI attitudes (Tsui, 2005; Yao, 1995) between Chinese and European parents. However, there is a lack of studies associating parents' culturally shaped beliefs regarding education and parenting with parents' PI attainment. The qualitative findings of the current manuscript revealed that parents' PI behaviors were motivated by their PI-related beliefs, which were further influenced by their culturally driven values and beliefs regarding education and parenting.

Taking all the evidence from the qualitative analyses into consideration, CNZ parents generally tend to believe that education should be results-oriented, while most ENZ parents value the learning process more than the learning results. To be specific,

CNZ parents in general tend to consider a type of PI action beneficial for their children if that particular PI action can demonstrate an immediate effect on children's learning outcomes. In contrast, ENZ parents would like to wait for longer till more solid improvement in children's learning. Discrepancies within these beliefs motivate parents from the two ethnic groups to participate differently in promoting their children's learning. For instance, both findings from the quantitative and qualitative results revealed that CNZ parents were more involved in home tutoring, arrangement of private lessons, and application of strict rules for media/technology use, since these activities can normally bring improvement sooner. Instead, ENZ parents tend to facilitate children's learning through playing and casual conversations. Meanwhile, they also provide more opportunities for their children's social experiences. Acknowledging the value of the learning processes might bring less immediate improvement of children's academic achievement; however, ENZ parents believe that these actions will be beneficial for children's future development and their all-around well-being.

Findings from the qualitative analyses also suggested that CNZ parents felt obligated to provide the most attentive parental instructions to achieve their children's future career success, while ENZ parents tended to consider independence and practical skills the keys to accomplishment. Hence CNZ parents' PI actions are more assertive and well structured, while European parents interfere less in children's specific learning tasks and participate more in outdoor activities. Most previous researchers (Pan, et al., 2006; Sheng, 2012) attributed these discrepancies to the values of individualism versus collectivism among Chinese and Europeans: European parents judge one's achievements as personal successes, while parents from Chinese

cultural background feel they should work together with their children to bring the family glory.

Strengths and Limitations of the Current Study.

To date, the majority of existing PI research has focused on impacts of PI on children's academic and social development (Fan & William, 2010; Lau et al., 2011; Parker, et al., 1999). There are relatively few empirical research studies examining the association patterns between PI actions, PI-related perceptions, and parents' individual factors (Antonopoulou, et al., 2011; Epstein & Van Voohis, 2001; Walker et al., 2007). Most importantly, although studies have examined the differences in PI patterns based on parents' ethnic groups (Cheung & Pomerantz, 2011; Huntsinger & Jose, 2009; Kung, 2003), the predictive power of ethnicity on PI level has rarely been examined when controlling for the impacts of motivational and social factors.

Lastly, most of these studies were conducted in North American or European countries (Chen & Stevenson, 1989; Huntsinger & Jose, 2009; Ji & Koblinsky, 2009; Pan et al., 2006), and few studies have been conducted in Oceania (Cao, et al., 2007; Hornby & Lafaele, 2011; Zhang, Keown & Farruggia, 2014). The current study attempted to address this gap by conducting an empirical study across CNZ and ENZ parents' PI patterns, in terms of their PI actions, perceived motivational factors, contextual barriers, and demographic (SES) characteristics.

In terms of methodology, most of the previous studies utilized either a quantitative (Cao et al., 2007; Huntsinger & Jose, 2009; Lau et al., 2011) or qualitative (Sheng, 2011) research design to evaluate parents' engagement level and their PI attitudes. The current study employed a mixed-methods research method. So

that the quantitative analyses were used to measure parents' PI level more precisely while the qualitative analyses were employed to explore parents' education-related values and cultural traditions that might guide their choices of PI types in their children's education.

Although the current manuscript attempted to address the above gaps of previous research in relevant fields, there are some limitations that exist within the study. First of all, despite the effort the current study made to survey parents' level of PI across a variety of expressions, the types of involvement that were actually analyzed were limited. Only three types of PI expressions (establishing a home learning environment, maintaining regular communication with children, and applying media/technology rules) were retained in the data analyses. Scales assessing PI expressed in supporting school-based activities and children's extracurricular activities were excluded from the current analyses, given their low reliability and convergent validity. Although findings from the qualitative analyses remedy this gap to some degree by revealing differences of ENZ and CNZ parents' involvement in supporting their children's extracurricular activities and maintaining parent-school communications, more precise reports of their engagement level in school-based support activities should be compared and contrasted.

Second, the recruited sample population of the current study was not diverse enough to represent the general population of New Zealand. In terms of SES background, a very large portion (less than 20%) of all participants reported themselves to have received tertiary education or even above. In addition, 80% of the ENZ parents reported that they worked in education-related professions. Awareness of the current sample's lack of representativeness is crucial, since SES background was highly related with parents' level of involvement. Meanwhile, in terms of

acculturation, 70% of the CNZ parents reported that they started to receive their tertiary or even earlier education in New Zealand. Therefore the current CNZ sample was more likely to become Westernized than the average immigrants in New Zealand. Thus, findings based on the current sample would relate most to middle-class European and Chinese families in New Zealand, but it does not reflect the general composition of the New Zealand population.

Last but not least, the current study is a cross-sectional and correlational model. The analyses support a theoretical model of the associations between culture, psychological motivators of PI, and PI behaviors; but causality and causal directions among the variables cannot be determined. In addition, the entire analysis of the current study was based on parents' self-reported data. Causal attribution associated with non-experimental analyses is exaggerated when data are self-reported. Also, given that self-reported evaluations can be highly subjective, findings from the current analyses would survive with less bias if children and teachers' observation of parents' actions were retrieved.

Suggestions For Future Research: The Role of Ethnicity in Previous Conceptual Models Predicting Parental Involvement.

In responding to the conceptual framework conducted by Walker et al. (2005) predicting parents' PI support types (either home-based or school-based), findings from all the above results shed some light on the how cultural background of parents' fits within Walker et al.'s (2005) model predicting PI. As reviewed previously, Walker et al. argued that parents' level of PI are predicted mainly by their subjective perceptions including their parental role construction, self-efficacy of PI, the receptiveness of the school, teacher, and children, and available resources (time and

energy along with skills and knowledge) to participate. Taking the quantitative and qualitative findings together, the current study suggest that rather than consider the cultural factor as another independent factor besides Walker et al.'s (2005) psychological motivators, future studies should consider parents' culturally shaped values regarding education as a more foundational factor. It associates largely with parents' self-perceived psychological motivators of PI, and eventually shapes parents' choices of PI expressions and their level of participation. This suggestion is line with Hornby and Lafaele's contextual model which argued that parents' motivational beliefs were socially conducted. Hence parents' cultural background indirectly shape parents' PI behaviours, through its impact on psychological motivating factors identified by Walker and colleagues (2005).

It worth noting that parental expectations was found in the current study to be the most significant factor associated with PI, while previous models did not include parental expectations as predictors of PI. To be specific, the current study indicated that parental expectations for children's education future motivated CNZ parents' high level of participation in establishing a home learning environment and applying media/technology rules. Moreover, parental expectations were shown in the multiple regression analyses and Sobel tests as largely mediated the path between ethnicity and PI in home-based activities (establishing home learning environment and applying media/technology rule for children). Future projects could be conducted to examine more precisely regarding the mediating pathways between ethnicity, parental expectations and PI actions.

This study has also contributed to the field in terms of discovering associations among culturally driven values and beliefs with parents' involvement patterns and perceptions, future studies could draw implications based on the current findings.

First, the current study found that the main differences in PI actions between ENZ and CNZ parents are in their levels of participation in establishing a home learning environment and applying media/technology rules for primary school-aged children. In line with the current findings, a longitudinal study on parents' support types will be valuable to evaluate long-term behavioral patterns in terms of parents' involvement types.

Second, the qualitative analyses of the current study reflected that parents' participation in children's extracurricular activities could be multidimensional. For instance, while some parents believe performing arts lessons are beneficial for children, other parents may find outdoor activities such as camping opportunities to be more practical for children's social development. Future research could utilize a quantitative research approach to more precisely assess parental support in extracurricular activities across various aspects.

In terms of factors associated with parents' PI choices and involvement level, the current study indicated that parental expectations and self-efficacy of PI skills for their children's education future were much more influential predictors than parents' ethnicity. In order to promote parents' participation in their children's education, future projects could be conducted to provide parents with better knowledge and specific skills to assist their children's learning.

Finally, the current study revealed that children's high level of western-towards acculturation was operating as a hindrance for CNZ parents to become more involved in their children's education. Given that the current acculturation level of children was reported by the participating parents, little is known about the parent–child acculturation gap based on the current manuscript. Future research could

examine the impact of the parent–child acculturation gap on parents' willingness to be involved in their children's education.

Conclusion.

Few studies have been conducted in New Zealand to examine the cross-cultural differences in PI behaviours and beliefs among CNZ and ENZ parents. Taking the quantitative and qualitative findings all together, the current study found that CNZ parents' beliefs in education are results-oriented, while ENZ parents value more of the learning process. These belief discrepancies in turn shaped parents' actions: On average, CNZ parents tended to use more systematic home supervision when participating in children's learning (establishing a home learning environment, applying specific rules for media/modern technology use and arranging after-school activities for children), whilst ENZ parents tended to involve more in holistic education (taking children to various social experiences, joining children's outdoor activities). Meanwhile, CNZ parents' high level of involvement in children's academic learning was associated with their high level of parental expectations for children's education future. Given that the current study is a cross-sectional and correlational model, the causality and causal directions between parental expectations, other PI related beliefs and PI behaviours cannot be determined. Future studies

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Appendix A

Cultural Background and Parental Involvement in Children's Education

PARTICIPANT INFORMATION SHEET

Persons in Charge:

Principal investigator:

Lu Yao, Masters Student, University of Canterbury, Christchurch; Tel: (0*3)3642987* ext. *43229.* Email: lu.yao@canterbury.ac.nz

Supervisors:

Dr Myron Friesen, School of Educational Studies and Human Development, University of Canterbury, Private Bag 4800, Christchurch. Tel: (03) 364-2987 ext. 8914. Email: myron.friesen@canterbury.ac.nz

Professor Garry Hornby, School of Sciences and Physical Education, University of Canterbury, Christchurch. Tel: (03) 364-2987 ext. 4906. Email:garry.hornby@canterbury.ac.nz

Background

You are invited to participate in a research project about cultural influences on parental involvement in children's education. The present study will examine how parental involvement in children's education may be shaped by parents' culturally based beliefs concerning the value and purpose of education, expectations for educational engagement, and ethnic educational traditions. The study is being conducted by Masters' student Lu Yao, and supervised by Dr. Myron Friesen and Professor Garry Hornby from the College of Education at the University of Canterbury (please see contact details below).

What does the study involve?

Participating in this study involves completing a short interview. During the interview, the

investigator will ask you a set of questions regarding your involvement in your children's education, your perception of your commitment to and involvement in cultural traditions and customs, and your educational experiences and beliefs about the educational traditions in your culture of origin. With your permission, a portion of the interview will be audio recorded. The interview will take 35 to 50 minutes to complete.

Your answers to the interview will be completely confidential. Only the researchers will have access to your data. The interview time and location will be determined based on your availability and preferred venue.

Who can participate in this study?

We are inviting the parents of primary aged students in Christchurch to participate in the study. Parents, regardless of ethnic background or age, are welcome to share opinions on their children's education. Most importantly, participation in this study is completely voluntary. There is no obligation to participate and withdrawal from participation may be done at any time. If you choose to participate in this study, and at a later date would like to withdraw your information, you may contact the researchers and ask to have your data removed from the study. Participation in this study will in no way affect you or your child's relationship with a school or it's employees.

Confidentiality, Anonymity and Data storage

To keep your individual information confidential, your data is only identified by a participant identification number, and only the researchers listed above will have access to participants' information. The results from this study will be published in the form of a thesis held at the University of Canterbury library database and may be further published in an academic journal. The withdrawal of information from the study will be impossible once the thesis is published. However, when the results from this study are published or shared in any form, the data and results are considered across all of the participants (at the group level) and individual quotes from the interview are edited to remove any identifying information. Following completion of the study, the raw data will be kept for a minimum period of 5 years and then destroyed.

Are there any benefits or risks to participating?

There are no foreseeable physical or psychological benefits or risks involved in participating in this study. The items in the questionnaires do not probe highly personal or sensitive information. In addition, this study has received ethical approval from the University of Canterbury Human Ethics Committee. If you have questions or concerns about the content of the questionnaire or the procedures used in this study, please feel free to contact the

researchers via the details listed above, or you may contact the ethics committee directly. Please address questions or concerns to, The Chair, Educational Research Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch; email: human-ethics@canterbury.ac.nz. Additionally, to thank you for your time and participation, at the end of the interview you will be given the opportunity to enter the draw for one of five $50 grocery gift vouchers.

What if I require further information about the study or my involvement in it?

You are free to contact the investigators via the details above if you have any further questions. During your interview if you do not understand a question, or if you have a concern, you may stop and get clarification at anytime. Transcripts of your interviews will be available for your viewing.

Feedback and Results

After we have collected and analysed the data, the results of this study may be published. Please be assured that your individual information will be kept confidential and anonymous. If at any stage you would like an update on our research findings, a summary of our final results, or have any questions about the study, please contact us on the above phone numbers. Finally, we would like to thank you for your time and participation in this study. Your assistance is greatly appreciated.

Appendix B

Cultural Background and Parental Involvement in Children's Education

Interview Consent Form

Please carefully read the paragraphs below, then sign your name and write today's date in the spaces provided.

I have read and understood the Participant Information Sheet, which explains the interview process of the research project and my role as a participant. In particular, I understand that:

- I will be attending an individual interview about my ethnic/cultural identity and my involvement in my children's education, and my perspectives, attitudes and beliefs about education and parental involvement in children's education.
- Participating in this research project is voluntary (my choice). Whether or not I participate in this study will not affect my relationship with the researchers, the University of Canterbury, or my child's/children's school.
- I have the right to stop participating at any time or request that my information be withdrawn from the study after I participate.
- A portion of my interview will be audio-recorded, and this information will be stored securely and anonymously. Also my personal information will be kept confidential in any reports resulting from this research project.

I give permission for the researchers of this study to use my answers to the interview questions as data in this study, and I give permission for the information I provide to be used in the publication of the results of this study, provided that my personal information is kept confidential.

Circle one [Yes] [No]

I agree to allow the interviewer to audio record the second portion of the interview, with the provision that I may review the audio recording.

Circle one [Yes] [No]

Name (please print)

_____

Signature

_____

Date _____

Appendix C

College of Education
School of Educational Studies and Human Development
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UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Participants Needed for Research Study:

Parental Involvement in Education

Opportunity to win $50 grocery gift vouchers.

Dear Parents and Caregivers,

The purpose of this study is to examine how parental involvement in children's education may be shaped by parents' culturally based beliefs and attitudes. This study is being conducted by University of Canterbury Masters' student Lu Yao, and supervised by Dr. Myron Friesen and Professor Garry Hornby, of the University of Canterbury College of Education.

Incentive: You will be given the opportunity to enter a draw for one of five $50 grocery gift vouchers.

Conditions: Parents of children currently enrolled in local primary schools in Canterbury.

Tasks: Participating in this research project involves completing a semi-structured interview which includes a short questionnaire (approximately 20 minutes) and several open-ended questions (15 – 30 minutes).

Confidentiality: Your individual information is strictly confidential. The items in the questionnaire and interview do not probe highly personal or sensitive information, and the tasks are not overly demanding. In addition, this study has received ethical approval from the University of Canterbury Human Ethics Committee.

If you are interested in participating in this study, or would like further information, please contact Lu Yao at lu.yao@canterbury.ac.nz or ring 03-364-2987 ext.43229. Or 02102218366.

Appendix D

Cultural Background and Parental Involvement Survey for English speaking CNZ Participants

Cultural background and Parental Involvement in Children's Education

Questionnaire for Asian New Zealand Participants

Participant Number:

Interview date:

This document is absolutely confidential. Only the researcher and participant have the authority to access this file.

Section A: Parental Involvement in Children's Education

INSTRUCTIONS: For each item please choose the number that best describes your situation and write it in the box to the right.

CODING: 1 = Not At All; 2 = A Few Times a Month; 3 = Few times a week; 4 = Everyday; 9 = NA.

In the past month, how often have you talked with your child about:

A1. His/her day at school	
A2. What he/she does with his/her friends	

Outside of school hours in the past year, how often have you:

CODING: 1 = Never; 2 = Rarely; 3 = Sometimes; 4 = Often; 5 = Always; 9 = NA.

A3. Encouraged your child to participate in non-school activities, (e.g. dance, music, art lessons)	
A4. Organized athletic activities (e.g. basketball, soccer, baseball, gymnastics) for your child	
A5. Visited a library with your child	

Regarding the future of your child's academic learning:

A6. What is the highest academic level you expect your child to complete?

- ☐ Year 12 High school
- ☐ Year 13 High school
- ☐ Two or more years of tertiary or post-secondary education
- ☐ Undergraduate university degree
- ☐ Master's degree or equivalent
- ☐ PhD, MD or other advanced degree?

A7. What are your expectations regarding your child's course marks/grades? Please check the box that best describes your situation.

- ☐ I expect my child do their best. Marks/grades don't matter.
- ☐ I expect my child to achieve marks/grades that are on par with the average for their age group.
- ☐ I expect my child to achieve marks/grades that are above average compared to their age group.
- ☐ I expect my child to obtain marks/grades that are well above average (excellence) compared to their age group.

A8. What are your expectation regarding your child's involvement in extracurricular activities, such as sports, arts, performing arts or school leadership? Please check the box that best describes your situation.

- ☐ I don't have any expectations. My child can get involved in whatever interests them.
- ☐ I expect my child to participate in at least one extracurricular activity or school leadership.
- ☐ I expect my child to participate in more than one extracurricular activity and/or school leadership.
- ☐ I expect my child to be widely involved in extracurricular activities *and* school leadership.

INSTRUCTIONS: For each item, please mark the box on the right that best describes your situation.

In the past semester, have you:

	No	Yes	NA
A9.Attended a meeting of Parent-Teacher Association or Parent–Teacher Organization	0	1	9
A10.Talked with your child's teacher/dean about his/her performance at school	0	1	9
A11. Volunteered at the school or served on a committee	0	1	9
A12. Does your child have a TV in his/her room?	0	1	9

INSTRUCTIONS: For each item, please mark the box on the right that best describes your situation.

In the past semester,

	No	Yes	NA
A13.Are there family rules for what TV programs your child can watch?	0	1	9
A14. Are there family rules for how early or late he/she may watch TV?	0	1	9
A15. Are there family rules for how many hours he/she may watch TV on weekdays?	0	1	9
A16. Does your child have his/her own computer/laptop/ipad/tablet?	0	1	9
A17. Are there family rules for how many hours he/she may spend on the computer?	0	1	9

INSTRUCTIONS: For each item below, please mark the box on the right that best describes your situation.

Do you agree with the following statement?

	No	Yes	NA
A18. I spend time working with my child on maths.	0	1	9
A19. I spend time working with my child on reading/writing skills.	0	1	9
A20. I bring home learning materials for my child (videos, etc.).	0	1	9
A21.I take my child places in the community (i.e., zoo, museum) to learn special things.	0	1	9
A22.I review my child's school work.	0	1	9
A23.I explain tough assignments to my child.	0	1	9

*The following section will be only conducted among participants with Asian origins (include participants with Asian parents but born and raised in New Zealand).

Section B: Acculturation of Parents

INSTRUCTIONS: The questions which follow are for the purpose of collecting information about your historical background as well as more recent behaviours which may be related to your cultural identity. Choose the one answer which best describes you.

B1. What generation are you? (Circle the generation that best applies to you:)

- 1st Generation = I was born in Asia or country other than New Zealand.
- 2nd Generation = I was born in New Zealand., either parent was born in Asia or country other than New Zealand.
- 3rd Generation = I was born in New Zealand, both parents were born in New Zealand, and all grandparents born in Asia or country other than New Zealand.
- Other, please specify:
- Don't know what generation best fits since I lack some information.

B2. Where were you raised?

- In Asia only
- Mostly in Asia, some in New Zealand
- Equally in Asia and New Zealand
- Mostly in New Zealand some in Asia
- In New Zealand only

B3. How much experience have you had with Asia?

- Raised one year or more in Asia
- Lived for less than one year in Asia
- Occasional visits to Asia
- Occasional communications (letters, phone calls, etc.) with people in Asia
- No exposure or communications with people in Asia

B4. What language can you speak?

- Asian only (for example, Chinese, Japanese, Korean, Vietnamese, etc.)
- Mostly Asian, some English
- Asian and English about equally well (bilingual)
- Mostly English, some Asian
- Only English

B5. What language do you prefer?

- Asian only (for example, Chinese, Japanese, Korean, Vietnamese, etc.)
- Mostly Asian, some English
- Asian and English about equally well (bilingual)
- Mostly English, some Asian
- Only English

B6. When do you prefer to speak English?

- I prefer to speak English whenever I could.
- When I am at work.
- When I am at home.
- When I am with friends.

B7. When do you prefer to speak your first language?

- I prefer to speak my first language whenever I could.
- When I am at work.
- When I am at home.
- When I am with friends.

B8. How do you identify yourself?

- Asian
- Asian-New Zealand
- Chinese-New Zealand, Japanese-New Zealand, Korean-New Zealand, etc.
- New Zealand

B9. Which identification does (did) your mother use?

- Asian
- Asian-New Zealand
- Chinese-New Zealand, Japanese-New Zealand, Korean-New Zealand, etc.
- New Zealand

B10. Which identification does (did) your father use?

- Asian
- Asian-New Zealand
- Chinese-New Zealand, Japanese-New Zealand, Korean-New Zealand, etc.
- New Zealand

B11. What was the ethnic origin of the friends and peers you had, as a child up to age six?

- Almost exclusively Asians, Asian-New Zealand,
- Mostly Asians, Asian-New Zealand,
- About equally Asian groups and European groups
- Mostly European, Maori, Pacific Island, or other non-Asian ethnic groups
- Almost exclusively European, Maori, Pacific Island, or other non-Asian ethnic groups

B12. Whom do you now associate with in the community?

- Almost exclusively Asians, Asian-New Zealand.
- Mostly Asians, Asian-New Zealand.
- About equally Asian groups and European groups
- Mostly European, Maori, Pacific Island or other non-Asian ethnic groups
- Almost exclusively European, Maori, Pacific Island, or other non-Asian ethnic groups

B13. If you could pick, whom would you prefer to associate with in the community?

- Almost exclusively Asians, Asian-New Zealand.
- Mostly Asians, Asian-New Zealand.
- About equally Asian groups and European groups
- Mostly European, Maori, Pacific Island or other non-Asian ethnic groups
- Almost exclusively European, Maori, Pacific Island or other non-Asian ethnic groups

B14. What is your music preference?

- Only Asian music (for example, Chinese, Japanese, Korean, Vietnamese, etc.)
- Mostly Asian
- Equally Asian and English
- Mostly English

- English only

B15. What is your movie preference?

- Asian-language movies only
- Asian-language movies mostly
- Equally Asian/English English-language movies
- Mostly English-language movies only
- English-language movies only

B16. What is your food preference at home?

- Exclusively Asian food
- Mostly Asian food, some Western food
- About equally Asian and Western food
- Mostly Western food
- Exclusively Western food

B17. Do you

- Read only an Asian language?
- Read an Asian language better than English?
- Read both Asian and English equally well?
- Read English better than an Asian language?
- Read only English?

B18. Do you

- Write only an Asian language?
- Write an Asian language better than English?
- Write both Asian and English equally well?
- Write English better than an Asian language?
- Write only English?

B19. Do you participate in Asian occasions, holidays, traditions, etc.?

- Nearly all
- Most of them
- Some of them
- A few of them
- None at all

*The following section will be only conducted among participants with Asian origins (include participants with Asian parents but born and raised in New Zealand).

Section C: Acculturation of Children Perceived by Parents

INSTRUCTIONS: The questions which follow are for the purpose of collecting information about your child's historical background as well as more recent behaviours which may be related to your child's cultural identity. Choose the one answer which best describes your child.

C1. What language can you child speak?

- Asian only (for example, Chinese, Japanese, Korean, Vietnamese, etc.)
- Mostly Asian, some English
- Asian and English about equally well (bilingual)
- Mostly English, some Asian
- Only English

C2. What language does your child prefer?

- Asian only (for example, Chinese, Japanese, Korean, Vietnamese, etc.)
- Mostly Asian, some English
- Asian and English about equally well (bilingual)
- Mostly English, some Asian
- Only English

C3. How does your child identify him/herself?

- Oriental
- Asian
- Asian-New Zealand
- Chinese-New Zealand, Japanese-New Zealand, Korean-New Zealand, etc.
- New Zealand

C4. What is the ethnic origin of the friends and peers your child has currently

- Almost exclusively Asians, Asian-New Zealand,
- Mostly Asians, Asian-New Zealand
- About equally Asian groups and European groups

- Mostly European, Maori, Pacific Island, or other non-Asian ethnic groups
- Almost exclusively European, Maori, Pacific Island, or other non-Asian ethnic groups

C5. If he/she could pick, whom would he/she prefer to associate with in the community?

- Almost exclusively Asians, Asian-New Zealand
- Mostly Asians, Asian-New Zealand,
- About equally Asian groups and European groups
- Mostly European, Maori, Pacific Island or other non-Asian ethnic groups
- Almost exclusively European, Maori, Pacific Island or other non-Asian ethnic groups

C6. What is your child's music preference?

- Only Asian music (for example, Chinese, Japanese, Korean, Vietnamese, etc.)
- Mostly Asian
- Equally Asian and English
- Mostly English
- English only

C7. What is your child's movie preference?

- Asian-language movies only
- Asian-language movies mostly
- Equally Asian/English English-language movies
- Mostly English-language movies only
- English-language movies only

C8. What generation is your child? (Circle the generation that best applies to you:)

- 1st Generation = he/she was born in Asia or country other than New Zealand.
- 2nd Generation = he/she was born in New Zealand; either parent was born in Asia or country other than New Zealand.
- 3rd Generation = he/she was born in New Zealand, both parents were born in New Zealand, and all grandparents born in Asia or country other than New Zealand.
- Other, Please specify:
- Don't know what generation best fits since I lack some information.

C9. What experiences does your child have with Asia?

- Raised one year or more in Asia

- Lived for less than one year in Asia
- Occasional visits to Asia
- Occasional communications (letters, phone calls, etc.) with people in Asia
- No exposure or communications with people in Asia

C10. What is your child's food preference?

- Exclusively Asian food
- Mostly Asian food, some Western food
- About equally Asian and Western food
- Mostly Western food
- Exclusively Western food

C11. Does your child

- Read only an Asian language?
- Read an Asian language better than English?
- Read both Asian and English equally well?
- Read English better than an Asian language?
- Read only English?

C12. Does your child

- Write only an Asian language?
- Write an Asian language better than English?
- Write both Asian and English equally well?
- Write English better than an Asian language?
- Write only English?

C13. Does your child participate in Asian occasions, holidays, traditions, etc.?

- Nearly all
- Most of them
- Some of them
- A few of them
- None at all

Section D: Parents' Satisfactions on Helping Their Children's Academic Succusses.

INSTRUCTIONS: For each item, please choose the number that best describes how much you AGREE or DISAGREE with each of the following statements.

Please think about *the current school year* as you consider each statement.

CODING: 1 = Disagree; 2 = Disagree a little; 3 = Neutral; 4 = Agree a little; 5 = Agree; 9 = NA

D1. I know how to help my child do well in school.	
D2. *I don't know if I'm getting through to my child.	
D3. *I don't know how to help my child make good grades in school.	
D4. I feel successful about my efforts to help my child learn.	
D5. *Other children have more influence on my child's grades than I do.	
D6. I don't know how to help my child learn.	
D7. I make a significant difference in my child's school performance.	

Section E: Responses to Parental Involvement Efforts

INSTRUCTIONS: For each line, please choose number that best describes how much you AGREE or DISAGREE with each of the following statements.

These questions relate to your children's current school. Please think about *the current school year* as you consider each statement.

CODING: 1 = Disagree; 2 = Disagree a little 3 = Neutral; 4 = Agree a little; 5 = Agree 9 = NA

E1.Teachers at this school are interested and cooperative when they discuss my child.	
E2. I feel welcome at this school.	
E3. Parent activities are scheduled at this school so that I can attend.	
E4. This school lets me know about meetings and special school events.	
E5. The staffs at this school contact me promptly about any problems involving my child.	
E6. The teachers at this school keep me informed about my child's progress in school.	

CODING: 1 = Disagree; 2 = Disagree a little 3 = Neutral; 4 = Agree a little; 5 = Agree 9 = NA

E7. My child's teacher has asked me to talk with my child about the school day.	
E8. My child's teacher has asked me to help out at the school.	
E9. My child's teacher has made contact with me (for example, sent a note, phoned, e-mailed).	
E10. My child has asked me to attend a special event at school.	
E11. My child has asked me to help out at the school.	
E12. My child has asked me to talk with his/her teacher.	
E13. My child has asked me to help explain something about his or her homework.	
E14. My child has asked me to supervise his or her homework.	
E15. My child has talked with me about the school day.	

Section F: During this school year, have you considered the following issues?

CODING: 1 = Not at all; 2 = A little; 3 = Very much; 9 = NA

F1. How much does your work interfere with your ability to participate in your child's education?	
F2. How much do family commitments interfere with your ability to participate in your child's education?	
F3. Do other responsibilities interfere with your ability to participate in your child's education?	

Would like to tell me more about how above responsibilities interfere with you participation in your children's education:

Section G: Demographics

The following information will help us track the demographic characteristics of the participants in this study. Your individual information will be kept strictly confidential.

1. What is your gender?

- ☐ Female
- ☐ Male

2. What is your child's gender?

- ☐ Female
- ☐ Male

Please complete the following items by filling in the text boxes.

3. What is your age?

4. What is your child's age?

5. What is your ethnicity?

6. What year is your child at his/her primary school?

7. What is your relationship to the child you referred to in this survey?

8. What is your highest level of educational achievement?

- ☐ Primary school
- ☐ High school
- ☐ Some university
- ☐ Post secondary school Diploma or Bachelor degree
- ☐ Honours/ /Masters/other postgraduate degree
- ☐ Doctorate degree

9. What is your occupation?

10. Are you a single-parent family?

- ☐ Yes
- ☐ No

11. If “No” to item 10, what is your partner’s highest level of academic achievement?

- ☐ Primary school
- ☐ High school
- ☐ Some university
- ☐ Post secondary school Diploma or Bachelor degree
- ☐ Honours/ /Masters/other postgraduate degree
- ☐ Doctorate degree

13. Who does your child live with the majority of the week? Check all the apply.

- ☐ Mother
- ☐ Father
- ☐ Siblings
- ☐ Extended family
- ☐ Step-mother
- ☐ Step-father
- ☐ Friends/boarders
- ☐ Other ,please specify: _____

14. Is your child’s school a multiethnic/mixed-cultural environment?

- ☐ Yes
- ☐ No

Thank you!

To show our appreciation, you can enter a draw for one of five $50 grocery vouchers. If you would like enter this drawing, please provide a valid email or postal address in the space below.

Email address	
Postal address	

If we receive funding for a follow-up study for this project, would you be interested in participating again?

- ☐ Yes
- ☐ No

IF you answered “Yes” above, may we contact you for the follow-up study via the email address you provided? (Please note: your email address will NOT be given to anyone outside of this study and will NOT be used for any other purposes.)

- ☐ Yes
- ☐ No

End of survey.

Section H: Interview

Script for open ended questions:

1. Please describe how you support and assist your child in his/her education?

Then ask:

- What are the things you do to directly support your child's learning?
- Can you tell me about any of the indirect support that you do (such as hiring tutors, establishing rules about study time, providing time and space to study)?

2. When you directly participate in your child's education, please tell me how your child reacts to your involvement.
    - How do you feel when working together with your child?
    - How do you manage your child's behaviour? For example, keeping him/her on task, dealing with complaints.
3. Does your child ever ask you for help with his/her schoolwork? How do you respond?

4. Is there anything that you can think of that might interfere with your involvement in your child's education?
    - Your language?
    - Your understanding of the curriculum used in your child's school?
    - Your familiarity with the school system of your child?

5. When you talk about your child's education with your friends /family, what topics do you discuss?

6. How does your own involvement in your child's education compare with your friends'? (What differences/ similarities do you notice)?

7. Have you noticed any differences between New Zealand and Asian parents in their views on education? Please describe what you have noticed.

- Do you think there are differences in how NZ and Asian parents get involved with their children's education or assist their children's learning?
- Can you tell me some of the differences you've noticed?

- What has given you this impression? (Probe: how/where do you know parents from other cultural backgrounds?)

8. How do you feel about these differences? (Probe: Have you thought about adjusting your way of involvement in your child's education, after seeing how parents from another culture participate in their child's education?)

9. Do you see your involvement in your child's education as representative of Western/Asian (depends on the participant's ethnic group) ways of educating children?

(Probe: then encourage parents to talk more about their insight about the similarities and differences of their own way of educating their children and the traditional perspective of child education of their culture. Start with the question: How did your parents get involved in your education when you were a primary school student?)

Appendix E

Cultural Background and Parental Involvement Survey for ENZ Participants

Cultural background and Parental Involvement in Children's Education

Questionnaire for European New Zealand Participants

Participant Number:

Interview date:

This document is absolutely confidential. Only the researcher and participant have the authority to access this file.

Section A: Parental Involvement in Children's Education

INSTRUCTIONS: For each item please choose the number that best describes your situation and write it in the box to the right.

CODING: 1 = Not At All; 2 = A Few Times a Month; 3 = Few times a week; 4 = Everyday; 9 = NA.

In the past month, how often have you talked with your child about:

A1. His/her day at school	
A2. What he/she does with his/her friends	

Outside of school hours in the past year, how often have you:

CODING: 1 = Never; 2 = Rarely; 3 = Sometimes; 4 = Often; 5 = Always; 9 = NA.

A3. Encouraged your child to participate in non-school activities, (e.g. dance, music, art lessons)	
A4. Organized athletic activities (e.g. basketball, soccer, baseball, gymnastics) for your child	
A5. Visited a library with your child	

Regarding the future of your child's academic learning:

A6. What is the highest academic level you expect your child to complete?

- ☐ Year 12 High school
- ☐ Year 13 High school
- ☐ Two or more years of tertiary or post-secondary education
- ☐ Undergraduate university degree
- ☐ Master's degree or equivalent
- ☐ PhD, MD or other advanced degree?

A7. What are your expectations regarding your child's course marks/grades? Please check the box that best describes your situation.

- ☐ I expect my child do their best. Marks/grades don't matter.
- ☐ I expect my child to achieve marks/grades that are on par with the average for their age group.
- ☐ I expect my child to achieve marks/grades that are above average compared to their age group.
- ☐ I expect my child to obtain marks/grades that are well above average (excellence) compared to their age group.

A8. What are your expectation regarding your child's involvement in extracurricular activities, such as sports, arts, performing arts or school leadership? Please check the box that best describes your situation.

- ☐ I don't have any expectations. My child can get involved in whatever interests them.
- ☐ I expect my child to participate in at least one extracurricular activity or school leadership.
- ☐ I expect my child to participate in more than one extracurricular activity and/or school leadership.
- ☐ I expect my child to be widely involved in extracurricular activities *and* school leadership.

INSTRUCTIONS: For each item, please mark the box on the right that best describes your situation.

In the past semester, have you:

	No	Yes	NA
A9.Attended a meeting of Parent-Teacher association or Parent–Teacher Organization	0	1	9
A10.Talked with your child's teacher/dean about his/her performance at school	0	1	9
A11. Volunteered at the school or served on a committee	0	1	9
A12. Does your child have a TV in his/her room?	0	1	9

INSTRUCTIONS: For each item, please mark the box on the right that best describes your situation.

In the past semester,

	No	Yes	NA
A13.Are there family rules for what TV programs your child can watch?	0	1	9
A14. Are there family rules for how early or late he/she may watch TV?	0	1	9
A15. Are there family rules for how many hours he/she may watch TV on weekdays?	0	1	9
A16. Does your child have his/her own computer/laptop/ipad/tablet?	0	1	9
A17. Are there family rules for how many hours he/she may spend on the computer?	0	1	9

INSTRUCTIONS: For each item below, please mark the box on the right that best describes your situation.

Do you agree with the following statement?

	No	Yes	NA
A18. I spend time working with my child on maths.	0	1	9
A19. I spend time working with my child on reading/writing skills.	0	1	9
A20. I bring home learning materials for my child (videos, etc.).	0	1	9
A21.I take my child places in the community (i.e., zoo, museum) to learn special things.	0	1	9
A22.I review my child's school work.	0	1	9
A23.I explain tough assignments to my child.	0	1	9

Section B: Parents' Satisfactions on Helping Their Children's Academic Succusses.

INSTRUCTIONS: For each item, please choose the number that best describes how much you AGREE or DISAGREE with each of the following statements.

Please think about *the current school year* as you consider each statement.

CODING: 1 = Disagree; 2 = Disagree a little; 3 = Neutral; 4 = Agree a little; 5 = Agree; 9 = NA

B1. I know how to help my child do well in school.	
B2. *I don't know if I'm getting through to my child.	
B3. *I don't know how to help my child make good grades in school.	
B4. I feel successful about my efforts to help my child learn.	
B5. *Other children have more influence on my child's grades than I do.	
B6. I don't know how to help my child learn.	
B7. I make a significant difference in my child's school performance.	

Section C: Responses to Parental Involvement Efforts

INSTRUCTIONS: For each line, please choose number that best describes how much you AGREE or DISAGREE with each of the following statements.

These questions relate to your children's current school. Please think about *the current school year* as you consider each statement.

CODING: 1 = Disagree; 2 = Disagree a little 3 = Neutral; 4 = Agree a little; 5 = Agree 9 = NA

C1.Teachers at this school are interested and cooperative when they discuss my child.	
C2. I feel welcome at this school.	
C3. Parent activities are scheduled at this school so that I can attend.	
C4. This school lets me know about meetings and special school events.	
C5. The staffs at this school contact me promptly about any problems involving my child.	
C6. The teachers at this school keep me informed about my child's progress in school.	

CODING: 1 = Disagree; 2 = Disagree a little 3 = Neutral; 4 = Agree a little; 5 = Agree 9 = NA

C7. My child's teacher has asked me to talk with my child about the school day.	
C8. My child's teacher has asked me to help out at the school.	
C9. My child's teacher has made contact with me (for example, sent a note, phoned, e-mailed).	
C10. My child has asked me to attend a special event at school.	
C11. My child has asked me to help out at the school.	
C12. My child has asked me to talk with his/her teacher.	
C13. My child has asked me to help explain something about his or her homework.	
C14. My child has asked me to supervise his or her homework.	
C15. My child has talked with me about the school day.	

Section D: During this school year, have you considered the following issues?

CODING: 1 = Not at all; 2 = A little; 3 = Very much; 9 = NA

D1. How much does your work interfere with your ability to participate in your child's education?	
D2. How much do family commitments interfere with your ability to participate in your child's education?	
D3. Do other responsibilities interfere with your ability to participate in your child's education?	

Would like to tell me more about how above responsibilities interfere you participation in your children's education:

Section E: Demographics

The following information will help us track the demographic characteristics of the participants in this study. Your individual information will be kept strictly confidential.

3. What is your gender?

☐ Female

☐ Male

4. What is your child's gender?

☐ Female

☐ Male

Please complete the following items by filling in the text boxes.

3. What is your age?

4. What is your child's age?

5. What is your ethnicity?

6. What year is your child at his/her primary school?

7. What is your relationship to the child you referred to in this survey?

8. What is your highest level of educational achievement?

☐ Primary school

☐ High school

☐ Some university

☐ Post secondary school Diploma or Bachelor degree

☐ Honours/ /Masters/other postgraduate degree

☐ Doctorate degree

9. What is your occupation?

10. Are you a single-parent family?

- ☐ Yes
- ☐ No

11. If “No” to item 10, what is your partner’s highest level of academic achievement?

- ☐ Primary school
- ☐ High school
- ☐ Some university
- ☐ Post secondary school Diploma or Bachelor degree
- ☐ Honours/ /Masters/other postgraduate degree
- ☐ Doctorate degree

13. Who does your child live with the majority of the week? Check all the apply.

- ☐ Mother
- ☐ Father
- ☐ Siblings
- ☐ Extended family
- ☐ Step-mother
- ☐ Step-father
- ☐ Friends/boarders
- ☐ Other ,please specify: _____

14. Is your child’s school a multiethnic/mixed-cultural environment?

- ☐ Yes
- ☐ No

Thank you!

To show our appreciation, you can enter a draw for one of five $50 grocery vouchers. If you would like enter this drawing, please provide a valid email or postal address in the space below.

Email address	
Postal address	

If we receive funding for a follow-up study for this project, would you be interested in participating again?

- ☐ Yes
- ☐ No

IF you answered “Yes” above, may we contact you for the follow-up study via the email address you provided? (Please note: your email address will NOT be given to anyone outside of this study and will NOT be used for any other purposes.)

- ☐ Yes
- ☐ No

End of survey.

Section F: Interview

Script for open ended questions:

5. Please describe how you support and assist your child in his/her education?

Then ask:

- What are the things you do to directly support your child's learning?
- Can you tell me about any of the indirect support that you do (such as hiring tutors, establishing rules about study time, providing time and space to study)?

6. When you directly participate in your child's education, please tell me how your child reacts to your involvement.
    - How do you feel when working together with your child?
    - How do you manage your child's behaviour? For example, keeping him/her on task, dealing with complaints.
7. Does your child ever ask you for help with his/her schoolwork? How do you respond?

8. Is there anything that you can think of that might interfere with your involvement in your child's education?
    - Your language?
    - Your understanding of the curriculum used in your child's school?
    - Your familiarity with the school system of your child?

5. When you talk about your child's education with your friends /family, what topics do you discuss?

6. How does your own involvement in your child's education compare with your friends'? (What differences/ similarities do you notice)?

7. Do you know parents from cultural backgrounds other than your own?

- What are your impressions of how parents from other cultural backgrounds get involved in their children's education?
- How is this similar to or different from NZ European parents?
- What has given you this impression? (Probe: how/where do you know parents from other cultural backgrounds?)

8. How do you feel about these differences? (Probe: Have you thought about adjusting your way of involvment in your child's education, after seeing how parents from another culture participate in their child's education?)

9. Do you see your involvement in your child's education as representative of Western/Asian (depends on the participant's ethnic group) ways of educating children?

(Probe: then encourage parents to talk more about their insight about the similarities and differences of their own way of educating their children and the traditional perspective of child education of their culture. Start with the question: How did your parents get involved in your education when you were a primary school student?)

Appendix F

Cultural Background and Parental Involvement Survey for Mandarin and Cantonese speaking CNZ Participants

Cultural background and Parental Involvement in Children's Education

Questionnaire for Chinese speaking New Zealand Participants

Participant Number:

Interview date:

This document is absolutely confidential. Only the researcher and participant have the authority to access this file.

Section A: 父母对于孩子教育的投入

请在以下右边的空格中填入对应您情况的指数。

CODING: 1= 从不； 2 = 一个月里有几次； 3 = 一周里有几次； 4 = 每天； 9 = 无可奉告。

在过去的一个月里面,您每隔多久会和您的孩子谈:

A1. 他/她在学校的一天	
A2. 他/她和他们的朋友都做了什么	

关于孩子的课余活动，您多久会:

指数: 1 = 从不； 2 = 很少; 3 = 有时候; 4 = 比较频繁; 5 = 总是; 9 = 无可奉告.

A3. 鼓励您的孩子积极参加舞蹈/音乐/其他艺术类课程	
A4. 为您的孩子准备体育项目，例如篮球，足球，棒球或者体操	
A5.带孩子去图书馆	

对于您子女的学术前景,

A6. 您期望他/她能取得以下哪个学历?

- □ 取得高中以下文凭就可以
- □ 高中毕业
- □ 参加至少两年的高等教育
- □ 本科毕业
- □ 研究生/硕士毕业
- □ 取得博士，医学博士或其他高等学历

A7.关于您子女的成绩，您有什么要求? 请在符合您情况的选项前打勾。

- □ 只要孩子尽力就好，学分不重要

- □ 我期望我的子女能取得同龄其他孩子的平均分
- □ 我期望我的子女能取得比同龄其他孩子稍好的成绩
- □ 我期望我的子女能取得远远优于同龄其他孩子的成绩（优异）

A8. 关于孩子在课外活动方面的表现，比如体育，艺术，表演艺术或者在学校的领袖活动,您有什么期望?

- □ 没有特别的期望，随我孩子的兴趣而定。
- □ 我期望我的孩子至少参加一项课外活动或者学校的领袖活动。
- □ 我期望我的孩子参加一项以上的各种课外活动或者学校举办的领袖活动。
- □ 我期望的孩子能尽量广泛的参加各种课余活动或者学校的领袖活动。

在过去的一个学期里，您有没有：

请在下面的每道题中给最符合您情况的选项打勾。

	否	是	无可奉告
A9. 参加家长教师协会/家长教师联谊组织的见面会	0	1	9
A10. 与学校的老师或者主任谈论关于您的孩子在学校的表现	0	1	9
A11. 自愿参加学校举办的一些活动或者服务于家长协会	0	1	9
A12. 您的孩子在他/她自己房间有电视吗	0	1	9
A13. 您家里有没有关于孩子能看哪些电视节目的规矩	0	1	9
A14. 关于孩子能在多早/多晚看电视，您家里有没有规定	0	1	9
A15. 孩子从周一到周五能看多久的电视，您家里有规定吗	0	1	9
A16. 您的孩子有没有他/她自己的电脑/手提电脑/ipad/tablet	0	1	9
A17. 您家里有没有规定孩子能用几个小时的电脑	0	1	9

下面的每一条陈述，符合您的情况吗?

请在下面的每道题中给最符合您情况的选项打勾。

	否	是	无可奉告
A18. 我花时间辅导我孩子的算术	0	1	9
A19. 我花时间辅导我孩子的读写能力	0	1	9
A20. 我会给我的孩子带学习辅导材料（例如录像,等等）	0	1	9
A21. 为了展开孩子的眼界， 我带孩子去社区中心（类似博物馆/动物园）这样的场所	0	1	9
A22. 我翻阅孩子的作业	0	1	9
A23. 我帮孩子讲解学科上面的难题	0	1	9

To be continued.

*以下的部分专为亚裔参与者问答设计（包括所有出生和成长在纽西兰的亚裔人群）。

Section B: 亚裔父母自我认同及文化融合量表

本问卷想了解您原本的民族文化和移民之后在纽西兰的「文化适应」对您现在行为的影响。请在下面每一题中选择最符合您情况 的选项。

B1. 您是第几代移民？

- □ 第一代：我出生在亚洲或纽西兰以外的其他地区。
- □ 第二代：我出生在纽西兰，我的父母出生在亚洲或纽西兰以外的其他地区。
- □ 第三代：我和我的父母都出生在纽西兰。我的祖父母和外祖父母都出生在亚洲或纽西兰以外的其他地区。
- □ 其他：
- □ 对于我本人是第几代移民并不清楚

B2. 你在哪里长大？

- □ 在亚洲长大
- □ 主要在亚洲，一些时候在纽西兰
- □ 亚洲和纽西兰各半
- □ 大部分成长在纽西兰，一些时间待在亚洲
- □ 只在纽西兰长大

B3. 你对亚洲有多少接触？

- □ 在亚洲国家居住过至少一年
- □ 在亚洲国家居住过最多一年
- □ 偶尔会去一次亚洲国家
- □ 偶尔会和住在亚洲国家的人们交流，例如书信或电话等等
- □ 完全没有对亚洲或亚洲国家人们的接触

B4. 您可以讲哪些语言？

- □ 只有亚洲国家的语言（例如中文，日文，韩文，越南文等等）
- □ 大部分是亚洲语言，可以讲一些英语
- □ 亚洲语言和英语都讲的很好（双语）
- □ 大部分讲英语，可以讲一些亚洲语言
- □ 只会讲英语

B5. 您更喜欢讲哪种语言？

- □ 只有亚洲国家的语言（包括中文，日文，韩文，越南文等等）
- □ 大部分是亚洲语言，可以讲一些英语。
- □ 亚洲语言和英语都讲的很好
- □ 大部分讲英语，可以讲一些亚洲语言
- □ 只会讲英语。

B6. 你什么场合里喜欢讲英语?

- □ 只要可以我都喜欢说英语.
- □ 当我工作的时候.
- □ 当我在家的时候.
- □ 当我和朋友在一起的时候.

B7. 你什么场合里喜欢讲你的母语?

- □ 只要可以我都喜欢说我的母语.
- □ 当我工作的时候.
- □ 当我在家的时候.
- □ 当我和朋友在一起的时候.

B8. 您觉得自己属于：

- □ 亚洲人
- □ 亚裔纽西兰人
- □ 华裔/日裔/韩裔等等纽西兰人
- □ 纽西兰人

B9. 您母亲觉得自己属于：

- □ 亚洲人
- □ 亚裔纽西兰人
- □ 华裔/日裔/韩裔等等纽西兰人
- □ 纽西兰人

B10. 您父亲觉得自己属于：

- □ 亚洲人
- □ 亚裔纽西兰人
- □ 华裔/日裔/韩裔等等纽西兰人
- □ 纽西兰人

B11.您小时候 6 岁之前，您的朋友和玩伴们都属于?

- □ 基本只有亚洲人或者是亚裔纽西兰人
- □ 大部分都是，亚洲人或者是亚裔纽西兰人
- □ 亚裔和西方后裔各半
- □ 大部分是西方后裔，毛利人，太平洋岛国人群或者其他非亚洲后裔。
- □ 基本只有西方后裔，毛利人，太平洋岛国人群或者其他非亚洲后裔。

B12. 现在的您的社交圈子中都有哪些人?

- □ 基本只有亚洲人或者是亚裔纽西兰人
- □ 大部分都是，亚洲人或者是亚裔纽西兰人
- □ 亚裔和西方后裔各半
- □ 大部分是西方后裔，毛利人，太平洋岛国人群或者其他非亚洲后裔。
- □ 基本只有西方后裔，毛利人，太平洋岛国人群或者其他非亚洲后裔。

B13. 如果可以选择，您更愿意和哪些人交往？基本全部都是亚洲人或者是亚裔纽西兰人

- □ 基本只有亚洲人或者是亚裔纽西兰人
- □ 大部分都是亚洲人或者是亚裔纽西兰人
- □ 亚裔和西方后裔各半
- □ 大部分是西方后裔，毛利人，太平洋岛国人群或者其他非亚洲后裔。
- □ 基本全部都是大部分是西方后裔，毛利人，太平洋岛国人群或者其他非亚洲后裔。

B14. 您喜欢哪里的音乐？

- □ 只听亚洲音乐（华语音乐，或者日文，韩文，越南语音乐等等）
- □ 大部分是亚洲音乐
- □ 亚洲和英语音乐各半
- □ 大部分是英语音乐
- □ 只听英语音乐

B15. 您喜欢看哪里的电影？

- □ 只看亚洲电影
- □ 大部分是亚洲电影
- □ 亚洲和英语电影各半
- □ 大部分是英语电影
- □ 只看英语电影

B16. 您在家里喜欢吃的食物是？

- □ 全都是亚洲食品
- □ 大部分是亚洲食品，一些是西方食品
- □ 亚洲和西方食品各半
- □ 大部分是西方食品
- □ 全部都是西方食品

B17. 您可以读：

- □ 只读亚洲语系的文字
- □ 亚洲语系的阅读能力比英语更强
- □ 亚洲语系和英语的阅读能力一样好
- □ 英语阅读能力比亚洲语系更强
- □ 只读英语

B18. 您会写：

- □ 只写亚洲语系的文字
- □ 亚洲语系的书写能力比英语更强
- □ 亚洲语系和英语的书写能力一样好
- □ 英语书写能力比亚洲语系更强
- □ 只写英语

B19. 您参与亚洲文化的场合，节日或者传统吗？

- □ 基本都参加
- □ 参加大部分
- □ 参加一部分
- □ 参加一点
- □ 不参加

*以下的部分专为亚裔参与者问答设计（包括所有出生和成长在纽西兰的亚裔人群）。

Section C: 父母心中其子女文化融合量表

本问卷想了解您的子女原本的民族文化和移民之后在纽西兰的「文化适应」对他们现在行为的影响。请在下面每一题中选择最符合您子女情况 的选项。

C1. 您的孩子可以讲哪些语言？

- □ 只有亚洲国家的语言（包括中文，日文，韩文，越南文等等）
- □ 大部分是亚洲语言，可以讲一些英语。
- □ 亚洲语言和英语都讲的很好
- □ 大部分讲英语，可以讲一些亚洲语言
- □ 只会讲英语。

C2. 您的孩子喜欢讲哪些语言？

- □ 只有亚洲国家的语言（包括中文，日文，韩文，越南文等等）
- □ 大部分是亚洲语言，可以讲一些英语。
- □ 亚洲语言和英语都讲的很好
- □ 大部分讲英语，可以讲一些亚洲语言
- □ 只会讲英语。

C3. 你的孩子觉得她/他属于：

- □ 东方人
- □ 亚洲人
- □ 亚裔纽西兰人
- □ 华裔/日裔/韩裔等等纽西兰人
- □ 纽西兰人

C4. 现在的您的孩子的朋友或者玩伴都有哪些人？

- □ 基本只有亚洲人或者是亚裔纽西兰人
- □ 大部分都是，亚洲人或者是亚裔纽西兰人
- □ 亚裔和西方后裔各半
- □ 大部分是西方后裔，毛利人，太平洋岛国人群或者其他非亚洲后裔。
- □ 基本只有西方后裔，毛利人，太平洋岛国人群或者其他非亚洲后裔。

C5. 如果可以选择，他/她更愿意和哪些人交往？

- □ 基本只有亚洲人或者是亚裔纽西兰人
- □ 大部分都是，亚洲人或者是亚裔纽西兰人
- □ 亚裔和西方后裔各半
- □ 大部分是西方后裔，毛利人，太平洋岛国人群或者其他非亚洲后裔。
- □ 基本只有西方后裔，毛利人，太平洋岛国人群或者其他非亚洲后裔。

C6. 您孩子喜欢哪里的音乐？

- □ 只听亚洲音乐（华语音乐，或者日文，韩文，越南语音乐等等）
- □ 大部分是亚洲音乐
- □ 亚洲和英语音乐各半
- □ 大部分是英语音乐
- □ 只听英语音乐

C7. 您孩子喜欢看哪里的电影？

- □ 只看亚洲电影
- □ 大部分是亚洲电影
- □ 亚洲和英语电影各半
- □ 大部分是英语电影
- □ 只看英语电影

C8. 您的孩子是第几代移民，请选择最适合的一种情况。

- □ 第一代：她/他出生在纽西兰以外的其他亚洲或地区。
- □ 第二代：她/他出生在纽西兰，他/她的父母出生在亚洲或其他地区。
- □ 第三代：他/她及其父母都出生在纽西兰。他的祖父母和外祖父母都出生在亚洲或其他地区。
- □ 其他
- □ 不清楚他/她是第几代移民。

C9. 你的子女对亚洲有多少接触？

- □ 在亚洲国家居住过至少一年
- □ 在亚洲国家居住过最多一年
- □ 偶尔会去一次亚洲国家
- □ 偶尔会和住在亚洲国家的人们交流，例如书信或电话等等。
- □ 完全没有对亚洲或亚洲国家人们的接触。

C10. 您孩子在家里喜欢吃的食物是？

- □ 全都是亚洲食品
- □ 大部分是亚洲食品，一些是西方食品
- □ 亚洲和西方食品各半
- □ 大部分是西方食品
- □ 全部都是西方食品

C11. 您的孩子阅读：

- □ 只认亚洲语系的文字
- □ 亚洲语系的阅读能力比英语更强
- □ 亚洲语系和英语的阅读能力一样好
- □ 英语阅读能力比亚洲语系更强
- □ 只认英语

C12. 您的孩子会写以下：

- □ 只写亚洲语系的文字
- □ 亚洲语系的书写能力比英语更强
- □ 亚洲语系和英语的书写能力一样好
- □ 英语书写能力比亚洲语系更强
- □ 只写英语

C13. 您的孩子参与亚洲文化的场合，节日或者传统吗？

- □ 基本都参加
- □ 大部分参加
- □ 参加一部分
- □ 参加一点
- □ 不参加

Section D: 父母对于辅助孩子在学习的自我成就感

想一想您的孩子目前的学年，请根据您对下列陈述的同意程度打勾

CODING: 1 = 完全不同意; 2 = 不太同意 3 = 中立; 4 = 比较同意; 5 = 同意; 9 = 无可奉告。

D1. 我知道如何辅导帮助我孩子在学校表现的更好.	
D2. *我不知道我的话孩子能否听的进去.	
D3. *我不知道如何帮助孩子在学校取得更好的学习成绩.	
D4. 关于我在帮助孩子学业上做出的努力，我自认为很成功.	
D5. *相比我自己对孩子的影响，其他孩子对于我孩子成绩的影响更大.	
D6. 我不知道怎样帮助孩子学习.	
D7. 我对孩子的在校表现有重要影响.	

Section E: 家长参与努力所收到的回应

想一想您的孩子目前的学年，请根据您对下列陈述的同意程度打勾。

CODING: 1 = 完全不同意; 2 = 不太同意 3 = 中立; 4 = 比较同意; 5 = 同意; 9 = 无可奉告。

E1. 在谈起我孩子的时候，他/她学校的老师显得很积极也很合作.	
E2. 我觉得我被学校欢迎.	
E3. 学校有安排父母参与的活动.	
E4. 学校让我知晓关于开见面会，以及特殊场合的信息.	
E5. 如果我的孩子在学校出现任何情况，学校的工作人员会迅速联系我.	
E6. 学校的老师会让我知道孩子在学校的进展.	
E7. 孩子的老师会要求我和孩子谈谈他/她在学校的一天.	

CODING: 1 = 完全不同意; 2 = 不太同意 3 = 中立; 4 = 比较同意; 5 = 同意; 9 = 无可奉告。

E8. 孩子的老师要求我积极帮助学校.	
E9. 我孩子的老师通过各种方式（留言，电话，电子邮件）联系我.	
E10. 我的孩子提出要我参加学校的特殊活动.	
E11. 我的孩子要求我多帮助学校.	
E12. 我的孩子让我和他/她的老师谈话.	
E13. 我的孩子让我帮他/她解释他们的家庭作业.	
E14. 我的孩子让我监督他们的家庭作业.	
E15. 我的孩子跟我谈起他/她在校的一天.	

Section F: 在这一年中，您认为：

CODING: 1 = 完全没有; 2 = 一点点; 3 = 很多; 9 = 无可奉告

F1. 您的工作有多少影响到了您参与孩子教育的精力?	
F2. 您对家庭承担的责任有多少影响到了您参与孩子教育的精力?	
F3. 您所承担的其他责任有多少影响到了您参与孩子教育的精力?	

以上责任/工作是如何影响您参与辅导孩子学习的？

Section G: 人口统计

下面的问题是为了了解本次学习参与人群的人口特征。您的个人信息是绝对保密的。

5. 您的性别?

□ 女性

□ 男性

6. 您孩子的性别?

□ 女性

□ 男性

请在下面的框里填入您的答案。

3. 您的年龄?

4. 您孩子的年龄?

5. 您所属的民族?

6. 您的孩子现在学校读几年级?

7. 您和这次调查中提到的孩子的准确关系是?

8. 您至今取得的最高学历是? 请在以下选择。

- □ 小学学历
- □ 高中学历
- □ 读过一些大学提供的课程
- □ 专科或本科学历
- □ 研究生或硕士学历
- □ 博士

9. 您的职业是?

10. 您是单亲家庭吗?

- □ 是
- □ 否

11. 您的配偶取得的最高学历是：

- □ 小学学历
- □ 高中学历
- □ 读过一些大学提供的课程
- □ 专科或本科学历
- □ 研究生或硕士学历
- □ 博士

13. 一周中的大部分时间，您的孩子和谁住？在下面凡是符合的项目中都打钩。

- □ 母亲
- □ 父亲
- □ 兄弟姊妹
- □ 祖父母大家庭
- □ 继母
- □ 继父
- □ 朋友/监护人
- □ 其他， 请指出: _____

14. 您孩子现在去的学校是不是一个种族文化多样性的环境?

- □ 是
- □ 否

谢谢！

为了表达我们的感谢之情，您可以参加**$50** 超市购物券的抽奖。如果您想要参加这个抽奖，请在下面填写您的电子邮件或者邮寄联系方式。

电子邮件

邮寄地址

如果我们的研究得到政府拨款，进行进一步的研究，您有兴趣参加吗？

□ 是

□ 否

如果您上面回答了是，我们可否用上面您提供的联系方式日后联系您？（您所提供的联系方式绝对不会泄漏给其他人，也不会去做其他用途。）

□ 是

□ 否

End of the survey

Section H: 开放性问答脚本

1. 请形容一下您是如何支持和帮助您孩子的教育的？

- 为了直接促进孩子的学习，您都做了哪些事情
- 在间接的促进孩子学习方面，您都做了哪些事情（例如聘请家庭教师，规定学习时间或者提供给孩子时间和空间学习）？

2. 当您直接参与孩子的教育时，请告诉我您的孩子是怎样对此反应的。

- 当跟您的孩子一起学习的时候，您有什么感觉
- 您是如何管理您孩子的行为的？例如，让他/她做功课，处理孩子的抱怨。

3. 您的孩子有没有提出过让您帮助他们的功课？您是如何回应的？

4. 还有其他的什么事情您觉得可以影响到您对孩子教育的参与？

- 您的语言？
- 你对孩子学校所使用教程的了解？
- 您对孩子的学校系统的了解

5. 当您和朋友或者家人谈起来孩子教育时，您们都谈论哪些话题呢？

6. 您如何看待自己在孩子的教育上的投入，相对于其他朋友对于他们孩子的教育投入？（您注意到了哪些相同或者不同点？

7. 以下问题针对第一代或者第二代移民：

关于纽西兰人和华人在孩子教育上的观点，您注意到了哪些不同？请形容一下您所观察到的。

- 在亚洲父母和纽西兰父母参与孩子教育或者协助孩子学习方面的做法，您觉得有没有不同？
- 您能不能告诉我一些您注意到的不同:
- 您是如何得到这样的印象的? (提示：您是怎么样了解到其他文化背景的父母对于孩子的教育的？)

8. 对于以上不同，您是怎么看的？（会不会因为看到其他文化下的父母教育孩子的方式，从而调整您自己教育孩子的方法?）

9. 您觉得自己对孩子的教育方法代表典型的亚洲文化吗？（鼓励父母们谈谈关于他们自己教育孩子的方式和亚洲传统文化的相同和不同点。譬如问：“您小学时候您的父母是怎样关注您的教育的？）