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**Work-family Conflict: A Study of Chinese Immigrants in New  
Zealand**

A thesis  
submitted in fulfilment  
of the requirements for the degree  
of  
Doctor of Philosophy in Psychology  
at  
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by  
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## **ABSTRACT**

This study of work-family conflict among Chinese immigrants in New Zealand arose in response to the growing ethnic diversity in the labour force. The research investigated the work-family experiences among Chinese immigrants in New Zealand. Only sparse attention within the work-family literature has been given to immigrants' work-family experiences. However, the Chinese ethnic group is fast growing and a critical part of the current and future labour market in New Zealand. Therefore, the antecedents, consequences, and coping strategies of work-family conflict among Chinese immigrants in New Zealand require attention. Furthermore, the majority of work-family studies assume that individuals function within a single culture, and overlook the impact of acculturation, which refers to the process of immigrants adapting to a new culture. The present research included acculturation as a major contributor to the work-family nexus.

This study makes an original contribution to the work-family literature by broadening our comprehension of work-family experiences among immigrant populations. First, the research investigated the antecedents and consequences of work-family conflict experienced by Chinese immigrants. Second, the potential role of acculturation in work-family experience among Chinese immigrants in New Zealand was also explored. Third, this research also investigated strategies used by individuals for coping with work-family conflict.

The thesis was designed and conducted through four separate studies, which are presented in four research articles designed to examine the above issues, and aimed to describe work-family experiences among Chinese immigrants. Each is a peer reviewed

publication, and has been accepted, resubmitted, or under-review in peer reviewed journals or premium conferences.

Study 1 examined the antecedents of work-family conflict, and the mediation effects of work-family conflict on well-being among Chinese immigrants to New Zealand, along with the moderating role of acculturation (cross-sectional analysis,  $n=557$ ), using structural equation modelling to test mediation and moderation effects. Overall, this study provided some evidence that both Chinese and New Zealand cultures could exert influences on the antecedents and consequences of work-family conflict among Chinese immigrants.

Study 2 investigated the mechanisms linking acculturation, work-family conflict and subjective well-being (two-wave longitudinal analysis,  $n=264$ ), using structural equation modelling to test two rival mediation models. The results suggested that subjective well-being mediated the effect of acculturation on work-family conflict, while acculturation did not directly influence work-family conflict.

Study 3 examined the mediation effects of work interference with family (one direction of work-family conflict) between interpersonal conflict at work and well-being, as well as the moderation effects of acculturation (two-wave longitudinal analysis,  $n=264$ ), using structural equation modelling to test both mediation and moderation effects. Overall, this study found that interpersonal conflict at work was a significant strain-based predictor of work interference with family, and strain-based work interference with family had more effects on well-being than did time-based work interference with family. In addition, visible artefact acculturation had little moderation effect on these relationships.

Study 4 was a qualitative study exploring the antecedents and coping strategies of work-family conflict in the context of acculturation. Participants (33) were selected from the Study 2 and those who got the lowest 10% and the highest 10% of scores on the work-family Conflict Scales were selected for inclusion. The selection was designed in order to compare responses from the two extreme groups (high and low work-family conflict). This study found that most Chinese immigrants had a low level of value acculturation, and strongly held their traditional Chinese cultural values, which largely affected their coping strategies and the antecedents of work-family conflict.

Overall, this thesis develops and extends previous research on work-family conflict by providing a broader understanding of complex work-family experiences among Chinese immigrants, such as the antecedents and coping strategies of work-family conflict in the context of acculturation. This broadened understanding paves the way for future work-family research among immigrant populations to continue to explore the role of value acculturation in their work-family experiences. The thesis also provides some practical recommendations for Chinese immigrants in aiming to balance their work and family demands, and for organizations to develop family-friendly policies to support immigrant workers, as well as for government to enact cultural awareness training to ensure their successful cultural adaptation.

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*Although the way ahead is endless and faraway, I still  
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修远兮, 吾将上下而求索).*

----- Qu Yuan (340 BC-278 BC)

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## **CHAPTER 1**

### **INTRODUCTION AND OVERVIEW**

#### **Statement of Problem**

New Zealand has always been a nation of immigrants (Ward & Masgoret, 2008). In the 2013 census, Chinese accounted for 4.3% of the total population, with 73.4% born overseas, the largest Asian ethnic group in New Zealand (New Zealand Census Statistics, 2013). The number of Chinese immigrants has shown a dramatic increase, especially from Mainland China. Chinese immigrants come to New Zealand to seek a better lifestyle, but the harsh reality for many is longer working hours to make ends meet and less time for leisure and family (Ho, Meares, Peace, & Spoonley, 2010). Accordingly, conflict between work and family may exist in Chinese immigrants, which can incur physical and psychological costs for them and their families (Brough, O'Driscoll, & Kalliath, 2005), and may further harm the productivity of organizations with Chinese immigrant workers. However, Chinese immigrants have been absent from the majority of work-family research (Wei, 2007). Therefore, it is necessary to extend our understanding of work-family experiences among non-immigrant populations to immigrant populations.

Work-family conflict (WFC) is one of the most discussed work-family issues, and a common phenomenon in modern life in many countries and cultural contexts. Researchers have recognized that work-family issues are at least as important to organizational function as to family function (e.g., Barnett, 1998). However, work-family issues have only been widely researched among individuals who live in their own cultures or countries. Immigrants, born as a citizen of one country and subsequently moved to another country at some point in their lifetime, are given little attention in research on work-family experiences. Immigrants are exposed to both local

and home cultures, and thus expectations of work and family roles are convoluted, which may exacerbate the complexity of antecedents and consequences of WFC they experience.

Furthermore, while juggling two cultures, immigrants inevitably experience a process of adjustment into local society, which is called *acculturation* (Berry, 2002). Grzywacz et al. (2007) suggested that acculturation may play a critical role when work-family models are applied to immigrant populations, since immigration has been regarded as a stressful event for both family and work (Suárez-Orozco & Suárez-Orozco, 2010). However, only sparse research has investigated the role of acculturation in work-family experiences.

In addition, overwhelming evidence demonstrates that work-family conflict exerts substantial and negative consequences on individuals' work, family and organizations (e.g., Somech & Drach-Zahavy, 2012). Therefore, exploring coping strategies that can ease this conflict is imperative. Nevertheless, it is uncertain whether the coping methods found in previous research in Western contexts are efficacious for immigrants, since acculturation is a process of changing values and may affect immigrants' coping behaviors (Lam & Zane, 2004).

Overall, in response to the above research limitations and immigrant prevalence worldwide, this thesis research aims to expand our understanding of work-family experiences, including antecedents and consequences of WFC, the role of acculturation, and coping strategies among a unique population that has received limited attention within the work-family literature: Chinese immigrants in New Zealand.



## **Research Objectives and Questions**

The objectives of this research are: (a) to identify the antecedents and consequences of work-family conflict among Chinese immigrants; (b) to examine the role of acculturation in work-family experiences, and (c) to explore possible coping strategies to reduce this conflict during their acculturation. Several linked research questions are explored.

Question 1: What are the antecedents of work-family conflict among Chinese immigrants in New Zealand?

Question 2: What are the consequences of work-family conflict among Chinese immigrants in New Zealand?

Question 3: What is the role of acculturation in the work-family experiences among Chinese immigrants in New Zealand?

Question 4: What kinds of coping strategies can help Chinese immigrants reduce work-family conflict?

## **Rationale for the Research Questions**

**Questions 1 and 2.** Chinese immigrants in New Zealand exist within two different cultures. They were born in the Chinese culture, which is labelled as a collectivistic culture, but now live in New Zealand, which is predominantly an individualistic culture (Hofstede, Hofstede, & Minkov, 2010). Collectivism versus individualism, one of the culture dimensions, has been regarded as an important factor which affects antecedents and consequences of WFC (e.g., Bhagat et al., 2010). That is, antecedents and consequences of WFC for individuals in collectivistic cultures may differ from those individuals in more individualistic cultures. However, the process of acculturation is

unavoidable for each Chinese immigrant, and their values are likely to incorporate both collectivism and individualism. Therefore, the antecedents and consequences of WFC among Chinese immigrants may be more complex, not similar to either Chinese in their home countries or New Zealanders. Hence, it is necessary to determine the antecedents and consequences of WFC experienced by Chinese immigrants.

**Question 3.** Acculturation is an inevitable journey for immigrants, and can exert a considerable impact on their work and family (Suárez-Orozco & Suárez-Orozco, 2010), but little attention has been given to the role of acculturation in work-family experiences in previous work-family research. The relationship between acculturation and WFC is still obscure. A lack of understanding of the role of acculturation may constrain organizations from proactively facilitating immigrant employees' subjective well-being in a diverse working environment, and from setting suitable policies to balance the relationship between work and family for immigrant workers. Therefore, investigating the role of acculturation in work-family experiences is warranted.

**Question 4.** WFC as a source of stress may generate some harmful consequences for individuals, their families and their organizations (Bellavia & Frone, 2005). It is therefore necessary to explore effective methods to reduce the conflict and alleviate those harmful consequences. Furthermore, coping strategies have been recognized as cultural-related (Yeh & Wang, 2000). Given the complex values held by immigrants, the coping strategies among immigrant populations may be also more complex than those among non-immigrants, which requires further investigation of the coping mechanisms immigrants adopt.

**Significance of the Topic**

This thesis research aims to advance knowledge of WFC among Chinese immigrants in New Zealand, including understanding the antecedents and consequences of WFC, the role of acculturation, and coping strategies, thereby encouraging future work-family research to better understand complex WFC experiences among them. Practically, this research can provide some beneficial prescriptions for organizations on how to manage WFC in a diverse workplace, including aiming to improve their family-friendly policies and practices. This may ensure the demands of immigrants in a diverse working environment can be fulfilled, and at the same time foster the organizational success (Grzywacz et al., 2007).

**Overview of Work-Family Conflict**

Work-family conflict (WFC) is increasingly recognized as consisting of two distinct, though related, concepts: work interference with family (WIF) and family interference with work (FIW) (e.g., Byron, 2005). The acronyms, WIF and FIW, refer to the specific direction of interference (e.g. work-to-family and family-to-work), whereas the term work-family conflict (WFC) reflects conflict in general between the two domains (O'Driscoll, Brough, & Kalliath, 2004). WIF is a form of inter-role conflict in which participation in the work role makes it more difficult to participate in the family role. On the other hand, FIW is a form of inter-role conflict in which participation in the work role is made more difficult by participation in the family role (Greenhaus & Beutell, 1985).

Researchers also have considered three different types of work-family conflict: *time-based conflict*, *strain-based conflict* and *behaviour-based conflict* (Greenhaus & Beutell, 1985). Time-based conflict occurs when time devoted to one role makes it difficult to participate in another role. For example, if a person spends extra hours on

work, the time he/she stays at home will decrease. He/she has little time to spend with his/her children and spouse. Strain-based conflict suggests that psychological strain experienced in one role intrudes into and interferes with participation in another role. For instance, negative emotional reactions to workplace stressors can lead to expressions of irritability toward family members or withdrawal from family interaction in order to recuperate (O'Driscoll, 1996). Behaviour-based conflict occurs when specific behaviours required in one role are incompatible with behavioural expectations in another role (Greenhaus & Beutell, 1985). For instance, at work an individual may be expected to be aggressive, ambitious, hard-driving and task-oriented. Successful job performance may be contingent upon demonstration of these behaviours. In contrast, at home supportive and accommodating behaviours may be regarded as essential to developing and fostering a happy and healthy family life. Clearly these opposing expectations may create a tension between work and family behaviours (Brough & O'Driscoll, 2005).

Time-based and strain-based conflict are concentrated on in this thesis, as they have received the most empirical attention of the three categories (Ford, Heinen, & Langkamer, 2007; O'Driscoll et al., 2004). In addition, behaviour-based conflict usually happens among people with very unique work demands, such as prison officers. For example, Triplett, Mullings, and Scarborough (1999) found that behaviour-based conflict is an important contributor to work stress among prison officers. At work, a prison officer may be required to behave in ways that are not necessarily appropriate in social and family life, such as questioning family members or barking orders (Lambert, Hogan, Camp, & Ventura, 2006). Except for these kinds of unique jobs, however, appropriate behaviours at work (home) may not greatly conflict with appropriate behaviours at home (work). Consequently, both directions of conflict (WIF and FIW)

and two forms of work-family conflict (time-based and strain-based conflict) are focused on in this thesis.

In the context of migration, to stabilize their life in the new country, many Chinese immigrants would like to spend more time on work to earn sufficient money (Ho et al., 2010). Regarding this, time-based conflict may always happen among them. Furthermore, frequently-occurring time-based conflict among Chinese immigrants can be a catalyst for increasing strain-based conflict. That is because too much time costed at work is bound to decrease individuals' energy and attention which should be given to family (e.g., Frone, Yardley, & Markel, 1997). In addition, juggling two different cultures, Chinese immigrants need to spend additional personal resources, such as time, energy, or attention, to adjust themselves to fit into the local culture (Lazarova, Westman, & Shaffer, 2010), which may intensify the competition between work and family for sufficient personal resources. Therefore, the degree of both time-based and strain-based conflict among them may increase in the new country.

### **Antecedents of Work-Family Conflict**

To date, researchers have found a number of possible antecedents of work interference with family (WIF) and family interference with work (FIW). According to Eby, Casper, Lockwood, Bordeaux, and Brinley (2005), those antecedents can be classified into three categories: work domain variables (e.g. workload), family domain variables (e.g. family responsibility), and individual and demographic variables (e.g. gender, age). This thesis focuses on work domain variables and family domain variables as predictors. Because personal variables tend to be weak predictors of WIF and FIW (Byron, 2005), they were treated as control variables in this research. Because of the complexity of integrating dual cultures, several antecedents were chosen, which allowed this research to effectively manage the development of theoretical models. The

antecedents identified in previous research and relevant to Chinese immigrants are discussed below.

**Work domain variables.** Work domain variables refer to job and workplace factors, including workload and interpersonal conflict at work. Past research has shown that domain-specific antecedents are related to different directions of WFC (Lu, Kao, Chang, Wu, & Cooper, 2011). That is, work-related antecedents tend to have a stronger influence on WIF than on FIW (Byron, 2005), since work demands require psychological and physical expenditure to meet the expectations of work, resulting in less time for family commitment (Michel, Kotrba, Mitchelson, Clark, & Baltes, 2011).

**Workload.** One reason for the inclusion of workload in this research is that workload is a relatively strong and consistent predictor of WFC across cultures (Britt & Dawson, 2005). Therefore, it seems reasonable to assume that workload is likely to hold its predicting role in WFC among Chinese immigrants who live in dual cultures. The other reason is that workload can represent both a time-based and a strain-based antecedent of WIF. Workload represents a time-based predictor due to having not enough time to complete the work (Greenhaus & Beutell, 1985). Generally, the amount of time workers assign to work is an important time-based antecedent, and is more positively related to WIF rather than to FIW (e.g., Byron, 2005). However, the relationship between the number of working hours and WFC is different across cultures in previous research. For example, the number of working hours is significantly related to WFC in the individualistic culture, but not in the collectivistic culture (Spector et al., 2004), since people in different cultures have different view on the amount of working hours (Yang, 2005). That is, individualists regard working more hours as taking away from their family, while collectivists see working long hours as a benefit for family. Therefore, the relationship between the number of working hours and WFC may be

more complex among Chinese immigrants juggling the two cultures. The investigation of the relationship would enrich our understanding of work-family experiences among them.

Workload also represents a strain-based predictor due to having too much work to accomplish in a certain period, which is called *work overload* and likely to lead to the experience of emotional distress (Frone et al., 1997). Work overload is an obvious aspect of work stress, and refers to job demands exceeding human limits (Frone et al., 1997). It is a common belief that heavy workload leads to elevated stress and reduced efficiency. High levels of workload in one role (e.g. work) can cause elevated levels of physical or psychological fatigue that may undermine an individual's ability or motivation to meet the obligations of other roles (e.g. family) (Eby et al., 2005). In general, work overload is significantly positively related to WIF but not FIW (Byron, 2005). In the context of migration, in order to stabilize their life in the new country, immigrants may not only sacrifice much family time, but also dedicate much attention and energy to work. Therefore, a high extent of work overload may exist among immigrants, which can further intensify the conflict between work and family. Overall, the relationship between work overload and WFC among immigrants requires an empirical investigation.

***Interpersonal conflict at work.*** Interpersonal conflict involves threats to one's self-image in situations where one's authority and expertise are challenged and where negative evaluations regarding one's behaviour and character are made explicit (De Dreu & Van Vianen, 2001). Interpersonal conflict in the workplace may range from minor disagreements to physical assaults among co-workers (Spector & Jex, 1998). Previous studies have shown that interpersonal conflict can make work more stressful, and high levels of interpersonal conflict are associated with exhaustion and job burnout

(e.g., Frone et al., 1997). These findings suggest that interpersonal conflict leads to exhaustion of one's personal resources, such as time, energy and attention. For instance, an individual who is experiencing interpersonal conflict will not only suffer from it, but will also try to handle this conflict, which may take additional energy and time. As mentioned before, increased time and energy spent on work will reduce the time and energy spent on family. Therefore, work behaviours related to engaging or handling interpersonal conflict could reduce the time and energy the family role needs, which may lead to high WIF.

Interpersonal relationships are an important and special phenomenon in Chinese society (Ling & Powell, 2001). In collectivistic cultures, maintaining harmonious relationships and avoiding interpersonal conflicts at work is a crucial work demand (Ling & Powell, 2001). For instance, employees need to build a good relationship with their supervisors to secure their benefits, since personal favours often play an important role in promotion, resource allocation and other reward decisions in Chinese culture (Lai, 1995). Ling and Powell (2001) compared the work contexts between China and the United States. They found that Chinese workers suffer greater negative effects of interpersonal conflict than American employees, since the Chinese culture attaches greater importance to interpersonal harmony. However, few studies have empirically examined interpersonal conflict in relation to WFC among Chinese, let alone among Chinese immigrants. Therefore, investigating the predicting role of interpersonal conflict at work in WFC can broaden our comprehension of work-family issues.

The Chinese traditional value advocates people to be less competitive and confrontational when facing conflict with other people, while the Western value is generally in the other way round (Wang, 2015). In the context of migration, interpersonal conflict at work may be complex among Chinese immigrants with



integrated bicultural values. Furthermore, communication between people from different ethnic backgrounds is often a challenge and frequently ends up in conflict as a result of confusion and misunderstanding (Scollon & Scollon, 1990). Local residents may express avoidance, irritation, frustration, prejudice, or suspicion toward immigrant co-workers (Amason, Allen, & Holmes, 1999). For example, local people may avoid conversation with immigrant co-workers, because they may think immigrants always perform in the wrong way at work, or the immigrant co-workers do not understand them. Feelings of irritation and frustration emerge among local residents (Amason et al., 1999). These negative expressions may easily cause interpersonal conflict between immigrants and local co-workers in the workplace. As the immigrants are adapting to the host culture, they are improving their intercultural communication competence (Neuliep, 2014), which may help them to avoid interpersonal conflict at work. Therefore, the degree of interpersonal conflict at work may keep changing as immigrants live in the host country. Overall, it is necessary to investigate the relationship between interpersonal conflict at work and WFC to advance our understanding of work-family experiences of immigrants.

**Family domain variables.** Family domain variables refer to factors related to family, including family responsibility, family support, and interpersonal conflict among family. Previous research suggests that family-related antecedents have a stronger influence on FIW than on WIF (Michel et al., 2011). According to Michel et al. (2011), family pressures require greater psychological and physical expenditure to meet the expectations of family role, resulting in a decrease in available resources for work role demands.

***Family responsibility.*** In the family domain, family responsibilities are identified as antecedents of WFC (Frone, Russell, & Cooper, 1992). Family responsibility is

selected as one of the research variables, because some aspects of family responsibility, such as caring for children and elderly parents, are value-related, which is discussed below.

Caring for children is one of the basic functions and main responsibilities of a family. In the family, the responsibility of childcare indicates stronger relations with well-being among Chinese than among Anglos and Latins (Spector et al., 2004). Aycan (2008) stated that, in collectivistic cultures, care and guidance of offspring is one of the most important family demands and is a life-long commitment for parents, who are involved in their children's lives at every age and stage. As such, caring for children is a serious responsibility and a family demand. Furthermore, taking care of elderly parents should also be considered, since many Chinese immigrants would like to assist their parents, who depend on their adult sons/daughters heavily to migrate to New Zealand (Ho et al., 2010). Responsibility for elderly parents is an obligation for adult children in Chinese culture. Ling and Powell (2001) stated that Chinese adult children are expected to be the major source of instrumental and psychological support to their elderly parents, since adult children have a great responsibility for providing economic and emotional support for their elderly parents. Overall, family responsibilities require people to spend more time and attention on these activities. These activities may create time-based and strain-based pressure from the family realm (Baltes & Heydens-Gahir, 2003). In the context of migration, whether Chinese immigrants who may have influenced by the local culture still hold the same cultural perspective on family responsibility with people in their home culture need to be further investigated.

***Interpersonal conflict with family members.*** Similar to interpersonal conflict at work, keeping harmonious relationships with family members is also one of the most important family demands in collectivistic societies (Aycan, 2008). Interpersonal

relationships play a particularly important role in Chinese culture, since Chinese culture places great importance on interpersonal harmony (Ling & Powell, 2001). Therefore, interpersonal conflict with family members should be examined as a family-related antecedent of WFC. Conflict within family has been associated with high levels of FIW, and disagreements with family and tense relationships are characteristics of high-FIW people (Parasuraman & Simmers, 2001). For instance, Ling and Powell (2001) stated that a bad marital relationship, such as husband-wife disagreement about family roles, has a great negative effect on Chinese family life.

In the context of migration, interpersonal conflicts may happen more frequently among family members due to the acculturation dissonance among them. For instance, Cleland (2004) claimed that parent-adolescent conflict occurs in Chinese immigrant families in New Zealand, since adolescents tend to adopt the values and behaviours of the mainstream culture faster and more strongly than their parents (Cheung, Chudek, & Heine, 2010). In addition, husband-wife conflict may happen when expected roles change (Suárez-Orozco & Suárez-Orozco, 2010). For instance, when a wife becomes acculturated faster than her husband, she accepts more Western values and behaviours, like independence and assertiveness, which are regarded as contradictory to traditional Chinese culture. Her husband may have difficulty coping with changes in her expected roles as an obedient wife (Suárez-Orozco & Suárez-Orozco, 2010). Overall, interpersonal conflicts with family members may have a stronger relationship with WFC among Chinese immigrants than either Chinese in the home country or the locals. However, the relationship between interpersonal conflict with family members and WFC in immigrant populations has not been investigated in work-family research to date.

***Support from family.*** Social support from other family members is also considered as another family-related antecedent of WFC, as family cooperation and help is an important way to maintain the stability of the family structure in Chinese society (Law, 2011). Although interpersonal conflict with family members can increase FIW, social support from family members may alleviate conflict. In Chinese culture, family closeness creates a strong bond, and Chinese place significant emphasis on cooperation and family cohesion (Law, 2011). It is the norm in Chinese society that mutual assistance exists between generations and family members. Therefore, it is necessary to examine social support as an antecedent of FIW. Support from the spouse, elderly parents and other extended family members is elaborated below.

Firstly, in the family, spousal support is the most common support, and supportive spouses may protect each other from experiencing high levels of WFC (e.g., Holahan & Gilbert, 1979). Adams, King, and King (1996) claimed that spouse support could be classified into emotional support and instrumental support. Emotional support mainly consists of empathy, understanding and communication between husband and wife, such as sincere concern and advice. Emotional support from the spouse can improve an individual's efficacy in both family and work domains. Furthermore, instrumental support mainly refers to practical help with housework and childcare. Instrumental support from one's spouse can relieve the burden of family demand and grant the individual more time for working. Byron (2005) suggested that family support from the spouse has a significant negative relation with FIW.

Secondly, in the Chinese family, although taking care of elderly parents is a family responsibility, elderly parents also can take over part of working parents' childcare and household responsibilities (Ling & Powell, 2001). Tsui (1989) suggested that elderly

parents are important providers of childcare and household assistance to their adult children in China. Instrumental support from the elder parents alleviates the burdens of childcare and housework to some extent for Chinese workers (Ling & Powell, 2001). Thirdly, extended families usually form a close-knit protective social network that can be called upon to provide support and help in times of need and distress in Chinese societies (Lu, 2006). For Taiwanese young parents, the help from extended families in childcare and home maintenance has been found to alleviate individual stress and enhance well-being (Lu, 2006). Overall, social support from family may serve to alleviate work-family conflict among Chinese, since social support may directly reduce family role pressures, thereby producing fewer time demands and less strain.

Within the context of migration, for many immigrants, migration causes loss of the familiar support network of family and friends (Yeh, Kim, Pituc, & Atkins, 2008). Accompanying family members may be more dependent on each other for support than when they were in their home country. Thus, family support, including spousal support and parental support, is likely to become a salient and precious personal resource for immigrants, which has not been inspected in work-family research on immigrant populations.

### **Consequences of Work-Family Conflict**

Many previous studies have examined the relationships between work-family conflict and potential consequences. According to Bellavia and Frone (2005), the relevant consequences of WFC can be divided into three categories: work-related consequences which primarily concern work life, family-related consequences which primarily concern family life, and individual consequences which primarily concern personal well-being. Among the consequences, work satisfaction, family satisfaction

and psychological well-being (or, conversely, heightened psychological strain) are focused on in this thesis. The rationale for the inclusion of the three consequences is that none work-family research has been carried out to investigate the consequences among immigrant populations, and the three consequences are relatively strong and consistent outcomes of WFC (O'Driscoll et al., 2004), which may provide some insight into the consequences of WFC among immigrants. The three consequences are generally recognized as subjective well-being. As mentioned before, WFC has two directions: work interference with family (WIF) and family interference with work (FIW). This research examines the relationships of the consequences with the two directions.

**Job satisfaction and family satisfaction.** Job satisfaction refers to the extent of an employee's positive emotions/attitude towards his/her work (O'Driscoll et al., 2004). WFC is strongly negatively associated with job satisfaction, which is related to many indicators of mental health and physical health and can be considered as a central aspect of an individual's well-being (Warr, 2011). Likewise, the family satisfaction can be regarded as the degree to which an individual is satisfied with his or her family life (Carlson, Kacmar, & Williams, 2000). Family satisfaction may be seen as the counterpart of job satisfaction (Amstad, Meier, Fasel, Elfering, & Semmer, 2011). If individuals spend too much attention or time on work, dissatisfaction among family members will be aroused.

The relationships of the two directions of WFC (WIF and FIW) with job satisfaction and family satisfaction are mixed (e.g., Amstad et al., 2011). For instance, Brough and O'Driscoll (2005) found that WIF predicted reduced job satisfaction, but there were no significant relationships between WIF and family satisfaction. However, Ford et al. (2007) suggested that WIF was significantly negatively related with family

satisfaction. The different results may be explained by two different perspectives: the cross-domain perspective and the source attribution perspective (or same-domain perspective).

Frone et al. (1992) assumed a *cross-domain perspective*. When one role (e.g. work) interferes with another role (e.g. family), it will be hard for individuals to meet demands in the receiving role (e.g. family). Satisfaction in the receiving role (e.g. family) may decrease. Therefore, WIF is negatively associated with job satisfaction, while FIW is negatively related to family satisfaction. *The conservation of resources perspective* views resources such as time, attention, and energy (physical and psychological) as finite (Hobfoll, 2011). An individual attributes the source of role conflict to the role that the individual believes caused the interference. When WFC occurs, individuals may experience decreased performance in the receiving domain (e.g. family), but they psychologically attribute blame to the domain (e.g. work) that is the source of the conflict (Amstad et al., 2011). For example, when experiencing WIF, individuals are likely to blame the work role and be dissatisfied with their work, since individuals consider their work is responsible for having too little time with their families (Amstad et al., 2011). In addition, when individuals experience FIW, they will blame family demands, which they think cause the conflict to occur, rather than the job demands. Therefore, WIF is negatively associated with job satisfaction, while FIW is negatively associated with family satisfaction. Overall, the debate about the direction of the relationships between WFC and the two types of satisfaction has not been settled yet.

One possible reason for that debate is that those mentioned relationships are tested in different populations or in different circumstances. Therefore, in order to contribute to resolving the controversies, it is worth to extend the investigation of those relationships to an immigrant population.

**Psychological well-being.** A substantial body of evidence has demonstrated that WFC contributes to individuals' decreased psychological well-being (which is also inversely called psychological strain) (Amstad et al., 2011). That is, psychological strain is harmful and usually has an adverse effect on individuals. According to Lazarus and Folkman (1984), strain arises when individuals perceive themselves as being unable to meet environmental demands. Consistent with Frone et al. (1992), an individual is likely to experience a high level of psychological strain related to a given role (e.g. work) if the individual frequently struggles to meet the demands of the role (e.g. work demands) because of hindrance from another role (e.g. family). As mentioned previously, people experiencing WIF have difficulty satisfying their family demands, while people experiencing FIW have difficulty meeting their work demands. Therefore, psychological strain might occur from both WIF and FIW. In many studies, both WIF and FIW are positively associated with psychological strain (Amstad et al., 2011; O'Driscoll et al., 2004). Increased levels of WIF or FIW will cause increased levels of anxiety, hostility, and feelings of discomfort (such as being upset, frustrated, or tense) (Parasuraman & Simmers, 2001). These emotions may be considered as indicators of psychological strain. Hence, both WIF and FIW are positively associated with psychological strain.

Within the context of migration, this research will not expect a different relationship between WFC and psychological strain with the above mentioned findings. However, investigation of this relationship would provide some fresh insights into the immigrants' psychological well-being, which is important in a diverse working environment. The rationale behind this investigation is that the link between WFC and psychological strain may be even severer. Hobfoll (1989) defined that psychological strain is caused by feeling the threat of personal resources or by knowing actual loss of



personal resources. Acculturation may be a life-long personal demand which requires sufficient resources to fulfil individuals' adjustment of values, behaviours and attitudes (Lazarova et al., 2010). Therefore, the amount of personal resources available for dealing WFC may be even constrained, which can further aggravate the existing psychological strain.

### **Acculturation**

Immigrants moving to a new country will experience a complex process of adapting to a new culture and society (Berry, 2002). This process is called *acculturation*, which generally includes two distinct features: visible artefacts and cognitive orientations/values. Visible artefacts refer to the changes in immigrants' customs, eating and dressing habits, language usages, social rituals, life styles, and so on, which are the surface level of acculturation. Cognitive/value orientations represent a set of collective mental programs including values, norms, attitudes, and cognitive maps by which a group of people react to their external environment (Abdullah, 1984). Taras, Rowney, and Steel (2013) found that visible artefact acculturation had a little positive relationship with value acculturation (the latter is only explained by 4% of variation in the former). For instance, it is quite possible that some immigrants speak, eat, play, or dress like the locals, and still remain committed to their original values and cognitive orientations (Abdullah, 1984). On the one hand, during the process of acculturation, immigrants deliberately or accidentally lose home cultural features (culture shedding); on the other hand, they deliberately or accidentally acquire host cultural features (culture learning) (Berry, 2002). As the extent of culture shedding and learning may be different across immigrants, the levels of acculturation may vary among them.

Two groups of immigrants are regarded as having high levels of acculturation (Lu, Samaratunge, & Hartel, 2012). One group consists of individuals who do not want to

maintain their original culture and who aim at complete absorption into the host culture. The other group are individuals who frequently interact with the host cultural group, although they are interested in maintaining their original culture. However, immigrants who do not approach the host culture and who think the host culture is not important may have low levels of acculturation. Therefore, immigrants with high levels of acculturation adopt the values and behaviours of the host culture more than their counterparts with low levels of acculturation. Since values and beliefs of individuals may shape people's work-family experiences (e.g. Joplin, Shaffer, Francesco, & Lau, 2003), immigrants with different levels of acculturation can have different work-family experiences. Therefore, when work-family models are applied to immigrant populations, acculturation may play a central role (Grzywacz et al., 2007). However, work-family research has yet to pay in-depth attention to this construct.

To comprehensively investigate the role of acculturation in work-family experiences among Chinese immigrants, this thesis research tested acculturation from different angles. First, the moderation role of acculturation - whether there are significant interactions between the antecedents of WFC and acculturation in predicting WFC, or whether there are significant interactions between WFC and acculturation in predicting consequences of WFC (details are presented in Chapter 3 and Chapter 4). Second, the predicting role of acculturation – whether acculturation will directly or indirectly predict WFC (details are displayed in Chapter 5). Third, value acculturation – does value acculturation matter in work-family experiences among Chinese immigrants (details are exhibited in Chapter 6).

### **Coping with Work-family Conflict**

Managing competing demands from the work and family domains represents a source of formidable stress for many employees which, in turn, can lead to health risks

and other adverse outcomes (Rotondo, Carlson, & Kincaid, 2003). Therefore, exploring individual coping strategies that can ease the conflict is crucial. Coping is defined as the cognitive and behavioural efforts individuals use to manage taxing demands appraised as exceeding their personal resources (Lazarus & Folkman, 1984). Some research on coping with work-family conflict has developed several theoretical models. However, no coping strategy is universally appropriate. That is, some might work better in one situation, but might be ineffective in another circumstance (Rotondo et al., 2003). Additionally, since the coping strategies may vary across cultures (Aycan, 2008), it is uncertain whether the coping strategies found in previous Western research is suitable to be applied to Chinese immigrants. Furthermore, most previous research has adopted general coping strategy typologies in the context of work-family conflict. Developing specific coping strategies might be better for people to mitigate work-family conflict. Importantly, acculturation is a variable which cannot be ignored in the immigrant research. As mentioned before, acculturation is a process of changing values and beliefs, which may also influence immigrants' problem-solving and conflict resolution tools (Neuliep, 2014). The role of acculturation in coping with WFC has not yet been well understood. Finally, there are few comprehensive scales to measure coping strategies in the context of work-family conflict. Therefore, eliciting the work-family experiences directly is a better method to examine personal strategies for coping with work-family conflict than assessing the experiences objectively.

### **Organization of the Thesis**

As discussed above, this thesis is dedicated to forging understanding of the complex work-family experiences among Chinese immigrants. To achieve the objectives, the experiences are investigated in different publication papers. Each of the research chapters that follow contains the research article, an outline of the article's

publication status, and the role of collaborating researchers. Table 1 below outlines each chapter and the research articles.

Table 1: Overview of chapters and research articles

Chapter	Title	Content covered
Chapter 1	Introduction and Overview	This chapter introduces the research problems, interprets the research questions, and reviews the relevant literature.
Chapter 2	Design of Studies and Methodology	This chapter overviews the general procedure of data collection and the general methodology. It also provides an outline of four research articles with the particular study samples, measures and outcomes.
Chapter 3	Moderating Role of Acculturation in a Mediation Model of Work-Family Conflict among Chinese Immigrants in New Zealand [Published in <i>Stress and Health</i> , 33, (1), 55 – 68, 2017]	This paper covers antecedents and consequences of WFC, along with the moderating role of acculturation in cross-sectional data.
Chapter 4	Interpersonal Conflict, Acculturation, and Work-to-family Conflict among Chinese Immigrants	This paper examined mediation effects of work-to-family conflict between interpersonal conflict at work and well-being, and the moderation

	[Accepted by 31 <sup>st</sup> Annual Conference of SIOP, 2016]	effects of acculturation in two-wave longitudinal data.
Chapter 5	Mechanisms Linking Acculturation, Work-family conflict, and Subjective Well-being among Chinese Immigrants in New Zealand  [Revised and resubmitted in <i>Human Resource Management</i> ]	This paper investigates the predicting role of acculturation in two rival work-family models through two-wave longitudinal data.
Chapter 6	When East Meets West: What are the Antecedents of Work-Family Conflict and Coping Strategies among Chinese Immigrants Juggling the Different Cultures?  [Under review in <i>Journal of Vocational Behavior</i> ]	This paper qualitatively explores value acculturation, antecedents of WFC, and coping strategies.
Chapter 7	General Discussion	This chapter provides an in-depth reflection on each research question, along with theoretical and practical implications, research limitations, and recommendations for future research.

## **CHAPTER 2**

### **DESIGN OF STUDIES AND METHODOLOGY**

The previous chapter outlined the research questions, and previous literature related to antecedents and consequences of work-family conflict (WFC), acculturation, and coping strategies. This chapter begins by overviewing the general procedure of data collection and the general methodology. It then provides an outline of four research articles and also overviews each of the study samples, measures and outcomes.

#### **General Procedure of Data Collection**

To achieve the research objectives, three phrases of data collection were implemented:

- First, the Time-1 survey was conducted;
- Second, the participants in the Time-1 survey were invited to take part in the Time-2 survey after approximately six months (the two surveys were identical); and
- Third, face-to-face interviews were conducted among the Time-2 participants who got the lowest 10% and the highest 10% of scores on work-family conflict.

The two-wave longitudinal survey aimed to measure work-family conflict, and its antecedents and consequences, along with Chinese immigrants' acculturation. Furthermore, the use of face-to-face interviews can provide a rich understanding of Chinese immigrants' work-family experiences, including the antecedents and coping strategies in the context of acculturation. The detailed procedure of data collection is presented below.

**Targeted participants.** This research focuses on Chinese immigrants who were born outside of New Zealand, including Mainland China, Hong Kong, Taiwan,

Singapore or Malaysia. Chinese immigrants from those places were the targets of this research, because they account for more than 99% of the Chinese immigrants in New Zealand (New Zealand Census Statistics, 2013) , and Chinese culture is preserved relatively well in those places. In addition, among Chinese immigrants, individuals who work at least 15 hours per week and live with their family in New Zealand are the eligible participants.

**Measures.** For the survey, three versions of the questionnaire were developed: English, simplified Chinese, and traditional Chinese. Since all original measures are English, a back-translation technique was employed to establish semantic equivalence between English and Chinese versions (Schaffer & Riordan, 2003). That is, all items in the questionnaire were translated into Chinese by three linguistics Ph.D students, and then the questionnaire was translated back into English by three teachers with English qualifications. After that, another three university lecturers whose native language is English examined the equivalence of wording in the original and back-translated versions. If there was any disagreement among three lecturers about the wording of an item, the item was translated again. The three versions of a coping of the questionnaire used in this research are attached (see Appendices 8, 9 and 10). The questionnaire contained measures of: (1) work-family conflict; (2) four work domain antecedents: number of working hours, work overload, interpersonal conflict at work, and perceived organizational work-family support; (3) three family domain antecedents: family responsibility, social support from family, and interpersonal conflict with family members; (4) four consequences: job satisfaction, family satisfaction, psychological health, and physical health; (5) acculturation; (6) demographic profile, including gender, age, educational level, number of dependants, length of residency, job tenure, and type of job.

A pilot study of the questionnaire was conducted before the distribution of the questionnaire to the targeted participants. The purpose of the pilot test was to evaluate the clarity and appropriateness of the items contained in the questionnaire. The pilot study was conducted among 10 Chinese immigrants. They were invited to complete the questionnaire, and to comment on item clarity and understanding. In general, all of them felt that the questionnaire was clear and easy to understand. Based on their comments, no changes were made to the questionnaire. The description of each measure is presented in the research papers in Chapters 3, 4, 5, and 6.

For the interview, the questions were derived from relevant literature on WFC, coping strategies, and acculturation. The initial pilot interview questions were conducted among two participants from the Time-2 survey. The purpose of the pilot test in a qualitative study is to ensure that the participants not only well understand the questions, but also comprehend them in the same way. After the pilot test, three main interview questions were generated (the full interview protocol is presented in Appendix 11):

- (1) Since you came to New Zealand, do you notice that any of your values related to work and family have changed? Please explain.
- (2) What are the causes of your work-family conflict? Please give some examples.
- (3) How do you cope with the work-family conflict you experience?

**Time-1 survey.** Initially, in the Time-1 survey, a snowball sampling technique was employed, whereby the participants were asked to introduce some of their Chinese friends or colleagues. The online version of survey on Qualtrics was the preferred option, and an email containing a survey link was sent to potential participants. But if participants preferred a paper version, a hard copy was sent to them with a return



envelope. By this approach, 600 copies of questionnaires were collected.

All data were loaded into Statistical Package for Social Science (SPSS) 23.0 for analysis. Firstly, the scores of all negatively worded items were reversed. Secondly, frequencies of all items were examined to detect missing responses. Nineteen cases with over 50% missing values were found and deleted. Thirdly, the Mahalanobis distance test (D2) was performed to check for potential outliers. The criterion for multivariate outliers in the present research was Mahalanobis distance at  $p < .001$  (Hair, Black, Babin, Anderson, & Tatham, 2011). Four multivariate outlying cases were obtained and deleted. Fourthly, the normality of the data was tested by using the Kolmogorov-Smirnov skewness and kurtosis statistics. Absolute values of skewness for variables more than 3.0 and of kurtosis more than 10.0 were regarded as problems (Kline, 2011). The absolute values of skewness for the variables in the Time-1 survey range from .06 to 1.40, and the absolute values of kurtosis range from .05 to 3.52. Therefore, the normality of the Time-1 data was acceptable for further data analysis.

Finally, 577 valid responses were obtained. Participants were employed from a variety of organizations, including universities, Chinese companies, Chinese associations and Chinese churches in New Zealand. 82.1% completed the hard copy questionnaire, while 17.9% did the survey online. Participants represented an array of industries, including agriculture, education, and financial. The sample was 49.7% male ( $n = 287$ ) and 49.3% female ( $n = 284$ ), with an average age of 38.42 ( $SD = 10.18$ , ranging from 19 to 65 years), an average resident length of 133.15 months ( $SD = 75.46$ ) and an average job tenure in New Zealand of 64.55 months ( $SD = 58.50$ ). Most respondents (73.3%) had dependents. 76.6% of the participants had a university Bachelor degree, with a further 32.4% also having a higher tertiary qualification. The full demographic information is presented in Appendix 1.

**Time-2 survey.** Approximately six months later, the 577 participants in the Time-1 survey were invited to participate in the Time-2 survey via mail or email, according to the contact information they left in the Time-1 survey. A total of 272 responses were obtained in the Time-2 survey (response rate = 47.1%). Similar to the statistical analysis for the Time-1 data, reversing negative items, checking missing values, detecting outliers, and testing normality were applied to the Time-2 data. Seven cases with over 50% missing values and one outlier were found and deleted. The absolute values of skewness and kurtosis for the variables in the Time-2 survey range from .14 to 1.25, and from .01 to 2.16 respectively, both of which are within an acceptable range.

Finally, 264 valid responses remained. 87.1% did the survey online, while 12.9% completed the hard copy questionnaire. 51.9% were male, 71.6% had dependents at home, and 78.4% held a Bachelor's degree, with 34.1% also having a higher tertiary qualification. The average age of the sample was 39.77 years ( $SD = 10.50$ ). The average time of residence in New Zealand was 140.23 months, ranging from 9 to 720 months ( $SD = 82.16$ ), and average job tenure was 66.67 months, ranging from 1 to 324 months ( $SD = 58.05$ ). The full demographic information is presented in Appendix 2.

**Interview.** After the Time-2 data had been collected, face-to-face interviews were conducted among the Time-2 participants who got the lowest 10% and the highest 10% of scores on work-family conflict, in order to compare their responses from the two extreme groups (high WFC and low WFC). Among the 20% targeted participants at Time-2 (approximate 53), a total of 33 participants (response rate = 62.3%) volunteered to take part in our interviews. Twenty-nine were from mainland China (interview in Chinese), two from Malaysia (interview in English), one from Singapore (interview in English), and one from Hong Kong (interview in English). Of the interviewees, 49.0% were male, 75.8% had dependents at home, and 87.9% held a Bachelors' degree or a

higher tertiary qualification. The average age was 40.60 years ( $SD = 9.23$ ). The average time of residence in New Zealand was 12.43 years, ranging from 2.92 to 22.50 years ( $SD = 5.10$ ), and the average job tenure was 6.02 years, ranging from .75 to 15.50 years ( $SD = 3.99$ ). The full demographic information is presented in Appendix 3.

### **General Methodology**

In general, the thesis takes both quantitative and qualitative approaches. The first three articles employed a quantitative data analysis approach. Firstly, means, standard deviations (SD's) and alpha coefficients for all the variables both at Time-1 and Time-2 were examined through SPSS 23.0. Secondly, Confirmatory factor analysis (CFA) was performed to validate the structure of each research measure by using AMOS 20.0. Thirdly, Pearson correlation analyses were conducted among all research variables in Time-1 data (cross-sectional data) and in two-wave longitudinal data. Fourthly, Structural Equation Modelling (SEM) using AMOS 20.0 was performed to validate the proposed relationships. All the data analysis results are presented in the relevant research papers (Chapters 3, 4, and 5).

The fourth article used a qualitative approach with thematic analysis to investigate the antecedents of WFC and coping strategies. Thematic analysis is a method for identifying, analysing and reporting patterns or themes within data (Braun & Clarke, 2006). The detailed procedure and results of thematic analysis for this study are presented in the fourth paper (Chapter 7).

### **Overview of Research Articles and Study Explanations**

The following section is a brief overview of four research articles produced to test the work-family experiences among immigrants from different angles.

**Study One (Chapter 3) - Moderating role of acculturation in a mediation model of work-family conflict among Chinese immigrants in New Zealand.** Study One specifically investigated the antecedents and consequences of work-family conflict (WFC), and the moderation role of acculturation in those relationships. The following section overviews the study's rationale, design and sample. It summarises the contribution to literature, overviews the hypothesised model and concludes with the study's current publication status.

***Rationale.*** As described in the previous chapter, WFC has been widely researched over the past three decades, however, it has been conducted largely among individuals who function in their own cultures, and immigrants who perform in dual cultures has been insufficiently researched. In addition, acculturation is an inevitable process for immigrants and can exert significant influences on both work and family domains. Accordingly, this study aims to establish a WFC model for immigrant populations, and to broadening our understanding of WFC experienced by immigrants.

***Design and sample.*** The data from 577 participants in the Time-1 survey were used to test the hypothesised model (Figure 1). Confirmatory factor analyses (CFA) were performed using AMOS 10.0 to validate the structure of each measure, and all measures achieved an acceptable model fit. Descriptive statistics using SPSS 23.0 were calculated to provide means, standard deviations (*SD*) and correlations. After that, Structural Equation Modelling (SEM) was used for examining the hypothesised direct, and mediation effects. Moderation tests were conducted for all the significant paths, with hierarchical regression via SPSS. Significant moderation effects were plotted.

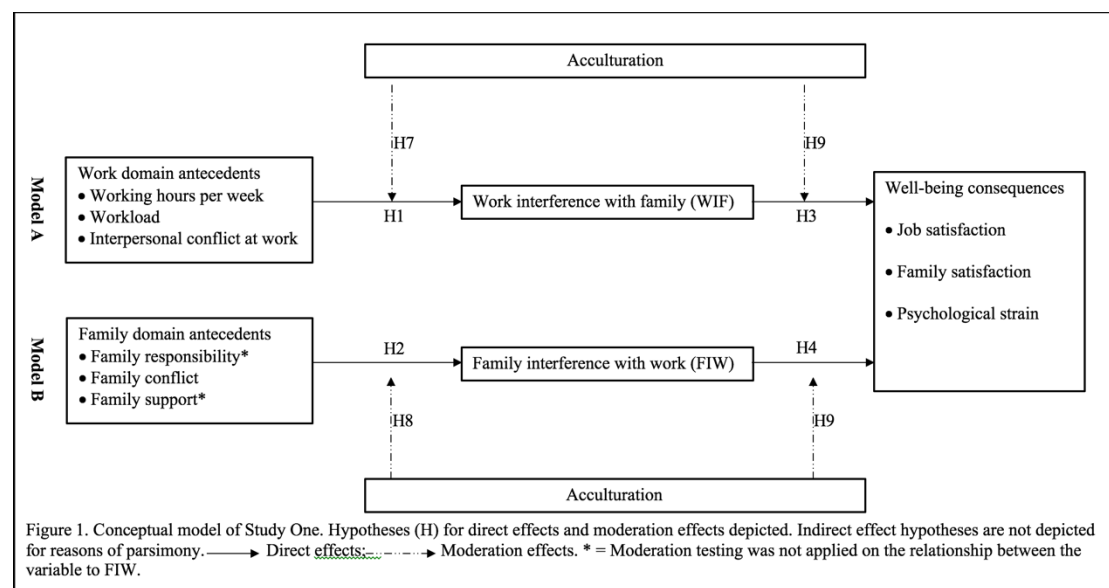
***Contribution to literature.*** This study had two major contributions to WFC literature. First, it is the first time, to my best knowledge, that the antecedents and well-

being consequences of WFC were investigated among an immigrant population. Second, the potential moderation role of acculturation was first to be examined in a WFC model. A fruitful avenue for future research is to further explore the roles of acculturation in work-family models.

**Publication status.** Shang, S., O'Driscoll, M. P., & Roche, M. (2017). Moderating role of acculturation in a mediation model of work–family conflict among Chinese immigrants in New Zealand. *Stress and Health*, 33 (1), 55 – 68. DOI: 10.1002/SMI.2674. [Impact Factor: 2.114; ABDC List Ranked A].

An earlier version of this paper (extended abstract and peer reviewed) was presented at the following conference:

Shang, S., O'Driscoll, M. P., & Roche, M. (2014, December). *Work-family conflict: A study of Chinese immigrants in New Zealand*. 3rd New Zealand Industrial/Organisational Psychology Conference, Albany, New Zealand.



**Study Two (Chapter 4) - Interpersonal conflict, acculturation, and work-to-family conflict among Chinese immigrants.** Study Two specifically investigated the mediation effects of work-to-family conflict between interpersonal conflict at work and well-being, and the moderation effects of acculturation. The following sections overview the study's rationale, design and sample, summarise the contribution to literature, overview the hypothesised model and concluded with the study's current publication status.

***Rationale.*** Acculturation may play a critical role in immigrants' work-family experiences (Grzywacz et al., 2007), and interpersonal conflict at work (ICW) may also exert influence on those experiences due to the importance of maintaining harmonious relationships among Chinese (Ling & Powell, 2001). However, the potential roles of acculturation and ICW have not been explored by work-family studies. Lacking of understanding of acculturation and ICW may bring challenges and adverse impacts to organizations (Olson, Huffman, Leiva, & Culbertson, 2013). Hence, the purpose of this study was to shed light upon the relationships of acculturation and ICW with work-to-family conflict, as depicted in Figure 2.

***Design and sample.*** The two-wave longitudinal data from 264 participants who took part in both Time-1 and Time-2 survey were used to test the hypothesised model (Figure 2). Confirmatory factor analyses (CFA) were conducted using AMOS to validate the structure of each measure, and all measures at Time-1 and Time-2 achieved an acceptable model fit. Descriptive statistics using SPSS were calculated to provide means, standard deviations (*SD*) and correlations. Structural Equation Modelling (SEM) was then used for investigating the hypothesised direct, mediation, and moderation effects.

***Contribution to literature.*** The current longitudinal study represents an initial attempt to test the work-family model with acculturation and interpersonal conflict at work (ICW). There are two main contributions to work-family literature. First, ICW should be included in future work-family research using Chinese samples. Second, the non-significant moderation effects of visible artefact acculturation suggest that value acculturation may play a moderating role. In the future research, measuring both visible artefacts and values would provide richer information for researchers to understand work-family experiences among immigrant populations.

***Publication status.*** This paper (full paper and peer reviewed) was presented at the following conference:

Shang, S., O'Driscoll, M., & Roche, M. (2016, April). *Interpersonal conflict, acculturation, and work-to-family conflict among Chinese immigrants*. The 31st Annual Conference of the Society for Industrial and Organizational Psychology, Anaheim, the United States.

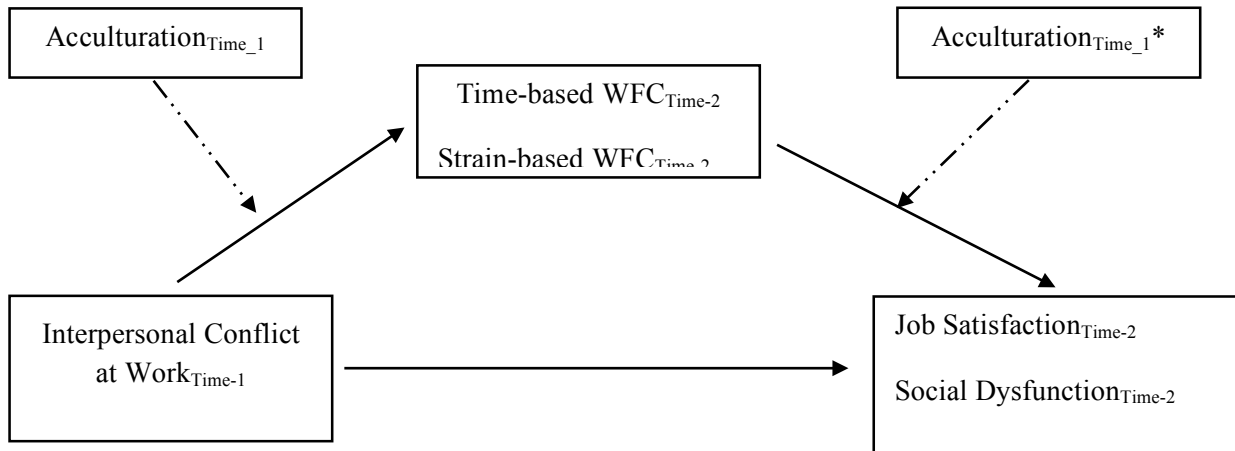


Figure 2. Conceptual model of Study Two. Hypothesised moderated mediated model with interpersonal conflict at work at Time 1 predicting well-being at Time 2 via work-to-family conflict (WFC) at Time 2, moderated by acculturation at Time 1.

*Note.* WFC = work-to-family conflict; Social dysfunction and anxiety/depression are the two factors of psychological strain after conducting CFA.

\*When tested the moderation effects of acculturation between WFC and well-being, time- and strain-based WFC at Time 1 were used.



**Study Three (Chapter 5) - Mechanisms linking acculturation, work-family conflict, and subjective well-being among Chinese immigrants in New Zealand.**

Study Three specifically investigated the mechanisms linking acculturation, WFC, and subjective well-being. The following sections overview the study's rationale, design and sample, summarise the contribution to literature, overview the hypothesised model and concluded with the study's current publication status.

***Rationale.*** Although the unavoidable acculturation of immigrants can exert a considerable impact on their work, family and even subjective well-being (Suárez-Orozco & Suárez-Orozco, 2010), the relationships among acculturation, work-family conflict (WFC) and subjective well-being are still under-researched. A lack of understanding of those relationships may constrain organizations with a diverse workforce from fostering immigrant employees' subjective well-being. To address this issue, this study aims to shed light upon how immigrants' acculturation, work-family conflict experiences and subjective well-being interact with each other. In order to do this, two competing theory-based mediation models (Model A and Model B) were developed (Figures 3 and 4).

***Design and sample.*** The data collected from the participants who took part in both Time-1 and Time-2 survey were used to test the two rival hypothesised models (Figures 3 and 4). Confirmatory factor analyses (CFA) were conducted using AMOS to validate the structure of each measure, and all measures at Time-1 and Time-2 achieved an acceptable model fit. Descriptive statistics using SPSS were calculated to provide means, standard deviations (*SD*) and correlations. Structural Equation Modelling (SEM) was then used for investigating the hypothesised direct and mediation effects in both Model A and Model B. After testing the two models, results were compared and concluded.

***Contribution to literature.*** Generally, this study broadens our understanding of work-family experiences among immigrant populations by longitudinally investigating the interactions among acculturation, WFC, and subjective well-being. The findings can provide an appropriate framework for future work-family research on immigrant populations.

***Publication status.*** Shang, S., O'Driscoll, M. P., & Roche, M. (*revised and resubmitted in December 2016*). Mechanisms linking acculturation, work-family conflict, and subjective well-being among Chinese immigrants in New Zealand. *Human Resource Management*. [Impact Factor: 1.817; ABDC List Ranked A\*].

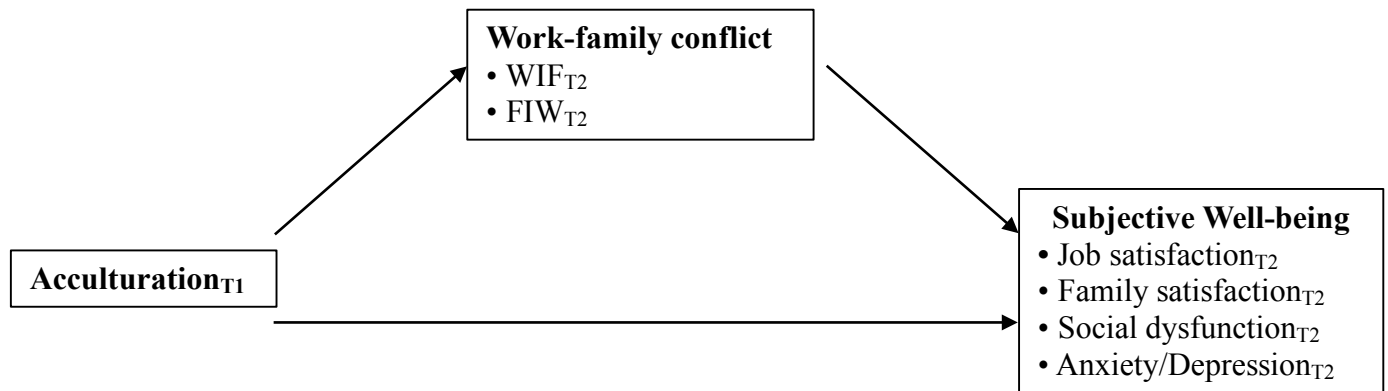


Figure 3. Model A of Study Three: work-family conflict mediating the relationship between acculturation and subjective well-being. T1 = Time 1; T2 = Time 2; WIF = Work interference with family; FIW = Family interference with work.

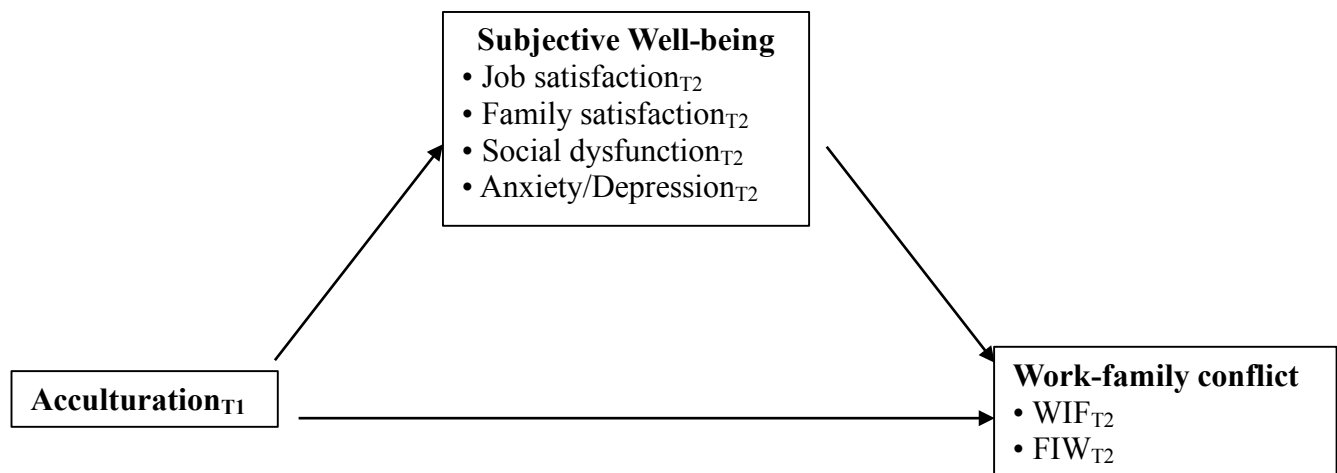


Figure 4. Model B of Study Three: subjective well-being mediating the relationship between acculturation and work-family conflict. T1 = Time 1; T2 = Time 2; WIF = Work interference with family; FIW = Family interference with work.

**Study Four (Chapter 6) – When East meets West: What are the antecedents of work-family conflict and coping strategies among Chinese immigrants juggling the different cultures?** Study Four qualitatively investigated value acculturation, the antecedents of work-family conflict (WFC), and coping strategies. The following sections overview the study's rationale, design and sample, summarise the contribution to literature, and concluded with the study's current publication status.

***Rationale.*** First, studies 1 and 2 suggested that value acculturation may influence the work-family experiences of immigrants. However, value acculturation has not been investigated in previous work-family research. Second, the values of Chinese immigrants may be a hybrid of the home culture and the local culture. The antecedents of WFC influenced by cultural values may be more complex than for non-immigrants in either an individualistic culture or a collectivistic culture, and have not yet been well understood. Third, previous research has demonstrated that exploring strategies to cope with WFC is important for individuals. However, coping strategies identified in previous Western research may not be effective for Chinese immigrants, since acculturation is a process of changing values which may impact their coping strategies (Lam & Zane, 2004). Overall, to address the above research limitations, this study aims to examine the value acculturation, the antecedents of WFC, and coping strategies among Chinese immigrants by using a qualitative approach.

***Design and sample.*** Among the targeted participants from the Time-2 survey (approximately 53), a total of 33 participants (response rate = 62.3%) volunteered to take part in an interview. To analyse the data, this research followed the procedure of thematic analysis to code the patterns or themes within the data.

***Contribution to literature.*** This study serves as an initial step in exploring value acculturation, antecedents of WFC, coping strategies among an immigrant population via a

qualitative method. This study demonstrates that WFC among immigrant populations is a complex and culture-related research domain, which needs additional research consideration in the future.

**Publication status.** Shang, S., O'Driscoll, M. P., Roche, M., & Wang, M. (*submitted in January 2017 and under review*). When East meets West: What are antecedents of work-family conflict and coping strategies among Chinese immigrants juggling the different cultures? *Journal of Vocational Behavior*. [Impact Factor: 2.764; ABDC List Ranked A\*].

## CHAPTER 3

### STUDY ONE

#### Paper Title

Moderating role of acculturation in a mediation model of work-family conflict among Chinese immigrants in New Zealand

#### Declaration

I developed the theoretical model for the paper. I took the whole responsibility for launching and completing the data collection. I was also responsible for data entry and screening, and the initial statistical analysis for the paper which was done in SPSS and then in structural equation modelling (SEM) via AMOS. I wrote the first full draft of the paper. The theoretical contributions are my own. My two supervisors (co-authors) checked the statistical analysis, and provided feedback on the paper and editing. In general, I contributed 80% to this paper, and my two supervisors equally contributed 20% to it.

#### Publication Status

Shang, S., O'Driscoll, M. P., & Roche, M. (2017). Moderating Role of Acculturation in a Mediation Model of Work-Family Conflict among Chinese Immigrants in New Zealand. *Stress and Health*, 33 (1), 55 - 68. DOI: 10.1002/SMI.2674. [Impact Factor: 2.114; ABDC List Ranked A].

An earlier version of this paper (extended abstract and peer reviewed) was presented at the following conference:

Shang, S., O'Driscoll, M. P., & Roche, M. (2014, December). *Work-family conflict: A study of Chinese immigrants in New Zealand*. 3rd New Zealand Industrial/Organisational Psychology Conference, Albany, New Zealand.

The following paper follows the layout, referencing and language required by the journal editors.

### **ABSTRACT**

This study examined the antecedents of work-family conflict (WFC), and the mediation effects of WFC on well-being consequences among Chinese immigrants to New Zealand, along with the moderating role of acculturation. Four types of WFC were explored: time-based and strain-based work interference with family, and time-based and strain-based family interference with work. Data were collected from 577 Chinese immigrants in New Zealand, who had full-time or part-time work and lived with family members in New Zealand. The four types of WFC were differentially related to the antecedents and well-being consequences, providing some evidence that both Chinese and New Zealand cultures may exert influences on Chinese immigrants' experiences of work-family conflict. Both directions of WFC (work interference with family, and family interference with work) were related to job satisfaction and family satisfaction, and strain-based WFC influenced their well-being more than time-based WFC. Most importantly, we found immigrants who were proficient in English perceived greater WFC and psychological strain.

**Keywords:** Work-family conflict, Chinese immigrants in New Zealand, Acculturation, Mediation, Moderation

## **Moderating Role of Acculturation in a Mediation Model of Work-Family Conflict among Chinese Immigrants in New Zealand**

### **INTRODUCTION**

Global mobility is promoting the ethnic diversity of the workforce worldwide (Grzywacz et al., 2007), and is becoming increasingly frequent (United Nations, 2013). Furthermore, immigrants who were born in one country and subsequently moved to another country are influenced by both home and host cultures. Immigrants will experience a complex process of adapting to a new culture and society, which is called *acculturation* (Berry, 2002). However, the effects of acculturation have not been addressed by work-family researchers. While work-family conflict (WFC) has been widely researched over the past three decades, it has been conducted largely among individuals who function in their own cultures. Grzywacz et al. (2007) suggested that acculturation may play a central role in the work-family experiences of immigrants, since acculturation may directly affect immigrants' work, family life and mental health (Suárez-Orozco & Suárez-Orozco, 2010). Nevertheless, few studies have explored the potential role of acculturation and none have examined its relevance for WFC. Attention to this construct would broaden perspectives on WFC among immigrants (Grzywacz et al., 2007).

The Chinese workforce is becoming a critical part of the current and future labour market in New Zealand (Badkar & Tuya, 2010), where the present study was conducted. In 2013, Chinese accounted for 4.3% of the total population of New Zealand, with 73.4% of these born overseas (New Zealand Census Statistics, 2013). While Chinese immigrants seek a better lifestyle in New Zealand, the harsh reality for many is that they end up working extremely hard to make ends meet, and, therefore, have less time for leisure and family (Ho, Meares, Peace, & Spoonley, 2010). A consequence is that work for many immigrants may conflict with family life.



This study had two aims. First, we explored whether previous findings on the antecedents, well-being consequences, and mediation effects of WFC could be generalized to Chinese immigrants in New Zealand. The second objective was to provide an initial test of the potential moderating (buffering) effects of acculturation between antecedents and WFC, and between WFC and well-being. The rationale behind this is that low acculturated individuals may be unable to interact effectively with the new culture, which will generate considerable pressure on their work, family and well-being, while this will be less likely for highly acculturated individuals (Neuliep, 2014). Thus, given the growing volume of Chinese immigrants and the crucial role of acculturation, the current study represents an important contribution to establishing a WFC model for immigrant populations, and to broadening our understanding of work-family conflict experienced by immigrants. Our theoretical model is depicted in Figure 1.

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*INSERT FIGURE 1 ABOUT HERE*

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### **Work-Family Conflict**

Greenhaus and Beutell (1985) defined *work-family conflict* as “a form of inter-role conflict in which the role pressures from the work and family domains are mutually incompatible in some respect. That is, participation in the family (work) role is made more difficult by virtue of participation in the work (family) role” (p.77). WFC is recognized as consisting of two distinct concepts: work interference with family (WIF) and family interference with work (FIW; O’Driscoll, Brough, & Kalliath, 2004).

WFC has been classified into three forms: time-based, strain-based, and behaviour-based conflict (Greenhaus & Beutell, 1985). However, only time-based and strain-based conflict were included in the present study, as behaviour-based conflict usually happens among people with

very unique work demands (Lambert, Hogan, Camp, & Ventura, 2006). For example, a prison officer at work may be required to behave in ways that are not necessarily appropriate in social and family life, such as questioning family members or barking orders (Lambert et al., 2006). Except for these unique occupations, appropriate behaviours at work (home) may not greatly conflict with appropriate behaviours at home (work). Hence, four types of WFC were included in the present study: time-based and strain-based work interference with family (TWIF and SWIF), and time-based and strain-based family interference with work (TFIW and SFIW).

### **Antecedents and Consequences of WFC**

When immigrants move to a new country, they deliberately or accidentally lose some of their home cultural features, and simultaneously acquire some host cultural features (Berry, 2002). Therefore, cultural norms and expectations prescribed by both Chinese and New Zealand cultures may exert an influence on Chinese immigrants. For instance, Chinese immigrants usually maintain their Chinese culture in family life (Li, Hodgetts, & Sonn, 2014), while at work they may conform to the norms and values of the host culture (Berry, 2002). Previous cross-cultural research suggested that different values and beliefs result in differences in the relationships among antecedents, consequences and WFC (Korabik, Lero, & Ayman, 2003). Hence, the antecedents and consequences of WFC for Chinese immigrants may be more complex, and be different to those for non-immigrants. Since we know very little about the experiences of WFC among immigrants, some potential antecedents and consequences of WFC are outlined from previous research findings below.

**Antecedents of WFC.** One of the major causes of WFC is that work and family are competing for an individual's finite resources, such as time, attention, and energy (physical and psychological) (Michel, Kotrba, Mitchelson, Clark, & Baltes, 2011). Work-related

antecedents tend to have an influence on WIF rather than on FIW, whereas family-related antecedents normally have an effect on FIW rather than on WIF (Michel et al., 2011).

In the work domain, the number of working hours and workload are positively related to WIF (Michel et al., 2011). The more hours spent at the workplace or the greater workload; the less resourced individuals are for their family life, which could lead to WIF. In addition, interpersonal conflict at work (ICW) has been regarded as negative interpersonal encounters ranging from minor disagreements to physical assaults among co-workers (Spector & Jex, 1998). ICW is a common phenomenon in workplaces, and can have a negative effect on employees' organizational life (e.g., Spector & Jex, 1998). Although ICW has been widely investigated, little attention has been paid to the predictor role of ICW in work-family conflict. Ling and Powell (2001) noted that interpersonal harmony is highly salient in Chinese culture, since maintaining harmonious interpersonal relationships at work is as important as other work demands. That may be because workplace interpersonal conflict can lead to exhaustion of one's personal resources (Dierdorff & Ellington, 2008). For instance, an individual who is experiencing interpersonal conflict will not only suffer from it, but will also try to handle this conflict, which may cost additional energy and time. Hence, interpersonal conflict at work is expected to be positively associated with WIF.

*Hypothesis 1:* (a) Number of working hours, (b) workload and (c) interpersonal conflict at work will be positively related to work interference with family (WIF).

In the family domain, family responsibilities and family conflict are associated with high levels of FIW (Michel et al., 2011). Fulfilling family responsibilities (e.g., caring for dependants) and keeping harmonious relationships among family members requires more time, and greater psychological and physical expenditure, resulting in fewer personal resources for work commitment (Michel et al., 2011). In addition, family support is negatively related to

FIW (Ling & Powell, 2001), because social support may directly reduce family role pressure (Greenhaus & Beutell, 1985).

*Hypothesis 2:* (a) Family responsibility and (b) family conflict will be positively related to family interference with work (FIW), but (c) family support will be negatively related to FIW.

**Consequences of WFC.** Research evidence consistently shows that WFC is negatively associated with job satisfaction, family satisfaction and psychological health (O'Driscoll et al., 2004). However, inconsistent relationships have been found between the two directions of WFC (WIF and FIW) and job satisfaction and family satisfaction (Amstad, Meier, Fasel, Elfering, & Semmer, 2011). Frone, Russell, and Cooper (1992) suggested that WIF and FIW were negatively related with family satisfaction and job satisfaction, respectively. They explained those results from a *cross-domain perspective*. When one role (e.g., work) interferes with another role (e.g., family), it will be hard for individuals to meet demands in the receiving role (e.g., family). In contrast, Amstad et al. (2011) argued that WIF is negatively related to job satisfaction, and FIW is negatively related to family satisfaction. They interpreted those results from a *source attribution perspective*. That is, when WFC occurs, individuals may experience decreased performance in the receiving domain (e.g., family), but they attribute blame to the domain (e.g., work) which is the source of the conflict. Both perspectives were examined in the current research. In addition, both WIF and FIW are also positively associated with psychological strain (or, conversely, psychological health) (O'Driscoll et al., 2004).

*Hypothesis 3:* Work interference with family (WIF) will be negatively associated with (a) job satisfaction and (b) family satisfaction, and positively associated with (c) psychological strain.

*Hypothesis 4:* Family interference with work (FIW) will be negatively associated with (a) job satisfaction and (b) family satisfaction, and positively associated with (c) psychological strain.

### **Mediation Role of WFC**

Previous research suggests that WFC may mediate the relationships between antecedents and consequences of the conflict, but almost all of the research on the mediation role of WFC has been conducted in Western countries (Blanch & Aluja, 2012). The present research extends the understanding of the role of WFC as a mediator in an immigrant population. Assessing whether the mediation role of WFC exists for immigrants is important, as this allows for greater generalization of the mediation effects of this variable.

*Hypothesis 5:* Work interference with family (WIF) will mediate the relationships of (a) working hours, (b) workload and (c) interpersonal conflict at work with (i) job satisfaction, (ii) family satisfaction, and (iii) psychological strain.

*Hypothesis 6:* Family interference with work (FIW) will mediate the relationships of (a) family responsibility, (b) family conflict and (c) family support with (i) job satisfaction, (ii) family satisfaction, and (iii) psychological strain.

### **Moderation Role of Acculturation**

Acculturation is a complex process of adapting to a new culture (Berry, 2002), with three main factors: language proficiency, cultural identity and cultural knowledge (Gim Chung, Kim, & Abreu, 2004). While it can play an important role in the workplace and family life of immigrants (Suárez-Orozco & Suárez-Orozco, 2010), work-family research has yet to pay in-depth attention to this construct. Indeed, it is not clear whether there are significant interactions between the antecedents of WFC and the three factors of acculturation in predicting WFC, nor whether there are significant interactions between WFC and the three factors of acculturation

in predicting well-being outcomes. In some cross-cultural research on WFC, cultural dimensions (e.g., individualism/collectivism) were examined as moderators of relationships between WFC and its antecedents and consequences (Spector et al., 2004). However, cultural dimensions are not the same as acculturation. Cultural dimensions do not recognise that immigrants are influenced by *both* their home and host cultures. Therefore, cultural dimensions per se are insufficient to explain the levels of WFC experienced by immigrants.

During the process of acculturation, individuals may experience acculturative stress, such as confusion, frustration, or anxiety, when they are unable to fit into their new cultural environment (Suárez-Orozco & Suárez-Orozco, 2010). New immigrants cannot avoid a certain degree of such stress, which will be intensified when there is a large cultural distance, that is, when the two cultures are dissimilar in language, norms, and values (Taras, Rowney, & Steel, 2013), which is the case for China and New Zealand. In order to adapt to the new cultural environment, individuals must learn the host language to communicate with the host people effectively, adjust their identities (e.g., Am I Chinese or New Zealander?), and understand the host cultural knowledge to gain an insight into the new culture and avoid cultural taboos (Suárez-Orozco & Suárez-Orozco, 2010). This adaptation process may require greater psychological and physical resources, which will limit the resources available for the work and family roles. Therefore, the immigration experience may have an adverse effect on both their family and work, as well as on their well-being (Berry, 2002).

In the workplace, immigrants have to conform to the work roles and norms of the host society, which may be different from their home society (Hofstede, Hofstede, & Minkov, 2010). Highly acculturated immigrants can more quickly process their work with improved language proficiency, and better understand and manage the role demands in the host culture with sufficient host cultural knowledge than less acculturated immigrants (Pooyan, 1984). Therefore,

facing the same amount of workload and working hours, less acculturated immigrants may feel more strain and time pressure than highly acculturated immigrants. In addition, improved language proficiency, adjusted identity and cultural knowledge may help them avoid interpersonal conflict and sort out the conflict effectively. In sum, working hours, workload and interpersonal conflict at work may require a greater psychological and physical expenditure of resources to meet the expectations of the new work role for less acculturated immigrants than highly acculturated immigrants. As a result, the available resources for family are likely to be threatened. Thus, less acculturated immigrants may perceive greater WIF from work demands than highly acculturated immigrants.

*Hypothesis 7:* Acculturation will moderate the positive relationships of (a) working hours, (b) workload and (c) interpersonal conflict at work with work interference with family (WIF), with the relationships being weaker for highly acculturated immigrants than for less acculturated immigrants.

In family life, Chinese immigrants often maintain their Chinese culture, such as speaking in Chinese, and accessing Chinese news and knowledge (Li, 2011). Therefore, they do not usually follow the family roles prescribed by the host culture. Chinese immigrants tend to continue to engage with traditional values and behaviours, and perform family responsibilities as required by their home culture. They may also get family support from elderly parents, partner or extended family members, following these Chinese cultural expectations. Hence, acculturation may not impact on the relationships of family responsibilities and family support with family interference with work (FIW).

However, acculturation may moderate the relationship between interpersonal conflict within the family and FIW, since cultural conflict often happens in immigrant families in the process of acculturation (Suárez-Orozco & Suárez-Orozco, 2010). For example, Cleland (2004)

noted that parent-adolescent conflict is a normal phenomenon in Chinese immigrant families in New Zealand. Adolescents tend to fit into the host culture quicker and more strongly than their parents (Cheung, Chudek, & Heine, 2010). Therefore, a mismatch in language, identities and cultural knowledge between children and parents can generate great parent-adolescent conflict. However, as people become more acculturated, parents may understand the change in their children, which may result in lower family conflict.

Therefore, to resolve family conflicts, less acculturated immigrants may expend more personal resources than highly acculturated immigrants, which will possibly result in a decrease in available resources for their work. Consequently, we predict that highly acculturated immigrants will suffer less FIW from family conflict than will less acculturated immigrants.

*Hypothesis 8:* Acculturation will moderate the positive relationships of family conflict with family interference with work (FIW), with the relationships being weaker for highly acculturated immigrants than for less acculturated immigrants.

Through a person's life, stressful events such as family changes or a job transfer to an unfamiliar environment might affect the person psychologically, and influence the person's family and job satisfaction (Bellavia & Frone, 2005; Leong, 2001). As immigrants interact with their new cultural environment, the host culture begins to make more sense, such as communicating with the host people confidently and fluently, understanding the host cultural knowledge, and getting used to their new cultural identity, which will help them build up new social networks and developing new problem-solving tools. These could assist their work and family life, and enable them to invest more available personal resources into their work and family roles, which in turn may increase satisfaction with their work and family, and may even be beneficial to immigrants' mental health. Given the above, acculturation may attenuate the impact of work-family conflict on job satisfaction, family satisfaction and psychological health.



*Hypothesis 9:* Acculturation will moderate the negative relationships of work-family conflict (WIF and FIW) with (a) job satisfaction and (b) family satisfaction, with the relationships being stronger for highly acculturated immigrants than for less acculturated immigrants.

*Hypothesis 9(c):* Acculturation will moderate the positive relationships of work-family conflict (WIF and FIW) with psychological strain, with the relationships being weaker for highly acculturated immigrants than for less acculturated immigrants.

In sum, our study makes several important contributions to the work-family literature. First, if our results support the model proposed, this research would give greater confidence in extending the generalizability of existing WFC theories to immigrant populations. However, if our results fail to support this model, our research would help future research further explore the experiences of WFC among immigrants. Second, to the best of our knowledge, this study was the first to empirically test the predictor role of interpersonal conflict at work. Third, we investigated the relationships of WIF and FIW with job satisfaction and family satisfaction, to examine the debate over the cross-domain perspective versus the resource attribution perspective. Fourth, the most unique contribution of our study was to explore the moderation role of acculturation in relation to work-family conflict.

## METHOD

### Sample and Procedures

A sample of 577 Chinese immigrants, who had full-time or part-time work and lived with family members in New Zealand, completed a survey assessing the variables listed in Figure 1. Participants were born in Mainland China, Hong Kong, Taiwan, Singapore or Malaysia. The sample was obtained from universities, Chinese companies, Chinese associations and Chinese churches around New Zealand. 82.1% completed the hard copy questionnaire, while 17.9% did

the survey online. Participants represented an array of industries, including agriculture, education, and financial. The sample was 49.7% male ( $n = 287$ ) and 49.3% female ( $n = 284$ ), with an average age of 38.42 ( $SD = 10.18$ , ranging from 19 to 65 years), an average resident length of 133.15 months ( $SD = 75.46$ ) and an average job tenure in New Zealand of 64.55 months ( $SD = 58.50$ ). Most respondents (73.3%) had dependents. 76.6% of the participants had a university Bachelor degree, with a further 32.4% also having a higher tertiary qualification.

## Measures

Following Brislin (1970), all survey items were translated into Chinese and back translated into English to verify semantic equivalence. Initially, linguistics Ph.D. students helped to translate an English version of the questionnaire into Chinese, and then the questionnaire was translated back into English by three teachers with English qualifications. Another three university level lecturers whose native language is English checked the equivalence of wording in the original and back-translated versions.

**Work-family conflict (WFC).** Each type of WFC (time-based WIF, strain-based WIF, time-based FIW and strain-based FIW) was measured by three items from the Work-Family Conflict Scale (Carlson, Kacmar, & Williams, 2000). A sample item is “My work keeps me from my family activities more than I would like (TWIF).” Respondents indicated how strongly they agreed with each item, on a 5-point scale from 1 (Strongly disagree) to 5 (Strongly agree), with a higher score representing more conflict. The Cronbach’s alpha coefficients were .84, .83, .74 and .89 for TWIF, SWIF, TFIW and SFIW respectively.

**Working hours.** Respondents were asked how many hours in total they usually worked per week.

**Workload.** Workload was assessed using the five-item scale designed by Spector and Jex (1998). A sample item is “My job requires me to work very fast.” Respondents were asked to

indicate how often each sample item occurred, on a 5-point scale from 1 (Less than once per month or never) to 5 (Several times per day), with a higher score representing a higher level of workload. The Cronbach's alpha was .88.

**Interpersonal conflict at work.** Interpersonal conflict at work was measured by Cox's (1998) five-item Organizational Conflict Scale. A sample item is "The atmosphere here is often charged with hostility." Respondents indicated how much they agreed with each item, on a 6-point scale ranging from 1 (Strongly disagree) to 6 (Strongly agree), with higher scores indicating more conflict. The Cronbach's alpha was .90.

**Family responsibility.** Three items adapted by L. Lu, Kao, Chang, Wu, and Cooper (2011) were used to assess family responsibility. A sample item is "I feel that our family makes too many demands on me." Respondents indicated how often each experience happened to them, on a 5-point scale from 1 (Never) to 5 (Very often), with higher scores representing more family responsibility. The Cronbach's alpha was .84.

**Family support.** Four items developed by Zimet, Dahlem, Zimet, and Farley (1988) were used to measure family support. A sample item is "My family really tries to help me." Respondents indicated how much they agree with each item, on a 7-point scale from 1 (Very strongly disagree) to 7 (Very strongly agree), with higher scores representing greater support. The Cronbach's alpha was .90.

**Family conflict.** Five items revised by Jaycox and Repetti (1993) were employed to assess family conflict. A sample item is "We fight a lot in our family." Respondents indicated to what extent they thought each item was true, on a 4-point scale from 1 (Mostly true) to 4 (False). A higher score indicates more perceived conflict among family members. The Cronbach's alpha was .72.

**Job satisfaction.** Global job satisfaction was assessed by three items from Seashore, Lawler, Mirvis, and Cammann (1982). A sample item is “All in all, I am satisfied with my job.” Respondents indicated how much they agreed with each item, on a 7-point scale from 1 (Very strongly disagree) to 7 (Very strongly agree). A higher score indicates greater job satisfaction. The Cronbach’s alpha was .81.

**Family satisfaction.** Family satisfaction was measured with three items from Edwards and Rothbard (1999). A sample item is “All in all, the family life I have is great.” Respondents indicated how much they agreed with each item, on a 7-point response scale from 1 (Strongly disagree) to 7 (Strongly agree), with a higher score indicating family satisfaction. The Cronbach’s alpha was .95.

**Psychological strain.** Two types of psychological strain (social dysfunction and anxiety/depression) were measured by eight items from the General Health Questionnaire revised by Kalliath, O'Driscoll, and Brough (2004). Sample items are “Been able to face up to my problems” for social dysfunction; “Been feeling unhappy or depressed” for anxiety/depression. Respondents were asked to reflect their psychological well-being over the previous three months on a 5-point response scale from 1 (Never) to 5 (All the time). Higher scores indicate higher levels of psychological strain. The Cronbach’s alphas were .80 and .81 for social dysfunction and anxiety/depression respectively.

**Acculturation.** Three dimensions of acculturation (language proficiency, cultural knowledge and cultural identity) were assessed using twelve revised items from Gim Chung et al. (2004) (e.g., “How well do I speak the language of English?” for language proficiency; “How knowledgeable am I about the history of mainstream New Zealanders?” for cultural knowledge; “How proud am I to be part of mainstream New Zealanders?” for cultural identity). Respondents were asked to respond on a 5-point scale, from 1 (Not very much) to 5 (Very

much), with higher scores representing higher acculturation. The Cronbach's alphas were .95, .82 and .88 for language proficiency, cultural knowledge and cultural identity respectively.

**Demographic variables.** Demographic information included gender (dummy coded male = 1, female = 2), age (measured in years), educational level (less than high school = 1, high school graduate = 2, diploma = 3, Bachelor's degree = 4, postgraduate degree = 5), number of dependents (self-reported), residency in New Zealand (measured in months), type of job (self-reported), job tenure in New Zealand (measured in months).

### Analysis

Confirmatory factor analyses (CFA) were performed using AMOS 21.0 to validate the structure of measures (Byrne, 2010). Descriptive statistics using SPSS 21.0 were calculated to provide means, standard deviations (*SD*) and correlations. Mediation analyses were conducted with AMOS 21.0. As the structural model became overly complicated when we included Hypotheses 1-6, we ran two sets of mediation models: Model A with SWIF and TWIF as mediators, and Model B with SFIW and TFIW as mediators. The only requirement for a significant mediation effect is that the indirect effect ( $a \times b$ ) is significant (Zhao, Lynch, & Chen, 2010). Moderation tests were conducted for all the significant paths, with hierarchical regression via SPSS 21.0. Following Dawson (2014), the requirement for significant moderation effect is that the predictor  $\times$  moderator interaction is significant. Additionally, in the present study, three indices were used to evaluate the overall model fit: the standardised root mean residual ( $SRMR \leq 0.10$ ), comparative fit index ( $CFI \geq 0.95$ ), and root mean square error of approximation ( $RMSEA \leq 0.08$ ) (Williams, Vandenberg, & Edwards, 2009).

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## RESULTS

### Scale Validation

All the variables (except working hours) in Figure 1 were assessed by confirmatory factor analysis (CFA) to confirm the factorial structures of the measures. A four-factor structure of WFC fit our data (time-based WIF, strain-based WIF, time-based FIW, and strain-based FIW). A two-factor structure of psychological strain (social dysfunction and anxiety/depression) fit the current data well. In addition, a three-factor structure of acculturation (language proficiency, cultural knowledge and cultural identity) was supported. The inter-factor correlations in the three structures were less than .80, suggesting that the factors were distinct (Kline, 2011). The fit indices of each construct achieved acceptable levels, and all factor loadings ( $> 0.3$ ) achieved the minimum requirements (Furr & Bacharach, 2013) (see Table 1). After conducting CFA, all measures had appropriate construct validity.

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*INSERT TABLE 1 ABOUT HERE*

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### Descriptive Statistics

Table 2 presents the means, standard deviations (*SDs*), reliability coefficients, and bivariate correlations. All variables demonstrated high levels of internal consistency (bold numbers on the diagonal), ranging from .74 to .95. As can be seen in Table 1, all correlations were in the expected direction.

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*INSERT TABLE 2 ABOUT HERE*

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## Control Variables

The demographic variables had weak and inconsistent correlations with the study variables in the mediation testing ( $r$ s ranged from .00 to .15). Theoretically, some researchers suggested that demographic characteristics have little impact on the magnitude of the parameter estimates in WFC models (e.g., Byron, 2005; Frone et al., 1992). If demographic variables are theoretically unimportant and have little relationship with key variables, they do not need to be controlled (Spector & Brannick, 2011). Hence, the demographic variables were not controlled in the mediation testing. However, some demographic variables showed moderate correlations with acculturation. For instance, the correlation between education and language proficiency was  $r = .54$  ( $p < .01$ ). Regression analyses were conducted with and without demographic variables, but the interaction effects did not change significantly. Therefore, demographic variables were also not controlled in moderation testing.

## Hypothesis Testing

**Direct effects.** To test Hypotheses 1 and 3, Model A was assessed by SEM. Model A had an acceptable fit after model respecification, which included the covariance between errors with high modification indices and trimming the non-significant paths. The fit indices were:  $\chi^2/df = 1.34$ ; CFI = .99; SRMR = .02; RMSEA = .02. As shown in Table 3, workload ( $\beta = .22$ ,  $p < .001$ ) and interpersonal conflict at work (ICW) ( $\beta = .17$ ,  $p < .001$ ) were positively related to strain-based WIF, while working hours did not show a significant relationship with strain-based WIF. However, all three predictors were positively related to time-based WIF (workload,  $\beta = .28$ ,  $p < .001$ ; ICW,  $\beta = .08$ ,  $p < .05$ ; working hours,  $\beta = .12$ ,  $p < .001$ ). Therefore, Hypothesis 1 was partially supported.

With regard to Hypothesis 3, strain-based WIF was significantly related to all four well-being consequences: job satisfaction ( $\beta = -.23$ ,  $p < .001$ ), family satisfaction ( $\beta = -.33$ ,  $p < .001$ ),

social dysfunction ( $\beta = .38, p < .001$ ), and anxiety/depression ( $\beta = .37, p < .001$ ). However, time-based WIF had no significant relationship with each outcome.

To test Hypotheses 2 and 4, Model B was investigated using SEM. Model B achieved an acceptable level of fit after model respecification:  $\chi^2/df = 2.37$ ; CFI = .99; SRMR = .02; RMSEA = .05. As shown in Table 3, family responsibility ( $\beta = .14, p < .001$ ) and family conflict ( $\beta = .14, p < .001$ ) were positively related to strain-based FIW, while family support ( $\beta = -.09, p < .05$ ) was negatively related to strain-based FIW. In addition, family responsibility ( $\beta = .29, p < .001$ ) was positively associated with time-based FIW, and family support ( $\beta = -.09, p < .05$ ) was negatively associated with time-based FIW, but family conflict showed a non-significant relationship with time-based FIW. Therefore, Hypothesis 2 was partially supported.

With regard to Hypothesis 4, strain-based FIW was significantly related to all four well-being consequences: job satisfaction ( $\beta = -.11, p < .05$ ), family satisfaction ( $\beta = -.14, p < .001$ ), social dysfunction ( $\beta = .30, p < .001$ ), and anxiety/depression ( $\beta = .22, p < .001$ ). However, time-based FIW had no significant relationship with each outcome.

**Mediation effects.** In respect of Hypothesis 5, as shown in Table 3, strain-based WIF mediated the relationships of workload and interpersonal conflict at work with job satisfaction, family satisfaction, social dysfunction and anxiety/depression. However, time-based WIF did not function as a mediator between the work domain predictors and the well-being consequences. Similarly, in respect of Hypothesis 6, strain-based FIW mediated the relationships of family responsibility, family conflict and family support with job satisfaction, family satisfaction, social dysfunction and anxiety/depression. However, time-based FIW did not function as a mediator between the family domain predictors and well-being consequences.

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*INSERT TABLE 3 ABOUT HERE*

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**Moderation effects.** As depicted in Figure 1, hypotheses 7, 8 and 9 predicted that acculturation (language proficiency, cultural knowledge and cultural identity) would perform as a moderator. As depicted in Table 4, there were two significant interaction effects. Specifically, SWIF was predicted by the interaction of workload with language proficiency ( $\beta = .13, p < .01$ ), and anxiety/depression was predicted by the interaction of SWIF with language proficiency ( $\beta = -.07, p < .05$ ). Based on procedures described by Aiken, West, and Reno (1991), values one standard deviation above and below the mean of the moderator were used to plot the interactions to provide a better understanding of the interaction effects (Figure 2 and 3).

The interaction between workload and language proficiency on SWIF is depicted in Figure 2. Contrary to Hypothesis 7(b), when immigrants experienced high workload, respondents with low language proficiency tended to have lower SWIF than respondents with high language proficiency.

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*INSERT FIGURE 2 ABOUT HERE*

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The interaction between SWIF and language proficiency on anxiety/depression is depicted in Figure 3. When immigrants experienced high SWIF, language proficiency had little or no buffering influence. However, when immigrants experienced low SWIF, individuals with low language proficiency tended to have lower anxiety/depression than people with high language proficiency, which is contrary to Hypothesis 9(c).

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*INSERT FIGURE 3 ABOUT HERE*

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## DISCUSSION

The impact of acculturation is a complex issue, and has not been addressed in previous WFC research. This study explored: (a) the direct relationships of WFC with several antecedents and well-being consequences; (b) the mediation effects of WFC; and (c) the moderating role of acculturation. In general, we found that: (1) Chinese immigrants may be in a state of “in-betweenness” (Li et al., 2014, p.33); (2) WIF and FIW are related to both job satisfaction and family satisfaction; and time-based WFC has less effects on individuals’ well-being than strain-based WFC; (3) immigrants with high levels of language proficiency perceived more SWIF and strain, and unchanged value acculturation may account for the non-significant moderation effects in our study. These findings are discussed in more detail below.

### **In-betweenness**

Li et al. (2014) described the state of Chinese immigrants as in-betweenness, since they are living between languages, between lifestyles, and between cultures. In other words, Chinese immigrants may still maintain their traditional Chinese values, but simultaneously attempt to follow and learn the attitudes and behaviours of host people. It seems our results are consistent with Li et al. (2014).

Interpersonal conflict at work (ICW) and family conflict are not unique to Chinese. However they play a particularly critical role as sources of WFC for Chinese (Ling & Powell, 2001). This is supported by our findings. ICW was positively related to strain-based and time-based WIF, and family conflict was positively related to strain-based FIW. These results suggest that Chinese immigrants emphasize maintenance of interpersonal harmony both in the workplace and at home.

In this research, the number of working hours was significantly related to time-based WIF, and the sample had a mean number of working hours of 38.75 per week, which fell in the range

of normal working hours (37-40) in New Zealand (Immigration New Zealand, n.d.). The results are contrary to previous Chinese findings. Previous studies have found that working hours were not a strong predictor of WFC, because Chinese usually commit more hours to work than Western people for the welfare of their family (Khairullah & Khairullah, 2013). However, our results appear to be more consistent with Western research, which suggests that the number of working hours is positively related to WFC (Aycan, 2008). Therefore, our findings imply that Chinese immigrants, unlike Chinese living in their homeland, may try to accept and follow the host attitudes of giving priority to family rather than work.

### **Permeable work and family role boundaries**

Following the cross-domain and source attribution perspectives, we hypothesized that WIF and FIW are related to both job satisfaction and family satisfaction. Although the two perspectives seem to be mutually exclusive, our results support both perspectives, but suggest that by themselves they may not be sufficient to interpret the current results. Rothbard and Ramarajan (2009) drew attention to the notion of role boundary permeability, which refers to family and work roles of individuals being integrated rather than segmented. Permeable work and family role boundaries enable individuals to merge various aspects of work and family domains (Powell & Greenhaus, 2012). From this perspective, WIF can influence not only job satisfaction but also family satisfaction. In a similar vein, FIW can also influence both job and family satisfaction.

Interestingly, only strain-based WFC (SWIF and SFIW) but not time-based WFC (TWIF and TFIW) was related to well-being. The results show that strain-based WFC is a consistent mediator between work demands and well-being, and time-based WFC has fewer effects on well-being than strain-based WFC. A possible explanation is that people have opportunities to manage their time-based WFC, which then will not influence their well-being substantially.

Modern technologies conveniently help them participate in one role (e.g., family), and simultaneously do not rule out their participation in the other role (e.g., work) (Bagger, Reb, & Li, 2014). For example, in recent years, the popularity of the home-office provides an opportunity to fulfil work demands, but simultaneously not sacrifice time with family members (Brough & O'Driscoll, 2005). Furthermore, flexible work time may help people manage their own time reasonably. People are increasingly willing to work for organizations that offer them the flexibility to create a balance between work and family commitments (Ministry of Business, Innovation & Employment, 2015). Hence, strain-based WFC has more impact on individuals' well-being than does time-based WFC.

### **Moderation Effects of Acculturation**

Interestingly, the only two significant moderation effects were counter to our expectations. Specifically, when experiencing high workload, Chinese immigrants with language proficiency perceived more SWIF than those less fluent in English. Additionally, we found that the detrimental effect of SWIF on anxiety/depression was more salient for immigrants with high levels of language proficiency. These results are important as this is the first study that reports moderation effects of acculturation, in particular language proficiency, among the relationships in work-family models.

A possible explanation for the results is that the types of job which immigrants can obtain may play a role in those (reverse) moderation effects. Language proficiency is positively associated with work performance, which is likely to result in different types of occupations across people with different levels of language proficiency (Dustmann & Fabbri, 2003). We ran a post hoc analysis of our data, and we found that participants who undertook professional work (e.g., academics and lawyers) had significantly higher levels of language proficiency ( $N = 330$ ,  $M = 3.83$ ,  $SD = .77$ ) than their counterparts who engaged in physical occupations (e.g.,

restaurant waiters and cleaners;  $N = 188$ ,  $M = 2.88$ ,  $SD = .95$ ;  $t = 11.84$ ,  $df = 325.76$ ,  $p < .001$ ). Professional immigrant workers are required to frequently communicate complex issues with host workers or clients, for instance, academics need to discuss research issues with their colleagues, and lawyers need to frequently handle cases with clients. During communication, cultural conflicts would easily occur if parties cannot understand each other's attitudes and opinions based on their own cultural values (Wang, 2015). However, those complex and frequent communications may happen less frequently for immigrants engaging in physical occupations, who may avoid the cultural conflicts experienced by the professional workers. Therefore, the more immigrants integrate into the host society, the more cultural conflict they may encounter, which will require them to utilize more personal resources. In line with Michel et al. (2011), who suggest that strain and conflict may occur when work and family compete for an individual's finite resources, immigrant workers may feel more SWIF when facing a high workload, and more anxiety/depression when experiencing SWIF, even though they are proficient in English. Furthermore, the positive correlations of language proficiency with SWIF and anxiety/depression also lend some support to our argument that immigrants proficient in English may perceive greater SWIF and anxiety/depression (see Table 1).

While this study failed to confirm most of the moderation hypotheses, an explanation could be that Chinese immigrants prefer to maintain traditional Chinese cultural values (Lu, Samaratunge, & Härtel, 2012). Pooyan (1984) suggested that acculturation generally includes two distinct features: visible artefacts (e.g., customs, eating habits, language usage) and values (beliefs, norms, attitudes). Taras et al. (2013) found that visible artefact acculturation had a small positive relationship with value acculturation (explaining only 4% of the variation in value acculturation). It is quite possible that some immigrants take on visible artefacts, such as

speak, eat, play, or dress like hosts, but still remain committed to their original values (Pooyan, 1984).

Chinese immigrants collectively tend to retain their traditional cultural values, which may be because of their strong sense of community (Li et al., 2014). Most Chinese immigrants attach themselves closely to Chinese communities in New Zealand, such as attending Chinese churches and joining Chinese associations. A large immigrant network might delay their process of value acculturation, as the network could remind them of the home culture through language, cultural festivals or even food (Taras et al., 2013). Value acculturation may not be required for most immigrants, since not everyone seeks to change their cultural values to be more like the other (often dominant) group (Berry, 2002).

Visible artefact acculturation, like language proficiency, can be convenient for immigrants' daily life. Attempts to fit into the host culture will absorb some of the individual's resources or energy, which could be traded off against the convenience of visible artefact acculturation. Therefore, the relationships between WFC and antecedents and well-being consequences are not necessarily influenced by different levels of visible artefact acculturation, which was measured in our research. Further research is needed to explore acculturation processes in more depth, especially value acculturation.

## **Implications**

Although the current study represents an initial attempt to test the WFC model in an immigrant population, our findings have implications for both theory and practice.

**Implications for theory and research.** We find that Chinese immigrants may, on the one hand, maintain their traditional Chinese values, but on the other hand, attempt to follow and learn the attitudes and behaviours of host people. Therefore, future work-family research on immigrant populations should consider the influences from both home and host cultures.

Interpersonal conflict at work has been rarely discussed in previous work-family research. However, given the present results, interpersonal conflict at work should be included in future WFC research as a predictor of WFC, especially when using Chinese and other collectivistic samples. Furthermore, work and family have long been regarded as separate domains. However, promoted by modern technologies and flexible work policies, the integration of work and family is more likely to occur (Brough & O'Driscoll, 2005). The perspective of role boundary permeability may provide another approach to interpreting the relationships between WFC and well-being of immigrants in the contemporary era.

The two significant moderation results provide some evidence for future research that acculturation has a potential moderating role in work-family models. The non-significant moderation effects suggest that value acculturation, not artefact acculturation, may play a salient role in buffering the impacts of antecedents on WFC, and the influence of WFC on well-being. Therefore, a fruitful avenue for future research is to further explore the roles of both value and artefact acculturation in work-family models.

**Implications for practice.** Measures like flexible time schedule may limit the adverse effects of time-based WFC on well-being. In order to continue to improve levels of well-being, organizations should adopt further measures to alleviate strain-based WFC. For instance, an organization should manage interpersonal conflict in the work environment, as we found that interpersonal conflict with other employees has a significant effect on the lives of Chinese immigrants.

Our moderation findings suggest that organizations should be aware of the well-being and work-family balance of immigrant employees with high levels of language proficiency. High levels of language proficiency would help immigrant employees succeed in their job positions, however they may experience high levels of work-family conflict and psychological strain as

indicated in our findings. We also suggest that immigration services should include programs not only focusing on the surface levels of acculturation, such as English learning programs, but also comparing the values between the host culture and the Chinese culture. These programs could help Chinese immigrants to understand host values and engage in the society actively.

### **Limitations**

This study has some limitations. First, our cross-sectional design makes it impossible to infer causal effects. Longitudinal data are needed to track changes in WFC and acculturation over time to better understand the experience of WFC among immigrants. Second, our research relied on self-report measures. Future studies could consider multiple sources of data to minimize concerns over common method variance (Anderson, Coffey, & Byerly, 2002). Third, this study only measured the visible artefacts of acculturation (language, cultural knowledge, and cultural identity). However, as acculturation is a complex dynamic process of people's behavioural and cognitive orientations (Pooyan, 1984), both visible artefacts and values should be included in future work-family research on immigrants. Fourth, this research focused only on Chinese immigrants in New Zealand, and cultural variations may exist among mainland Chinese, Hong Kong, Taiwan, Malaysia and Singapore. Therefore, the present findings may not explain the work-family experiences of immigrants from other ethnic groups, or of Chinese immigrants in countries other than New Zealand.

### **CONCLUSION**

It is imperative to expand our understanding of WFC among Chinese immigrants, because the Chinese workforce is becoming a critical part of the current and future labour market in New Zealand (Badkar & Tuya, 2010), and worldwide (Varian et al., 2009). This study applied a Western WFC model to Chinese immigrants in New Zealand. We found that it is possible that Chinese immigrants are living in a state of in-betweenness. That is, they may still retain



their Chinese cultural values, and at the same time, attempt to follow the attitudes and behaviours of host people. Their work and family appear to be integrated rather than segmented, and strain-based work-family conflict especially exerts adverse impact on their well-being rather than time-based work-family conflict. During the process of acculturation, immigrants who are proficient in the host language experience more SWIF and psychological strain, and value acculturation may play a more salient role to buffer the relationships in work-family models. Therefore, our research findings have significant implications for immigrants in both New Zealand and other countries.

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## TABLES AND FIGURES

Table 1. CFA results of measures

Studied variables ( <i>N</i> =577)	$\chi^2/df$	SRMR	CFI	RMSEA	Range of factor loadings	Range of $R^2$
Work-family conflict	4.88	.04	.96	.08	.69 - .92	.47 - .85
Workload	4.69	.02	.99	.08	.72 - .85	.51 - .73
Interpersonal conflict at work	3.80	.02	.99	.07	.67 - .94	.45 - .88
Family responsibility*	.61	.01	1.00	.00	.72 - .90	.51 - .81
Family support	2.72	.01	1.00	.06	.67 - .96	.45 - .92
Family conflict	4.89	.03	.98	.80	.53 - .68	.28 - .46
Job satisfaction*	.63	.01	1.00	.00	.71 - .84	.50 - .71
Family satisfaction*	.02	.00	1.00	.00	.90 - .96	.81 - .92
Psychological strain	3.71	.04	.97	.07	.63 - .83	.39 - .69
Acculturation	4.84	.07	.96	.80	.32 - .97	.10 - .95

\*Those measures had only three items. When conducting CFA, we added one more constraint to the models.

$R^2$  = Squared multiple correlation.

Table 2. Descriptive statistics and correlations for major variables (N=577)

Variable	Mean	SD	Correlation																
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. TWIF	2.36	1.00	<b>.84</b>																
2. TFIW	2.41	.85	.42*	<b>.74</b>															
3. SWIF	2.44	.90	.59*	.46*	<b>.83</b>														
4. SFIW	2.17	.89	.35*	.48*	.57*	<b>.89</b>													
5. Hours	38.75	10.64	.20*	.07	.12*	.09	- <sup>a</sup>												
6. WL	2.60	.99	.32*	.26*	.38*	.21*	.18*	<b>.88</b>											
7. ICW	2.32	1.07	.14*	.11*	.22*	.15*	-.02	.23*	<b>.90</b>										
8. FR	2.56	.94	.13*	.31*	.27*	.32*	.09	.18*	.13*	<b>.84</b>									
9. FC	1.68	.58	.10*	.16*	.25*	.30*	.04	.06	.15*	.22*	<b>.72</b>								
10. FSup	5.90	1.14	-.14*	-.18*	-.17*	-.25*	-.01	-.10*	-.09	-.25*	-.35*	<b>.90</b>							
11. JS	5.32	1.20	-.16*	-.13*	-.27*	-.20*	-.02	-.10*	-.27*	-.16*	-.23*	.21*	<b>.81</b>						
12. FSat	5.65	1.23	-.23*	-.21*	-.34*	-.33*	-.10	-.10*	-.12*	-.29*	-.44*	.45*	.42*	<b>.95</b>					
13. SD	2.07	.68	.24*	.20*	.37*	.37*	.04	.08	.15*	.11*	.31*	-.25*	-.45*	-.54*	<b>.80</b>				
14. A/D	1.94	.66	.31*	.19*	.42*	.33*	.02	.23*	.20*	.23*	.31*	-.21*	-.31*	-.32*	.53*	<b>.81</b>			
15. LP	3.44	.97	-.01	-.14*	.01	-.16*	-.07	.05	-.03	-.08	-.11*	.09	.21*	.15*	-.12*	.02	<b>.95</b>		
16. CK	2.93	.78	-.06	-.11*	-.05	-.15*	-.10*	.03	-.04	-.03	-.10*	.16*	.20*	.19*	-.19*	-.02	.50*	<b>.82</b>	
17. CI	2.85	.87	-.04	-.13*	-.02	-.15*	-.06	.03	-.03	-.09	-.12*	.07	.23*	.16*	-.18*	-.01	.52*	.68*	<b>.88</b>

*Note.* TWIF = Time-based work interference with family; TFIW = Time-based family interference with work; SWIF = Strain-based work interference with family; SFIW = Strain-based family interference with work; Hours = Number of working hours per week; WL = Workload; ICW = Interpersonal conflict at work; FR = Family responsibility; FC = Family conflict; FSup = Family support; JS = Job satisfaction; FSat = Family satisfaction; SD = Social dysfunction; A/D = Anxiety/depression; LP = Language proficiency; CI = Cultural identity; CK = Cultural knowledge.

The bold number on the diagonal is Cronbach's alpha estimate.

<sup>a</sup> One self-report item.

*P* < .01\* (One-tailed).

Table 3. Mediation results in Model A and Model B<sup>1</sup>

	Significant mediated Path	Indirect effect ( $a \times b$ )	Significant unmediated Path	Standardised path coefficients
<b>Model A</b>	WL→SWIF→JS	-.05** (.22*** × -.23***)	Hours→TWIF	.12***
	WL→SWIF→FSat	-.07** (.22*** × -.33***)	WL→TWIF	.28***
	WL→SWIF→SD	.08** (.22*** × .38***)	ICW→TWIF	.08*
	WL→SWIF→A/D	.08** (.22*** × .37***)		
	ICW→SWIF→JS	-.04** (.17*** × -.23***)		
	ICW→SWIF→FSat	-.06** (.17*** × -.33***)		
	ICW→SWIF→SD	.07** (.17*** × .38***)		
	ICW→SWIF→A/D	.06** (.17*** × .37***)		
<b>Model B</b>	FR→SFIW→JS	-.01* (.14*** × -.11*)	FR→TFIW	.29***
	FR→SFIW→FSat	-.02** (.14*** × -.14***)	FSup→TFIW	-.10*
	FR→SFIW→SD	.04** (.14*** × .30***)		
	FR→SFIW→A/D	.03** (.14*** × .22***)		
	FC→SFIW→JS	-.02* (.18*** × -.11*)		
	FC→SFIW→FSat	-.03** (.18*** × -.14***)		
	FC→SFIW→SD	.05** (.18*** × .30***)		
	FC→SFIW→A/D	.04** (.18*** × .22***)		
	FSup→SFIW→JS	.01* (-.09* × -.11*)		
	FSup→SFIW→FSat	.01* (-.09* × -.14***)		
	FSup→SFIW→SD	-.03* (-.09* × .30***)		
	FSup→SFIW→A/D	-.02* (-.09* × .22***)		

*Note.*  $a$  = the standardized path coefficients of path from predictor to mediator;  $b$  = the standardized path coefficients of path from mediator to outcome;

TWIF = Time-based work interference with family; TFIW = Time-based family interference with work; SWIF = Strain-based work interference with family; SFIW = Strain-based family interference with work; Hours = Number of working hours per week; WL = Workload; ICW = Interpersonal conflict at work; FR = Family responsibility; FC = Family conflict; FSup = Family support; JS = Job satisfaction; FSat = Family satisfaction; SD = Social dysfunction; A/D = Anxiety/depression.

<sup>1</sup> = Only the significant SEM results are presented, due to the complexity of results and for parsimony (for a copy of the full results, please contact the corresponding author).

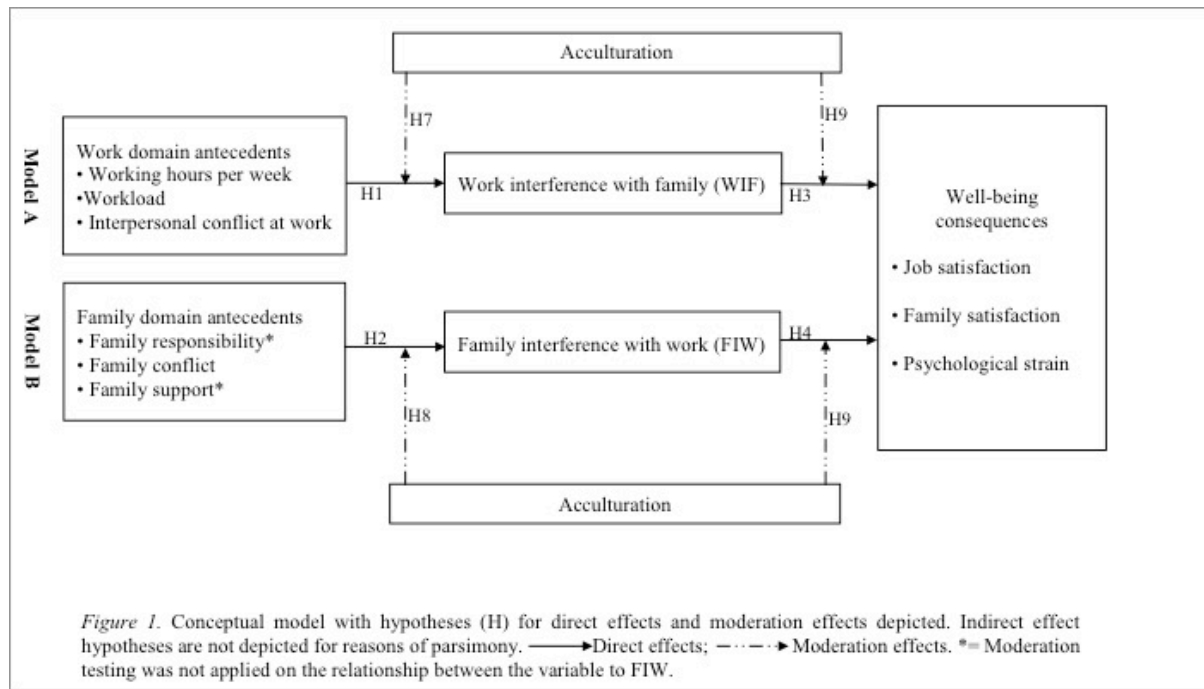
$p < .05^*$ ,  $p < .01^{**}$ ,  $p < .001^{***}$ .

Table 4. Moderation results in Model A and Model B\*

Model Path	A	Moderators			H	Model Path	B	Moderators			H
		LP	CK	CI				LP	CK	CI	
WL→SWIF		<b>.13**</b>	.01	-.08	H7	FC→SFIW		.04	-.04	-.05	H8
ICW→SWIF		-.01	-.01	.01	H7	SFIW→JS		-.01	-.06	-.01	H9
Hours→TWIF		-.02	-.04	.04	H7	SFIW→FSat		.02	.06	-.09	H9
WL→TWIF		.09	.00	-.03	H7	SFIW→SD		-.05	.01	.06	H9
ICW→TWIF		.06	-.02	-.02	H7	SFIW→A/D		-.04	.04	.00	H9
SWIF→JS		.05	-.08	-.04	H9						
SWIF→FSat		.05	.04	-.08	H9						
SWIF→SD		-.04	.07	.01	H9						
SWIF→A/D		<b>-.07*</b>	.00	.06	H9						

*Note.* All the figures in the table are unstandardized regression coefficients.

TWIF = Time-based work interference with family; TFIW = Time-based family interference with work; SWIF = Strain-based work interference with family; SFIW = Strain-based family interference with work; Hours = Number of working hours per week; WL = Workload; ICW = Interpersonal conflict at work; FC = Family conflict; JS = Job satisfaction; FSat = Family satisfaction; SD = Social dysfunction; A/D = Anxiety/depression, LP=Language proficiency; CK=Cultural knowledge; CI=Cultural identity. H = Hypothesis;  $p < .05^*$ ,  $p < .01^{**}$ .



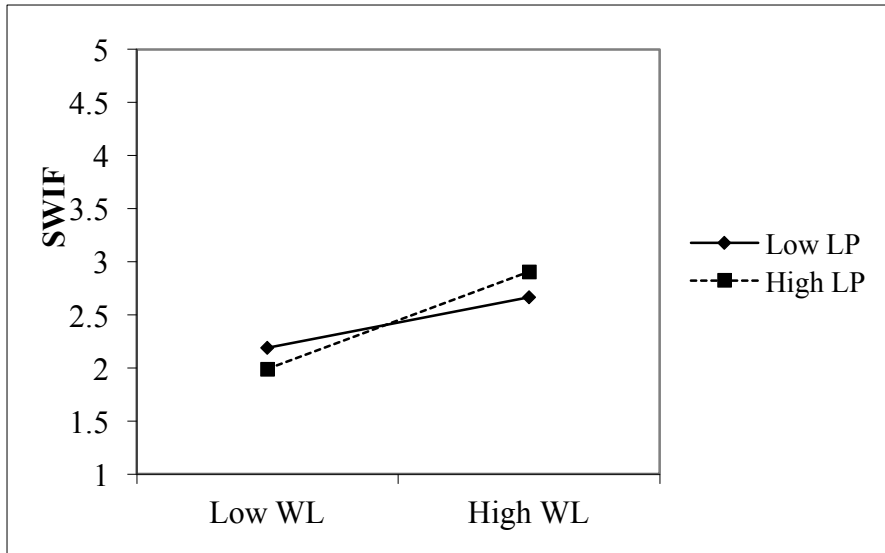


Figure 2: Interaction effects of workload (WL) and language proficiency (LP) on strain-based work interference with family (SWIF).

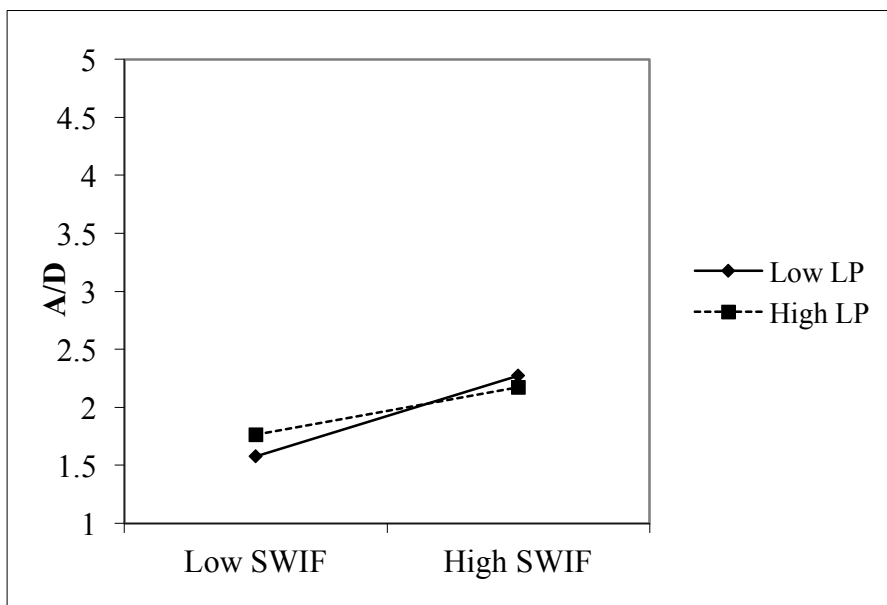


Figure 3: Interaction effects of strain-based work interference with family (SWIF) and language proficiency (LP) on anxiety/depression (A/D).

## **CHAPTER 4**

### **STUDY TWO**

#### **Paper Title**

Interpersonal conflict, acculturation, and work-to-family conflict among Chinese immigrants

#### **Declaration**

I developed the theoretical model for the paper. I took the whole responsibility for launching and completing the data collection. I was also responsible for data entry and screening, and the initial statistical analysis for the paper which was done in SPSS and then in structural equation modelling (SEM) via AMOS. I wrote the first full draft of the paper. The theoretical contributions are my own. My two supervisors (co-authors) checked the statistical analysis, and provided feedback on the paper and editing. In general, I contributed 80% to this paper, and my two supervisors equally contributed 20% to it.

#### **Publication Status**

This paper (full paper and peer reviewed) was presented at the following conference:

Shang, S., O'Driscoll, M. P., & Roche, M. (2016, April). *Interpersonal conflict, acculturation, and work-to-family conflict among Chinese immigrants*. The 31st Annual Conference of the Society for Industrial and Organizational Psychology, Anaheim, the United States.



The following paper follows the layout, referencing and language required by the conference.

### **ABSTRACT**

We examined the mediation effects of work-to-family conflict between interpersonal conflict at work and well-being, and the moderation effects of acculturation, among 264 Chinese immigrants in New Zealand, over two time periods. Strain-based work-to-family conflict had significantly mediating effects, suggesting that conflict has detrimental outcomes. Acculturation showed no moderating effects.

### **PRESS PARAGRAPH**

Work-family issues are important for organizations. However work-family researchers have not studied Chinese immigrants, despite the growing volume of them influenced by both home and host cultures. Therefore the understanding of work-to-family conflict (WFC) needs to be expanded. The purpose of this paper is to investigate the relationships of WFC with interpersonal conflict and employees' well-being, and examine how immigrants' acculturation impacts their WFC and well-being. The paper provides theoretical advice for researchers to improve future work-family research in immigrant populations, and practical advice for managers to reduce employees' WFC and for immigration services to improve programs for immigrants.

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## **Interpersonal Conflict, Acculturation, and Work-to-Family Conflict among Chinese Immigrants**

### **INTRODUCTION**

Work and family are particularly important life domains for most people, and work-family issues have been researched over the past three decades. However, the understanding of work-family conflict is subjected to a number of limitations (Grzywacz et al., 2007). Most work-family researchers have focused on individuals who have work and family experiences in their own cultures, but few focus on immigrants exposed to both home and host cultures. Nowadays frequent immigration is promoting the ethnic diversity of the workforce worldwide (Grzywacz et al., 2007). In New Zealand, the Chinese workforce is becoming a critical part of the current and future labour market (Badkar & Tuya, 2010). The Chinese ethnic group accounts for 4.3% of the total population of New Zealand, with 73.4% born overseas (New Zealand Census Statistics, 2013). Therefore, issues related to Chinese immigrants should be included in work-family studies.

Grzywacz et al. (2007) suggested that acculturation may play a central role in work-family theories being applied to immigrant populations. Furthermore, Ling and Powell (2001) proposed that interpersonal conflict at work (ICW) may produce more stress than work role demands in the work domain for Chinese, as Chinese culture particularly emphasizes maintaining harmonious relationships. However, few work-family studies have explored the potential role of acculturation and ICW. Lacking of understanding of acculturation and ICW may bring challenges and adverse impacts to organizations (Olson, 2013). Hence, the purpose of this study was to shed light upon the relationships of acculturation and ICW with work-family conflict, as depicted in Figure 1. Given the growing volume of Chinese immigrants in New Zealand, the current study represents an important contribution to the work-family literature.

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*INSERT FIGURE 1 ABOUT HERE*

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### **Work-to-family Conflict, ICW and Well-being**

Work-family conflict may occur when participating in the work (family) role makes it more difficult to participate in the family (work) role (Greenhaus & Beutell, 1985). The conflict consists of two directions: work-to-family conflict (WFC) and family-to-work conflict (FWC) (O'Driscoll, Brough, & Kalliath, 2004). In the present study, we focus on WFC, which has two different types. Time-based WFC (TWFC) occurs when time devoted to work makes it difficult to fulfil family responsibilities. Strain-based WFC (SWFC) suggests that psychological strain experienced at work spills over to family life.

To date, little is known about the relationships of WFC with ICW and well-being among Chinese immigrants, although there are some comparisons between Chinese and Western in cross-cultural work-family conflict research. In Chinese culture, maintaining harmonious relationships and avoiding interpersonal conflict at work is an important work demand (Ling Powell, 2001). Work behaviours related to engaging or handling ICW could reduce the time and energy the family role needs (Zedeck, 1992). We predicted that:

**Hypothesis 1.** ICW will be positively related to WFC.

Western research evidence consistently shows that WFC is negatively associated with job satisfaction, and positively with psychological strain (O'Driscoll et al., 2004). When experiencing WFC, individuals consider that their work is responsible for having too little time and energy with their families, and then they would feel anger and resentment towards their organization (Amstad, Meier, Fasel, Elfering, & Semmer, 2011). Furthermore, higher WFC will cause increased anxiety, hostility, and feelings of discomfort, which are the indicators of psychological strain (Beatty, 1996). We predicted that:

**Hypothesis 2a.** WFC will be negatively associated with job satisfaction.

**Hypothesis 2b.** WFC will be positively associated with psychological strain.

Previous research suggests that WFC can mediate relationships between work demands and well-being, since those relationships are not direct (Blanch & Aluja, 2012). However, most of the research on the mediation role of WFC has been conducted among individuals who function in their own cultures. As such, the previous findings may not generalize to an immigrant population. Furthermore, few studies have tested WFC as a mediator of the relationship between ICW and well-being. Therefore, this research extends the understanding of the mediating role of WFC in an immigrant population. We predicted that:

**Hypothesis 3.** WFC will mediate the relationships of ICW with (a) job satisfaction and (b) psychological strain.

### **Moderation Role of Acculturation**

Acculturation is a complex process of adapting to a new culture, and is unavoidable for immigrants (Berry, 2002). While acculturation plays an important role in the workplace and family life for immigrants (Suárez-Orozco & Suárez-Orozco, 2010), work-family research has yet to pay in-depth attention to acculturation.

Fitting into another culture is stressful for most immigrants because of the costs involved in the process of acculturation (Suárez-Orozco & Suárez-Orozco, 2010). Immigrants need to overcome the language barrier, because it is a critical factor for immigrants to succeed in the labour market (Mahmud, Alam, & Härtel, 2008). For many, migration causes loss of the support network of family friends (Yeh, Kim, Pituc, & Atkins, 2008). In the new culture, developing new social networks to replace those they have lost is a difficult and lengthy process (Moon, 2008; Thomas & Ganster, 1995). Besides, immigrants have to develop new problem-solving tools, like communication skills, as the old ones might not be effective in the new environment (Suárez-Orozco & Suárez-Orozco, 2010).

As they adapt to the host culture, high language proficiency, new social networks and new problem-solving tools provide help for their work and family life, and may even be beneficial to immigrants' mental health (Suárez-Orozco & Suárez-Orozco, 2010). Thereafter, they invest less time or energy in acculturation, which will increase the available resources for work and family requirements. Furthermore, increased available personal resources will attenuate the adverse influences of WFC on job satisfaction, and psychological health (Amstad et al., 2011; Frone, Russell, & Cooper, 1992). We predicted that:

**Hypothesis 4.** Acculturation will moderate the positive relationships of WFC with (a) ICW and (c) psychological strain, with the relationships being weaker for highly acculturated immigrants than for less acculturated immigrants.

**Hypothesis 4(b).** Acculturation will moderate the negative relationships of WFC with job satisfaction, with the relationships being stronger for highly acculturated immigrants than for less acculturated immigrants.

## METHOD

### Sample and Procedures

Data were collected from universities, Chinese companies, Chinese associations and Chinese churches in New Zealand. Participants completed two confidential questionnaires, administered at a six-month interval. A total of 577 Chinese immigrants responded to the time 1 questionnaire. The second questionnaire was emailed to the 577 time-1 respondents with a unique code for each person. Of these, 264 (45.8%) completed the second survey. Participants represented an array of industries, including agriculture, education, wholesale, financial, service industries. 51.9% were male ( $n = 137$ ), the average age was 39.77 years ( $SD = 10.5$ , range from 20 to 65 years), and 71.6% indicated that they had dependents at home. The average resident length was 140.23 months ( $SD = 82.16$ ) and average job tenure was 66.67 months ( $SD = 58.05$ ).

78.4% had a university Bachelor's degree, with a further 34.1% also having a higher tertiary qualification.

### Measures

Using Brislin's (1970) method, all survey items were translated into Chinese and back translated into English to verify semantic equivalence. The same measures were used at both Time 1 and 2.

**WFC.** Six items were used to assess WFC (Carlson, Kacmar, & Williams, 2000). Three items measured TWFC ( $\alpha_{\text{Time 1}} = .84$ ;  $\alpha_{\text{Time 2}} = .87$ ), and the other three measured SWFC ( $\alpha_{\text{Time 1}} = .83$ ;  $\alpha_{\text{Time 2}} = .79$ ). Sample items include "My work keeps me from my family activities more than I would like." for TWFC. Response options ranged from 1 (Strongly disagree) to 5 (Strongly agree).

**ICW.** ICW was measured using 5-item scale by Cox (1998) ( $\alpha_{\text{Time 1}} = .90$ ;  $\alpha_{\text{Time 2}} = .94$ , e.g. "The atmosphere here is often charged with hostility."). Response options ranged from 1 (Strongly disagree) to 7 (Strongly agree).

**Job satisfaction.** Three items from Seashore, Lawler, Mirvis, and Cammann (1982) were used to assess job satisfaction ( $\alpha_{\text{Time 1}} = .81$ ;  $\alpha_{\text{Time 2}} = .81$ , e.g. "All in all, I am satisfied with my job"). Response options ranged from 1 (Very strongly disagree) to 7 (Very strongly agree).

**Psychological strain.** Psychological strain was measured by eight items from the General Health Questionnaire revised by Kalliath, O'Driscoll, and Brough (2004). Four items were used to assess social dysfunction ( $\alpha_{\text{Time 1}} = .82$ ;  $\alpha_{\text{Time 2}} = .78$ ; e.g. "Felt capable of making decisions about things"). Four items were used to assess anxiety/depression ( $\alpha_{\text{Time 1}} = .77$ ;  $\alpha_{\text{Time 2}} = .83$ ; e.g. "Been feeling unhappy or depressed"). Response options ranged from 1 (Never) to 5 (All the time).

**Acculturation.** Twelve items developed by Gim Chung, Kim, and Abreu (2004) were used to assess acculturation ( $\alpha_{\text{Time 1}} = .91$ ;  $\alpha_{\text{Time 2}} = .92$ ; e.g. “How well do I speak the language of English?”). Response options ranged from 1 (Not very much) to 5 (Very much).

### Scale Validation

To validate the structure of measures, confirmatory factor analysis (CFA) was run using AMOS 21. We followed Williams, Vandenberg, and Edwards (2009) recommendations regarding the goodness-of-fit measures: the standardised root mean residual ( $\text{SRMR} \leq 0.10$ ), comparative fit index ( $\text{CFI} \geq 0.95$ ), and root mean square error of approximation ( $\text{RMSEA} \leq 0.08$ ). If the fit indices were poor, model respecifications were applied, including trimming or correlating errors based on modification indices (Kline, 2011). WFC was split into two factors: SWFC and TWFC, each with 3 items. Psychological health was also split into two factors: social dysfunction and anxiety/depression, each with 4 items. All instruments achieved an acceptable level of fit (results available from authors). Overall, the hypothesized model included seven distinct factors: ICW, SWFC, TWFC, acculturation, job satisfaction, social dysfunction and anxiety/depression.

### Analysis

Hypotheses were tested using SEM in AMOS 21 to assess the direct effects (Hypotheses 1-2), mediating effects (Hypotheses 3) and moderating effects (Hypotheses 4). Since the structural model became overly complex when we included all the hypothesis tests, we ran three sets of models - one mediation model and two moderation models (acculturation moderating the relationships of ICW with WFC, and of WFC with well-being). The only requirement for a significant mediation effect is that the indirect effect ( $a \times b$ ) is significant (Zhao, Lynch, & Chen, 2010). The requirement for a significant moderation effect is that an interaction term is significant (Dawson, 2014).

## RESULTS

### Correlations

Descriptive statistics and correlations for the study variables are shown in Table 1. In the mediation model, most of the study variables were significantly correlated to each other in the expected directions, except the correlation between  $ICW_{Time1}$  and  $TWFC_{Time2}$  ( $r = .07, ns$ ). In the moderation models,  $Acculturation_{Time1}$  was only significantly correlated to job satisfaction $_{Time2}$  ( $r = .29, p < .01$ ), and social dysfunction $_{Time2}$  ( $r = -.20, p < .01$ ).

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*INSERT TABLE 1 ABOUT HERE*

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### Direct and Mediating Effect

To ensure demographic variables did not influence the study variables in the mediation test, we examined Pearson correlations in Table 1. The demographic variables had weak and inconsistent correlations with the study variables. If demographic variables are theoretically unimportant and have little relationship with key variables, they do not need to be controlled Spector and Brannick (2011). Hence, the demographic variables were not controlled in the mediation testing.

The mediation model resulted in an acceptable fit:  $\chi^2(23) = 47.6$  ( $p = .002$ ), CFI = 0.97, SRMR = 0.05, and RMSEA = 0.06. The mediation results were showed in Table 2.  $ICW_{Time1}$  was significantly related to  $SWFC_{Time2}$ , but not to  $TWFC_{Time2}$ , partially supporting hypothesis 1.  $SWFC_{Time2}$  but not  $TWFC_{Time2}$  was significantly related to job satisfaction $_{Time2}$ , social dysfunction $_{Time2}$ , and anxiety/depression $_{Time2}$ , also partially supporting hypothesis 2. Furthermore,  $SWFC_{Time2}$  was significantly mediated the relationships of  $ICW_{Time1}$  with job satisfaction $_{Time2}$ , social dysfunction $_{Time2}$ , and anxiety/depression $_{Time2}$ . However  $TWFC_{Time2}$  did not exhibit its mediating function in this study.



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*INSERT TABLE 2 ABOUT HERE*

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### **Moderation effects**

Table 1 shows that acculturation significantly correlated with resident length ( $r = .29, p < .01$ ), education ( $r = .39, p < .01$ ), and job tenure ( $r = .24, p < .01$ ). Those three variables were controlled while conducting the moderation test. The two moderated SEM models also resulted in a good fit:  $\chi^2(8) = 17.3$  ( $p = .027$ ), CFI = 0.97, SRMR = 0.05, and RMSEA = 0.07 for model of acculturation moderating the relationship between ICW and WFC; and  $\chi^2(38) = 82.7$  ( $p = .000$ ), CFI = 0.96, SRMR = 0.07, and RMSEA = 0.07 for model of acculturation moderating the relationship between WFC and well-being. As depicted in Table 2, we did not get any significant interaction effects.

## **DISCUSSION**

### **Work-to-family Conflict and Interpersonal Conflict at work**

High ICW was related to high SWFC rather than TWFC, which empirically confirmed the proposition of Ling and Powell (2001) that ICW is a strain-based predictor of WFC for Chinese. That is because the Chinese culture places greater importance on interpersonal harmony than the Western culture, and ICW has greater negative effects for Chinese (Ling & Powell, 2001). This implies that Chinese immigrants might retain keep their traditional Chinese values to guide their behaviours, although they are exposed to a Western culture.

### **Strain-based Work-to-family Conflict = Time-based Work-to-family Conflict?**

Interestingly, only SWFC but not TWFC was related to well-being, which shares a similar pattern with our mediation results, that is, only SWFC rather than TWFC mediated the relationships between ICW and well-being. The results show that SWFC is a consistent mediator between work demands and well-being, and TWFC has fewer effects on well-being than SWFC.

A possible explanation is that time is fluid, and people can engage in multiple activities at the same time (Kaufman, Lane, & Lindquist, 1991). Modern technologies conveniently help them participate in their work role, and at the same time do not rule out their participation in their family role (Bagger, Reb, & Li, 2014). In other words, work and family can be allies rather than competitors (Greenhaus & Powell, 2006). For example, in recent years, the popularity of the home-office provides an opportunity to fulfil the work demands, but simultaneously does not sacrifice time with family members (Brough & O'Driscoll, 2005). Furthermore, people may manage their own time reasonably with the flexible time policy. All employees have a right to request flexible work in New Zealand (Ministry of Business, Innovation & Employment, n.d.). Therefore, people have opportunities to reduce their TWFC, which then will not influence their well-being too much.

#### **Non-significant moderation effects of acculturation**

Surprisingly, acculturation did not significantly moderate all the examined relationships. A plausible explanation is that, in New Zealand, Chinese immigrants collectively choose to retain their traditional Chinese cultural values (Li, Hodgetts, & Sonn, 2014). Our measure of acculturation included English proficiency, cultural identity, cultural knowledge, and food consumption, which are defined as visible artefact acculturation (surface level of acculturation) by Pooyan (1984). Taras, Rowney, and Steel (2013) suggested that visible artefact acculturation has a small positive relationship with value acculturation (explaining only 4% of variation in value acculturation). It is quite possible that some immigrants speak, eat, interact, or dress similar to their host nations to appear to be more local, but still remain committed to their original values (Pooyan, 1984). Therefore, even though many Chinese immigrants may have developed a high level of visible artefact acculturation, the unchanged values may lead to the insignificant moderating effects. Our results indirectly support the view that it is the

different values shape different experiences of work-family conflict rather than the visible artefacts (Joplin, Shaffer, Francesco, & Lau, 2003).

### **Implications**

The current longitudinal study represents an initial attempt to test the work-family model with acculturation and ICW, and provides some theoretical and practical implementation. ICW have been rarely discussed in Western work-family research. However, given the present results, ICW should be included in future work-family research using Chinese samples. Interpersonal relationships play a particularly critical role for Chinese in the work place (Lai, 1995; Ling & Powell, 2001). Furthermore, SWFC plays more important role in the work domain than TWFC, as SWFC has more effects on well-being than TWFC. Our findings also have practical implications for how to manage WFC among Chinese immigrants. Measures like flexible time schedule or using a home office may limit the adverse effects of TWFC on well-being. In order to continue to improve levels of well-being, organizations should adopt further measures to alleviate SWFC. For instance, an organization with Chinese immigrants should pay more attention to managing ICW.

The non-significant moderation effects of acculturation suggest that visible artefact acculturation does not have buffering effects in our work-family model, while value acculturation may play a critical role in buffering those relationships. When measuring acculturation, including both visible artefacts and values would provide more information for researchers to explore immigrants' work-family experiences. Practically, the research suggests that immigration services should include programs not only focusing on the surface levels of acculturation, such as language programs, but also comparing the values between the local culture and the Chinese culture. This should help Chinese immigrants to understand the locals better and engage in the society actively.

**Limitation**

This research focused only on Chinese immigrants in New Zealand. Therefore the present findings may lack the capacity to explain the work-family experiences of immigrants from other ethnic groups, or of Chinese immigrants in countries other than New Zealand.

**CONCLUSION**

It is imperative to expand our understanding of WFC among Chinese immigrants, because the Chinese workforce is becoming a critical part of the current and future labour market in New Zealand (Badkar & Tuya, 2010), and worldwide (Varian et al., 2009). We found that ICW is a significant strain-based predictor of WFC, and SWFC has more effects on well-being than does TWFC. This would help organizations develop awareness of ICW among Chinese immigrant workers, and well manage ICW to reduce their WFC. Furthermore, visible artefact acculturation did not have moderation effects in our work-family model, which indirectly supports the notion that different values of individuals shape different work-family experiences, and further research in value acculturation is required. Overall, our research findings have significant implications for immigrants in both New Zealand and other countries.

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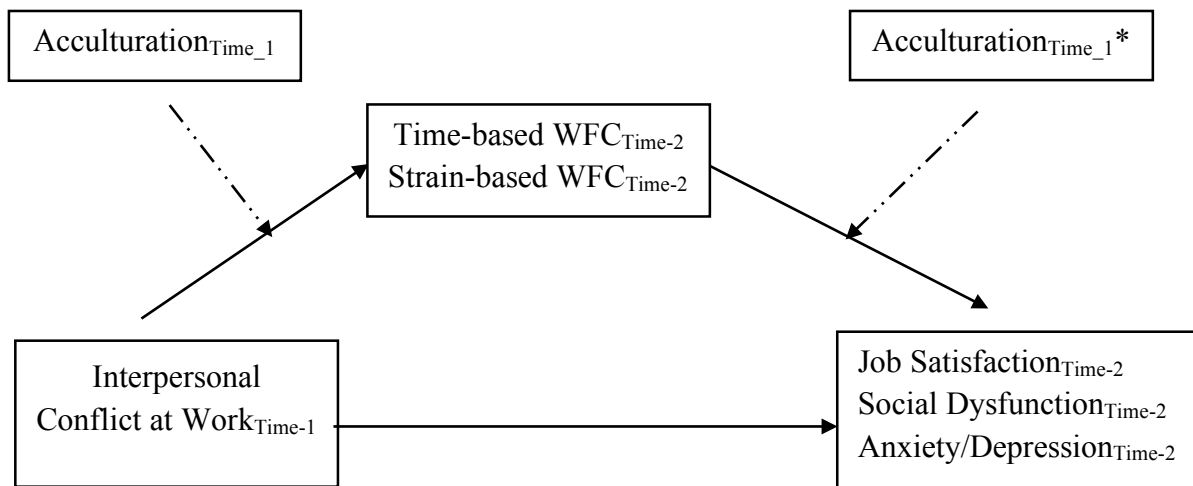
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## FIGURE AND TABLES



*Figure 1.* Hypothesised moderated mediated model with interpersonal conflict at work at Time 1 predicting well-being at Time 2 via WFC at Time 2, moderated by acculturation at Time 1.

*Note.* WFC = work-to-family conflict; Social dysfunction and anxiety/depression are the two factors of psychological strain after conducting CFA.

\*When tested the moderation effects of acculturation between WFC and well-being, time- and strain-based WFC at Time 1 were used.

Table 1. Means, Standard Deviations, Internal Reliabilities, and Bivariate Correlations of Main Variables ( $N = 264$ )

Variables	<i>M</i>	<i>SD</i>	Gender	Age	No. of Depen dents	Resident Length	Education	Job Tenure	1	2	3	4	5	6	7	8	9
1.TWFC <sub>Time1</sub>	2.34	.97	.06	-.07	-.01	-.04	-.08	-.04	(.84)								
2.SWFC <sub>Time1</sub>	2.40	.91	.14	-.10	-.03	-.07	-.03	-.05	.58*	(.83)							
3.TWFC <sub>Time2</sub>	2.62	.96	.07	-.16*	.04	-.02	-.02	-.12	.41*	.37*	(.87)						
4.SWFC <sub>Time2</sub>	2.54	.81	.18*	-.06	.07	-.01	.01	-.07	.28*	.44*	.55*	(.79)					
5.ICW <sub>Time1</sub>	2.29	1.06	-.09	-.05	.02	-.02	-.12	-.05	.09	.12	.07	.19*	(.90)				
6.ACC <sub>Time1</sub>	3.18	.65	.07	-.04	.07	.29*	.39*	.24*	-.03	-.10	-.01	-.02	-.14	(.91)			
7.JS <sub>Time2</sub>	5.25	1.16	-.07	.04	.03	.00	.11	.10	-.06	-.19*	-.15*	-.34*	-.19*	.29*	(.81)		
8.SD <sub>Time2</sub>	2.09	.61	.00	.03	.04	.03	-.10	-.05	.08	.18*	.27*	.41*	.07*	-.20*	-.47*	(.78)	
9.AD <sub>Time2</sub>	2.05	.71	.16*	-.17*	-.05	-.02	.07	-.11	.15*	.32*	.27*	.46*	.06	-.06	-.32*	.48*	(.83)

*Note.* TWIF = Time-based work-to-family conflict; SWIF = Strain-based work-to-family conflict; ICW = Interpersonal conflict at work; ACC = Acculturation; JS = Job satisfaction; SD = Social dysfunction; AD = Anxiety/depression.

Internal reliabilities are reported along the diagonal in the brackets. \*  $p < .01$  (1-tailed).

Table 2. Mediation and Moderation Test Results

Mediation test		Moderation test	
Mediated Path	Indirect effect ( $a \times b$ )	Interaction Path	Interaction effect
ICW <sub>T1</sub> →SWFC <sub>T2</sub> →JS <sub>T2</sub>	-.04** ( .10** × -.43***)	ICW <sub>T1</sub> ×Acculturation <sub>T1</sub> →SWFC <sub>T2</sub>	.02
ICW <sub>T1</sub> →SWFC <sub>T2</sub> →SD <sub>T2</sub>	.04** ( .10** × .21***)	ICW <sub>T1</sub> ×Acculturation <sub>T1</sub> →TWFC <sub>T2</sub>	-.04
ICW <sub>T1</sub> →SWFC <sub>T2</sub> →AD <sub>T2</sub>	.05** ( .10** × .31***)	SWFC <sub>T1</sub> ×Acculturation <sub>T1</sub> →JS <sub>T2</sub>	-.04
ICW <sub>T1</sub> →TWFC <sub>T2</sub> →JS <sub>T2</sub>	-.00 ( .03 × -.07)	SWFC <sub>T1</sub> ×Acculturation <sub>T1</sub> →SD <sub>T2</sub>	.02
ICW <sub>T1</sub> →TWFC <sub>T2</sub> →SD <sub>T2</sub>	.00 ( .03 × .01)	SWFC <sub>T1</sub> ×Acculturation <sub>T1</sub> →AD <sub>T2</sub>	.02
ICW <sub>T1</sub> →TWFC <sub>T2</sub> →AD <sub>T2</sub>	.00 ( .03 × .01)	TWFC <sub>T1</sub> ×Acculturation <sub>T1</sub> →JS <sub>T2</sub>	.09
		TWFC <sub>T1</sub> ×Acculturation <sub>T1</sub> →SD <sub>T2</sub>	.01
		TWFC <sub>T1</sub> ×Acculturation <sub>T1</sub> →AD <sub>T2</sub>	.00

Note. Unstandardized regression weights, only main effects are shown.

TWFC = Time-based work-to-family conflict; SWFC = Strain-based work-to-family conflict; ICW = Interpersonal conflict at work; JS = Job satisfaction; SD = Social dysfunction; AD = Anxiety/depression; T1 = Time 1; T2 = Time 2.

$a$  = coefficients of path from predictor to mediator;  $b$  = coefficients of path from mediator to outcome.

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

## **CHAPTER 5**

### **STUDY THREE**

#### **Paper Title**

Mechanisms linking acculturation, work-family conflict, and subjective well-being among Chinese immigrants in New Zealand

#### **Declaration**

I developed the theoretical model for the paper. I took the whole responsibility for launching and completing the data collection. I was also responsible for data entry and screening, and the initial statistical analysis for the paper which was done in SPSS and then in structural equation modelling (SEM) via AMOS. I wrote the first full draft of the paper. The theoretical contributions are my own. My two supervisors (co-authors) checked the statistical analysis, and provided feedback on the paper and editing. In general, I contributed 80% to this paper, and my two supervisors equally contributed 20% to it.

#### **Publication Status**

Shang, S., O'Driscoll, M. P., & Roche, M. (*revised and resubmitted in December 2016*). Mechanisms Linking Acculturation, Work-family conflict, and Subjective Well-being among Chinese Immigrants in New Zealand. *Human Resource Management*. [Impact Factor: 1.817; ABDC List Ranked A\*].

The following paper follows the layout, referencing and language required by the journal editors.

### **ABSTRACT**

Work-family conflict (WFC) research has focused almost exclusively on non-immigrant populations. To expand the understanding of WFC among immigrants, this longitudinal study (6-month time lag) aimed to investigate the mechanisms linking acculturation, WFC, and subjective well-being. In order to do this, two theory-based mediation models were developed. The models were tested on a sample of 264 Chinese immigrants working in New Zealand using structural equation modeling. Results show that subjective well-being mediated the effect of acculturation on WFC, and acculturation did not directly influence WFC. Furthermore, evidence was found for reciprocal relationships between WFC and subjective well-being, as well as for the same-domain perspective. Work interfering with family and family interfering with work (two directions of WFC) have significant effects on work-related and family-related well-being respectively, and vice versa. In addition, we found that strain-based WFC, but not time-based WFC, exerted effects on subjective well-being. Overall, the present study provides an appropriate platform for future work-family research on immigrant populations, and offers practical prescriptions for human resource managers to operate successfully within a diverse workplace.

Keywords: work-family conflict, Chinese immigrants in New Zealand, acculturation, mediation, subjective well-being

## **Mechanisms Linking Acculturation, Work-family conflict, and Subjective Well-being among Chinese Immigrants in New Zealand**

### **INTRODUCTION**

The way we work “is not responding fast enough to the challenges presented by changes in the world around us” (Equal Opportunities Commission, 2007, p. 16). Although work-family issues have been widely researched in many countries over the past 30 years, organizations are still confronting the challenge of a changing global reality, including frequently increasing migration. Immigrants are exposed to a new culture that may be very different from their home cultures, and working environments are even more diverse. Most previous work-family studies assume that individuals function only within their own cultures, and overlook the impacts of *acculturation*, which refers to the process of immigrants adapting to a new culture (Berry, 2002). Individuals influenced by different cultures may have different work-family experiences (Ayman, 2008). Since immigrants are always juggling their home and host cultures (Li, 2011), their work-family experiences may be more complex than non-immigrants.

Acculturation is an inevitable journey for immigrants, and can exert a considerable impact on their work, family and even subjective well-being (Suárez-Orozco & Suárez-Orozco, 2010). Acculturation might play a critical role when work-family theories are applied to immigrant populations (Grzywacz et al., 2007), but only recently has the role of acculturation received the attention of work-family researchers. Olson, Huffman, Leiva, and Culbertson (2013) found that social-based acculturation but not language-based acculturation could directly contribute to WFC, which provided some insight into the role of acculturation in work-family experiences among immigrants. However, social-based acculturation may transfer its impact to WFC through subjective well-

being, since the levels of acculturation could influence individuals' subjective well-being (Suárez-Orozco & Suárez-Orozco, 2010) and subjective well-being could directly affect their WFC (e.g., Nohe, Meier, Sonntag, & Michel, 2015). The relationship between subjective well-being and work-family conflict in the context of acculturation has not been discussed by Olson et al. (2013). Furthermore, besides language- and social-based acculturation, acculturation includes more components, such as food consumption and identity (Gim Chung, Kim, & Abreu, 2004). Therefore, the mechanisms that link acculturation with WFC and subjective well-being are still obscure. A lack of understanding of work-family conflict (WFC) among immigrants may constrain organizations from proactively facilitating employees' subjective well-being in a diverse working environment.

To address this issue, the main aim of the current research is to shed light upon how immigrants' acculturation, work-family conflict experiences and subjective well-being interact with each other. In particular, this study utilized a longitudinal design (two waves) which aids in addressing possible causal connections, as this longitudinal design could reflect the dynamic process of acculturation (Olson et al., 2013) and of work-family conflict (Ode-Dusseau et al., 2013). This research focused on Chinese immigrants in New Zealand, who are becoming a crucial segment of the current and future workforce (Badkar & Tuya, 2010).

The present research examines work-family experiences among immigrant populations, thereby encouraging future work-family research to better understand complex WFC experiences among them. Practically this work offers some beneficial prescriptions for organizations on how to manage work-family conflict in a diverse working environment, including aiming to improve their work-family policies and practices. This may ensure the needs of immigrants in a diverse working environment



can be met, and at the same time foster the organizational success (Grzywacz et al., 2007).

### **Work-Family Conflict, Acculturation and Subjective Well-being**

Work-family conflict (WFC) is “a form of inter-role conflict in which the role pressures from the work and family domains are mutually incompatible in some respect. That is, participation in the family (work) role is made more difficult by virtue of participation in the work (family) role” (Greenhaus & Beutell, 1985, p. 77). According to the definition, WFC is a bidirectional concept: work interference with family (WIF) and family interference with work (FIW) (e.g., Byron, 2005). Based on the sources of inter-role conflict, WFC has two major forms<sup>1</sup>: time-based conflict and strain-based conflict (Greenhaus & Beutell, 1985). Time-based conflict occurs when time devoted to one role makes it difficult to participate in another role. Strain-based conflict suggests that psychological strain experienced in one role intrudes into and interferes with participation in another role (Greenhaus & Beutell, 1985). Therefore, four types of WFC are focused on in this paper: time-based WIF, strain-based WIF, time-based FIW and strain-based FIW.

Acculturation is a complex process where immigrants adjust and adapt to a new culture and society, when they have moved to a new country (Sonderegger & Barrett, 2004). During this process, immigrants deliberately or accidentally learn host cultural features, including language, clothing, food consumption, cultural knowledge, and values, and then adjust their behaviours, identity and values to align with the host cultures (Berry, 2002). However, this process is not easy. The larger the cultural distance (the degree of dissimilarity between two cultures), the more difficult it is for immigrants to adapt (Hofstede, Hofstede, & Minkov, 2010). This is the case of Chinese

immigrants who were born in a collectivistic culture, but now are living in a predominantly individualistic culture of New Zealand (Hofstede et al., 2010).

Subjective well-being is defined as “a person’s cognitive and affective evaluations of his or her life” (Diener, Lucas, & Oishi, 2002, p. 63). It is a very broad concept, and can be indicated by positive emotion, psychological strain, depression, family satisfaction, job satisfaction, and life satisfaction (e.g., Ford, Heinen, & Langkamer, 2007). Bellavia and Frone (2005) suggested that subjective well-being related to WFC can be divided into three categories: work-related well-being which primarily concerns the work, family-related well-being which primarily concerns the family, and individual well-being which primarily concerns the individual. Therefore, this research focuses on the following three indicators to represent the three categories. Job satisfaction refers to the degree to which an individual is satisfied or happy with his/her job (e.g., Carlson, Kacmar, & Williams, 2000). Family satisfaction refers to the degree to which an individual is satisfied or happy with his/her family (e.g., Carlson et al., 2000). Psychological health (the reverse is psychological strain) describes an individual’s general feeling of emotional satisfaction (Kalliath, O’Driscoll, & Brough, 2004).

### **Mechanisms Linking WFC, Acculturation and Subjective Well-being**

As mentioned before, the relationships among WFC, acculturation and subjective well-being remain unclear. Two prominent theoretical paradigms, role theory (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964) and conservation of resources theory (Hobfoll, 1989), give some insight into these mechanisms. Role theory implies that individuals attempt to meet multiple work and family role expectations, and they may suffer some degree of role pressure, when their work and family roles are ambiguous (Kahn et al.,

1964). Conservation of resources theory suggests that individuals may experience stress or strain when their personal resources (anything valued by a person, such as energies, time, and personal characteristics) are threatened or actually lost, which will motivate them to seek more resources in order to protect their personal resource pool (Hobfoll, 2011). Accordingly, we proposed two alternative models: Model A, WFC mediating the relationship between acculturation and well-being (see Figure 1); and Model B, subjective well-being mediating the relationship between acculturation and WFC (see Figure 2). Both models have not been discussed in work-family literature, therefore the current research would enrich the literature by presenting the two competing models.

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*INSERT FIGURE 1 AND FIGURE 2 ABOUT HERE*

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**WFC mediating the effect of acculturation on subjective well-being (Model A).**

In the work-family literature, a dominant “full-range” construct contains three main components: antecedents, a mediating WFC construct, and consequences (Michel, Mitchelson, Kotrba, LeBreton, & Baltes, 2009, p. 201).

Expectations from work and family are one main category of the antecedents of WFC (Judge & Colquitt, 2004). During the process of acculturation, to fit into the new culture, immigrants have to come to terms with the work-role and family-role expectations which may be very different from their home culture (Lazarova, Westman, & Shaffer, 2010; Olson et al., 2013). However, the expectations are always implicit, unlike regulations which are clearly written down. Immigrants have to learn expectations from their own experiences and by observing members of the host culture speaking and behaving. Therefore, the information they obtain may lack clarity (Kahn et al., 1964). For example, at the workplace, when a Chinese immigrant encounters

interpersonal conflict, some people may advise him/her to keep silent, while some others may suggest him/her to express him/herself (Wang, 2015). In the family life, Chinese immigrant parents may hesitate as to whether they should educate their kids in a normal Chinese way to be “tiger parents” (strict and demanding parents who always push their children to high achievement), or in a general Western way learning freely or through play. The process of weighing the advantages and disadvantages of either way could threaten or deplete immigrants’ personal finite resources (e.g., time and energy), which will increase the incompatibility between work and family domains (Michel, et al., 2011).

Furthermore, acculturation could happen at the value level (Pooyan, 1984). That means that values of immigrants learned from their home countries may gradually change to be similar to values of locals in the host countries. In the current study, Chinese immigrants moved from a collectivistic culture to a predominantly individualistic culture of New Zealand (Hofstede et al., 2010). The values of Chinese immigrants may be progressively turning from collectivism to individualism through their frequent interaction with locals during their living in New Zealand. In contrast to collectivists generally regarding work and family domains as integrated, individualists are prone to see the two domains as distinct (Spector et al., 2004). The more work and family are mingled, the more liable people experience WFC. Therefore, Spector et al. (2004) reported that individualists (e.g., Anglos) had a lower level of WFC than collectivists (e.g., Chinese) through comparison between the two groups. Accordingly, the higher levels of acculturation Chinese immigrants obtain, the more likely they undergo lower levels of WFC.

**Hypothesis 1.** Acculturation will be negatively related to ( i ) work interfering with family (WIF) and ( ii ) family interfering with work (FIW).

A substantial body of evidence has demonstrated that when work-family conflict happens, there are adverse consequences to individuals' subjective well-being, such as job satisfaction, family satisfaction, and psychological health (e.g., O'Driscoll, Brough, & Kalliath, 2004). Conservation of resources theory suggests that high levels of work-family conflict will result in personal resource losses (time and energy), which will lead to decreased subjective well-being (e.g., Hobfoll, 1989). Specifically, both WIF and FIW are positively related to psychological strain, as increased levels will cause increased levels of anxiety, depression, social dysfunction, and feelings of discomfort, which are the indicators of psychological strain (Amstad, Meier, Fasel, Elfering, & Semmer, 2011).

However, the relationships of WIF/FIW with job/family satisfaction are still debated. The segmentation theory suggests that there are firm boundaries between work and family, which gives rise to two contradictory perspectives: cross-domain perspective and same-domain perspective (which also refers to matching or resource attribution perspective; Amstad et al., 2011). The cross-domain perspective suggests that WIF negatively impacts on individuals' *family* satisfaction, whereas FIW negatively influences their *job* satisfaction. When WIF (FIW) occurs, it will be difficult for the person to meet demands which family (work) requires, such as investment of time and energy (Ford et al., 2007). On the other hand, the same-domain perspective suggests that WIF is negatively related to job satisfaction, while FIW is negatively associated with family satisfaction (Amstad et al., 2011). The rationale behind this perspective is that when experiencing work-family conflict, individuals are likely to

blame the domain where the conflict arises rather than the receiving domain (Amstad et al., 2011; Nohe & Sonntag, 2014).

In addition, boundary-permeability perspective suggests that the boundaries between work and family may be permeable, and work and family domains are more likely to be integrated (Rothbard & Ramarajan, 2009). As such, WIF and FIW may be related to both job and family satisfaction. Shang, O'Driscoll, and Roche (2017) found that WIF and FIW were negatively associated with both job and family satisfaction among Chinese immigrants in New Zealand. The reason is that immigrant family members are highly dependent on each other for support and companionship, as they are isolated from their relatives and friends in their home countries, which enhances the integration of work and family domains (Lazarova et al., 2010). Overall, three perspectives (cross-domain, same-domain, and boundary-permeability perspectives) currently provide insight into the relationships between WIF/FIW and job/family satisfaction. The present study compared the three perspectives to determine which perspective is more applicable in a sample of Chinese immigrants.

**Hypothesis 2.** ( i ) Work interfering with family (WIF) and ( ii ) family interfering with work (FIW) will be negatively related to (a) job satisfaction and (b) family satisfaction.

**Hypothesis 2 (c).** ( i ) Work interfering with family (WIF) and ( ii ) family interfering with work (FIW) will be positively related to psychological strain.

The work-family literature suggests that WFC can mediate the relationship of either family or work stressors and commitment with subjective well-being, since those relationships are not direct. During the process of acculturation, many immigrants will

have to endure the stress and pressure generated from their cultural shock, which may further exert detrimental influence to their work and family (Suárez-Orozco & Suárez-Orozco, 2010). Therefore, acculturation could be regarded as one type of their family and work stressors. Furthermore, drawing on conservation of resources theory, high extent of WFC is bound to impair the sense of their subjective well-being (Michel et al., 2011). In support of our argument, research has reported social-based acculturation to be negatively related to WFC (Olson et al., 2013), and WFC to be negatively associated with family satisfaction, job satisfaction, and psychological health (O'Driscoll et al., 2004). In addition, most research on the mediation role of WFC was conducted among individuals who function solely in their own cultures. What remains unclear and untested is whether WFC acts as a mediator in an immigrant population. Therefore, assessing the mediation role of WFC among immigrants may broaden our understanding of the application of work-family theories in diverse ethnic groups. Given that, we predicted that acculturation will mediate the influence of WFC on subjective well-being.

**Hypothesis 3.** ( i ) Work interfering with family (WIF) and ( ii ) family interfering with work (FIW) will mediate the relationships of acculturation with (a) job satisfaction, (b) family satisfaction, and (c) psychological strain.

**Subjective well-being mediating the effect of acculturation on WFC (Model B).** A number of acculturation studies have demonstrated that acculturation has a direct effect on subjective well-being (Yoon, Lee, & Goh, 2008). Furthermore, a small number of work-family researchers have argued that a reverse relationship (as opposed to what is proposed in Hypothesis 2) may exist between subjective well-being and WFC (e.g., Nohe et al., 2015). Therefore, we also tested an alternative (Model B), which

posits that subjective well-being will mediate the relationship between acculturation and WFC, to compare with Model A.

Through a person's life, stressful events such as moving to an unfamiliar environment might impair his/her psychological health, job satisfaction, and family satisfaction (Leong, 2001). For example, at the early stage of migration, immigrants cannot avoid being subjected to some degree of acculturative stress, feelings of confusion, frustration, and anxiety due to experiences in their new environment (Neuliep, 2014). In the workplace, a lack of intercultural communication skills may lead to interpersonal conflict between immigrant workers and local workers (Amason, Allen, & Holmes, 1999). In family life, when parent/adolescent or husband/wife fit into the new country at difference paces, conflict between family members may occur (Suárez-Orozco & Suárez-Orozco, 2010). As such, personal resources could be threatened or actually lost in the process of juggling two cultures if the immigrants are unable to interact effectively with their new environment. Regarding the conservation of resources theory, losing resources is bound to undermine immigrants' subjective well-being. Thus, we proposed:

**Hypothesis 4.** Acculturation will be positively related to (a) job satisfaction, and (b) family satisfaction.

**Hypothesis 4 (c).** Acculturation will be negatively related to (c) psychological strain.

There are arguments suggesting that subjective well-being is likely to influence the experience of work-family conflict (Nohe et al., 2015). Matthews, Wayne, and Ford (2014) suggested that subjective well-being can serve as a personal resource. For example, individuals who experience high levels of job/family satisfaction might



perceive that they have a high level of self-efficacy for managing their work/family roles. In the same vein, people who have a high level of psychological health may perceive that they have sufficient energy to enrich their lives. Since the gain or loss of personal resources would result in the decreased or increased levels of work-family conflict (Hobfoll, 2011), subjective well-being is likely to have a negative relationship with WFC.

As mentioned earlier, three perspectives (cross-domain, same-domain, and boundary-permeability perspectives) were examined by testing the relationships between WIF/FIW and job/family satisfaction. Furthermore, Nohe et al. (2015) suggested that those perspectives could also be applied to the reverse relationships of job/family satisfaction with WIF/FIW. Specifically, if family satisfaction (job satisfaction) exerts a significant effect only on FIW (WIF), the same-domain perspective will be supported. The rationale is that when suffering low levels of job (family) satisfaction, individuals are likely to blame work (family) for creating pressure which causes WIF (FIW). However, if family satisfaction (job satisfaction) only significantly impacts WIF (FIW), then the cross-domain perspective will be supported. That is, when individuals suffer low levels of job (family) satisfaction, they may utilize more resources to try to increase their job (family) satisfaction, which leads to fewer resources available for family (work), and then FIW (WIF) is likely to happen. Finally, if family/job satisfaction significantly influence both WIF and FIW, the boundary-permeability perspective will be evidenced, as permeable work and family role boundaries enable individuals to integrate the domains of work and family (Powell & Greenhaus, 2012). Taken together, we proposed:

**Hypothesis 5.** (a) Job satisfaction and (b) family satisfaction will be negatively related to ( i ) work interfering with family (WIF) and ( ii ) family interfering with work (FIW).

**Hypothesis 5 (c).** Psychological strain will be positively related to ( i ) work interfering with family (WIF) and ( ii ) family interfering with work (FIW).

Regarding social identity theory, failure to fit into the host culture could minimize immigrants' success at the workplace and their sense of family satisfaction, and simultaneously escalate their psychological strain (Lazarova et al., 2010). Furthermore, as mentioned earlier, drawing on conservation of resources theory, lower levels of subjective well-being are likely to intensify people's WFC (Nohe et al., 2015). In support of our argument, research has reported that acculturation is positively related to subjective well-being (Yoon et al., 2008), and subjective well-being is negatively associated with WFC (Nohe et al., 2015). Therefore, we predicted that subjective well-being will mediate the influence of acculturation on WFC.

**Hypothesis 6.** (a) Job satisfaction, (b) family satisfaction, and (c) psychological strain will mediate the relationships of acculturation with ( i ) work interfering with family (WIF) and ( ii ) family interfering with work (FIW).

### **Comparison between Model A and Model B**

The purpose of this longitudinal study was to compare the two competing models to better understand the interplay among acculturation, WFC and subjective well-being in an immigrant population. In order to better capture the work-family experiences among Chinese immigrants, we addressed the following four questions: (1) does

acculturation directly or indirectly predict subjective well-being (Hypothesis 3 versus Hypothesis 4)? (2) does acculturation directly or indirectly predict WFC (Hypothesis 1 versus Hypothesis 6)? (3) does WFC predict subjective well-being or vice versa (Hypothesis 2 versus Hypothesis 5)? and (4) whether the matching, cross-domain, or boundary-permeability perspective is applicable to Chinese immigrants in New Zealand (Hypothesis 2 versus Hypothesis 5)?

## **METHOD**

### **Sample and Procedure**

Participants were Chinese, born in Mainland China, Hong Kong, Taiwan, Singapore or Malaysia, working at least 15 hours per week, and living with at least one family member in New Zealand. Data were collected from universities, Chinese companies, Chinese associations and Chinese churches in New Zealand. Initially, we used the snowball sampling technique, and a total of 577 Chinese immigrants participated in the Time 1 (T1) survey. Approximately six months later, these 577 respondents were invited to complete the Time 2 (T2) survey. A total of 264 (response rate = 45.8%) participated in the T2 survey. 51.9% were male, 71.6% had dependents at home, and 78.4% held a Bachelor's degree, with 34.1% also having a higher tertiary qualification. The average age of the sample was 39.77 years ( $SD = 10.50$ ). The average time of residence in New Zealand was 140.23 months, ranging from 9 to 720 months ( $SD = 82.16$ ), and average job tenure was 66.67 months, ranging from 1 to 324 months ( $SD = 58.05$ ).

### **Measures**

Using Brislin's (1970) method, all survey items were translated into Chinese and then back-translated into English to minimize translation error. The same measures were used at both T1 and T2. The original English version of the questionnaire was firstly

translated into Chinese by two linguistics Ph.D. students, and then the Chinese version was translated back into English by three English teachers in China. Another three university lecturers whose native language is English compared the wording equivalence between original and back-translated versions. Finally, we provided three language versions of questionnaire for potential participants to choose, simplified Chinese, traditional Chinese and English.

**Work-family conflict (WFC).** Twelve items were used to assess WFC (Carlson et al., 2000). Three items respectively measured each of strain-based work interference with family (SWIF,  $\alpha_{T1} = .83$ ;  $\alpha_{T2} = .79$ ), time-based work interference with family (TWIF,  $\alpha_{T1} = .84$ ;  $\alpha_{T2} = .87$ ), strain-based family interference with work (SFIW,  $\alpha_{T1} = .88$ ;  $\alpha_{T2} = .90$ ), and time-based family interference with work (TFIW,  $\alpha_{T1} = .75$ ;  $\alpha_{T2} = .77$ ). Sample items are “Due to all the pressures at work, sometimes when I come home I am too stressed to do the things I enjoy” for SWIF, and “The time I spend on family responsibilities often interfere with my work responsibilities” for TFIW. Response options ranged from 1 (Strongly disagree) to 5 (Strongly agree), with a higher score representing more work-family conflict.

**Job satisfaction.** Three items from Seashore, Lawler, Mirvis, and Cammann (1982) were used to assess job satisfaction ( $\alpha_{T1} = .81$ ;  $\alpha_{T2} = .81$ , e.g., “In general, I don’t like my job”). Response options ranged from 1 (Strongly disagree) to 7 (Strongly agree), with higher scores indicating greater job satisfaction.

**Family satisfaction.** Family satisfaction was measured with three items from Edwards and Rothbard (1999) ( $\alpha_{T1} = .95$ ;  $\alpha_{T2} = .97$ , e.g., “In general, I am satisfied with my family life.”). Response options ranged from 1 (Strongly disagree) to 7 (Strongly agree), with higher scores indicating greater family satisfaction.

**Psychological strain.** Psychological strain was measured by eight items from the General Health Questionnaire revised by Kalliath et al. (2004). Four items were used to assess social dysfunction, referred to as an individual's self-evaluation of the performance of his/her daily activities and coping ability ( $\alpha_{T1} = .82$ ;  $\alpha_{T2} = .78$ ; e.g., "Been able to face up to my problems"). Four items were used to assess anxiety/depression, referred to as the extent of an individual's anxiety and depression symptoms ( $\alpha_{T1} = .77$ ;  $\alpha_{T2} = .83$ ; e.g., "Been losing confidence in myself"). Response options ranged from 1 (Never) to 5 (All the time), with higher scores indicate higher levels of psychological strain.

**Acculturation.** Fourteen items developed by Gim Chung et al. (2004) were used to assess acculturation ( $\alpha_{T1} = .91$ ;  $\alpha_{T2} = .92$ ; e.g., "How well do I read and write in English?"). Response options ranged from 1 (Not very much) to 5 (Very much), with higher scores representing a greater level of acculturation.

### **Confirmatory factor analysis**

Before proceeding with hypothesis testing, a series of confirmatory factor analyses (CFA) was conducted using AMOS 23 to confirm the factor structures of the measures. T1 data were firstly used to conduct these analyses. Consequently, WFC was split into four factors: strain-based WIF, time-based WIF, strain-based FIW and time-based FIW. Acculturation was initially separated into four factors: language proficiency, cultural knowledge, cultural identity, and food consumption. However, we consider that a single aspect of acculturation per se may not be able to represent acculturation. For example, immigrants could obtain a high level of second-language proficiency in their home country before moving to the new country, but that does not mean that they have acculturated. Therefore, we conducted a higher-order factor analysis for the measure of acculturation, and the model fit was significantly better than the four-factor model. As

such, one-factor acculturation was used in this study. Job and family satisfaction were one-factor measures. Psychological strain was divided into two factors: social dysfunction and anxiety/depression.

All instruments achieved an acceptable level of fit (full results are available from the corresponding author). Standardized factor loadings were on average .79 for strain-based WIF, .86 for time-based WIF, .87 for strain-based FIW, .71 for time-based FIW, .61 for acculturation, .76 for job satisfaction, .93 for family satisfaction, .70 for social dysfunction, and .71 for anxiety/depression. We also applied the T1 CFA results to T2 data, and all T2 the model fit and factor loadings also achieved an acceptable level (full results are available from the corresponding author). Hence, nine distinct constructs were used in this research: strain-based WIF, time-based WIF, strain-based FIW, time-based FIW, acculturation, job satisfaction, family satisfaction, social dysfunction, and anxiety/depression.

### **Analysis**

As we had two waves of data, Cole and Maxwell (2003) suggested that analysis should include T1 scores for the exogenous variables (predictors), along with T2 scores for the endogenous variables (mediators and outcomes). In order to avoid contamination and inflated causal path estimates, we used T1 mediators and T1 outcomes to control T2 mediators and T2 outcomes respectively (Cole & Maxwell, 2003). Model A and B were tested using SEM in AMOS 23 to assess the direct effects (Hypotheses 1, 2, 4, and 5) and mediating effects (Hypotheses 3 and 6). We followed recommendations from Zhao, Lynch, and Chen (2010) that a significant mediation effect requires a significant indirect effect ( $a \times b$ ), and the significance of indirect effects can be determined by the bootstrapping estimates provided by AMOS.

Following the recommendation of Grace and Bollen (2005), unstandardized regression coefficients (B) are presented.

## RESULTS

Table 1 shows descriptive statistics and correlations for the study variables.

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*INSERT TABLE 1 ABOUT HERE*

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### Control variables

Regarding the control variables, some researchers (e.g., Byron, 2005) suggested that demographic variables have little influence on the magnitude of the parameter estimates in WFC models. Spector and Brannick (2011) argued that demographic variables do not need to be controlled if they are theoretically unimportant and have little relationship with main variables. In our two mediation models, resident length, education and job tenure had moderate correlations with acculturation (see Table 1). However, all the demographic variables had inconsistent and small correlations with the other variables (see Table 1). Hence, only acculturation was controlled by resident length, education and job tenure while we tested the two mediation tests.

### WFC Mediating the Effect of Acculturation on Subjective Well-being (Model A)

Model A was supported, with overall fit statistics suggesting good model fit:  $\chi^2(106) = 205.93$  ( $p = .000$ ), CFI = 0.95, SRMR = 0.07, and RMSEA = 0.06. The direct and indirect effects are displayed in Table 2. However, acculturation<sub>T1</sub> had no significant relationship with either type of WFC (see Table 2). Therefore, there is no evidence to support Hypothesis 1.

With regard to the tests of WFC predicting subjective well-being (Hypothesis 2), strain-based WIF<sub>T2</sub> was significantly negatively related to job satisfaction<sub>T2</sub> ( $B = -.33$ ,

$p < .001$ ), but positively related to social dysfunction<sub>T2</sub> ( $B = .12, p < .01$ ) and to anxiety/depression<sub>T2</sub> ( $B = .21, p < .001$ ). Similarly, strain-based FIW<sub>T2</sub> was significantly negatively related to job satisfaction<sub>T2</sub> ( $B = -.33, p < .001$ ), and to family satisfaction<sub>T2</sub> ( $B = -.27, p < .01$ ), but positively related to social dysfunction<sub>T2</sub> ( $B = .18, p < .001$ ) and to anxiety/depression<sub>T2</sub> ( $B = .24, p < .001$ ). Interestingly, neither time-based WIF nor time-based FIW had significant relationships with subjective well-being. Therefore, the results suggest that strain-based WFC, but not time-based WFC, was a predictor of subjective well-being in our sample. Furthermore, we found no support for WFC as a mediator in the relationship between acculturation and subjective well-being, inconsistent with Hypothesis 3.

#### **Subjective Well-being Mediating the Effect of Acculturation on WFC (Model B)**

Model B was supported, with overall fit statistics suggesting excellent model fit:  $\chi^2(90) = 152.84$  ( $p = .000$ ), CFI = 0.97, SRMR = 0.05, and RMSEA = 0.05. The direct and indirect effects are displayed in Table 2. Acculturation<sub>T1</sub> was significantly positively associated with job satisfaction<sub>T2</sub> ( $B = .30, p < .001$ ), and negatively associated with social dysfunction<sub>T2</sub> ( $B = -.10, p < .05$ ). Therefore, in line with Hypothesis 4, the results suggest that the levels of acculturation functioned as a predictor of Chinese immigrants' subjective well-being.

With regard to the tests of subjective well-being predicting WFC (Hypothesis 5), job satisfaction<sub>T2</sub> was significantly negatively related to strain-based WIF<sub>T2</sub> ( $B = -.11, p < .05$ ). Family satisfaction<sub>T2</sub> was significantly negatively related to strain-based FIW<sub>T2</sub> ( $B = -.10, p < .01$ ) and to time-based FIW<sub>T2</sub> ( $B = -.11, p < .05$ ). Social dysfunction<sub>T2</sub> was significantly positively related to strain-based WIF<sub>T2</sub> ( $B = .27, p < .001$ ), time-based WIF<sub>T2</sub> ( $B = .29, p < .01$ ), strain-based FIW<sub>T2</sub> ( $B = .23, p < .01$ ), and time-based FIW<sub>T2</sub> ( $B = .28, p < .01$ ). Anxiety/depression<sub>T2</sub> was significantly positively



related to strain-based WIF<sub>T2</sub> ( $B = .27, p < .001$ ), time-based WIF<sub>T2</sub> ( $B = .18, p < .05$ ), and strain-based FIW<sub>T2</sub> ( $B = .23, p < .001$ ). Therefore, in line with Hypothesis 5, the results demonstrate that subjective well-being predicted WFC in our sample.

With regard to Hypothesis 6, job satisfaction<sub>T2</sub> significantly mediated the relationship between acculturation<sub>T1</sub> and strain-based WIF<sub>T2</sub>, and social dysfunction<sub>T2</sub> significantly mediated the relationships of acculturation<sub>T1</sub> with all four types of WFC<sub>T2</sub> (see Table 2). Therefore, we found support for subjective well-being as a mediator in the relationship between acculturation and WFC. This is consistent with Hypothesis 6.

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*INSERT TABLE 2 ABOUT HERE*

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## **DISCUSSION**

In this longitudinal study, we set out to establish mechanisms that link acculturation, WFC, and subjective well-being among Chinese immigrants in New Zealand by testing two theory-based models. Specifically, Model A is that WFC mediates the relationship between acculturation and subjective well-being, while Model B is that subjective well-being mediates the relationship between acculturation and WFC. The two models were presented due to theories that could support either, yet with regard to the work-family experiences of immigrant populations remain unclear. We assessed the direct and indirect effects in both models. The most important findings emerging from our study are: (1) acculturation was directly related to subjective well-being; (2) subjective well-being was a mediator of the relationship between acculturation and WFC; (3) there were reciprocal relationships between WFC and subjective well-being; and (4) the same-domain perspective was most supported. Overall, these findings suggest that Model B is relatively better than Model A. In addition, we found that strain-based WIF/FIW, but not time-based WIF/FIW, were significantly related to subjective well-being.

**Acculturation Directly Predicting Subjective Well-being**

Our results supported a direct relationship between acculturation and subjective well-being. Specifically, acculturation was directly related to job satisfaction and social dysfunction. It appears that the more immigrant workers acculturate into local culture, the more likely they will report higher job satisfaction and psychological health. This could be because when immigrants are highly acculturated, their language proficiency is improved, new social networks are built up, new conflict resolution skills are learned, and they get used to local work norms (e.g., Berry, 2002; Winkelman, 1994). According to the conservation of resources theory, this new learning could serve to enrich individuals' resource pool (gain spiral) (Hobfoll, 2011), which will then enhance their performance at workplace and their psychological health. However, acculturation was not significantly related to family satisfaction. That may be due to that acculturation is not directly relevant to their family life, since Chinese immigrants, at home, tend to maintain their Chinese values, language, and cultural expectations (Shang et al., In press).

**Acculturation Indirectly Predicting WFC**

The relationship between acculturation and WFC appears to be more indirect than direct, since the results failed to confirm the direct relationship between them in Hypothesis 1, but supported the mediation relationship in Hypothesis 6. Specifically, job satisfaction significantly transmitted the influence of acculturation to strain-based WIF. We also found that social dysfunction (one type of psychological strain) significantly transmitted the influence of acculturation to all four types of WFC. Two significant paths, one from acculturation to subjective well-being and the other from subjective well-being to WFC, are helpful to explain those mediation relationships. As

mentioned above, when immigrants acclimatize to the host culture (that is, highly acculturated), they could gain more personal resources which enhance their job satisfaction and psychological health. The enhanced well-being could serve as new resources that relieves the tension between work and family (Nohe et al., 2015). Therefore, this finding suggests that acculturation can exert its influence on WFC via job satisfaction and social dysfunction, rather than directly.

### **Reciprocal Relationships between WFC and Subjective Well-being**

Our results reveal that there are reciprocal relationships between WFC and subjective well-being (Hypothesis 2 and Hypothesis 5). Specifically, individuals who experience high levels of strain-based WIF are more likely to indicate decreased job satisfaction and psychological health (Hypothesis 2), while individuals who perceive low levels of subjective well-being tend to report increased WFC (Hypothesis 5). Our findings are consistent with the view that subjective well-being is not only a consequence of work-family conflict, but can also serve as an indicator of conflict (Matthews et al., 2014). Hobfoll's (2011) notion of a loss spiral could explain these reciprocal relationships. People who experience WFC may invest more personal resources than usual to meet the demands of work/family roles. Leading to initial resource losses, which could negatively affect their perceived subjective well-being (Matthews et al., 2014). Because initial resource losses can lead to a loss spiral (Hobfoll, 2011), negative well-being may continue to worsen, exacerbating incompatibility between work and family.

### **The Same-domain Perspective**

This study extends the ongoing debate about whether same-domain, cross-domain, or the boundary-permeability perspective provides the best fit in work-family models

for Chinese immigrants. In Model A, we found that WIF predicted job satisfaction but not family satisfaction, and the influence of FIW was stronger on family satisfaction than on job satisfaction. In (reverse) Model B, job satisfaction primarily influenced WIF (but not FIW), while family satisfaction affected only FIW (but not WIF). These results imply that the same-domain perspective is supported in both models. That is, on the one hand, WIF has significant effects on work-related well-being, and FIW has significant effects on family-related well-being; on the other hand, work-related well-being significantly influences WIF, and family-related well-being significantly influences FIW. The reason could be that individuals cognitively tend to appraise the source of the conflict or strain negatively (Shockley & Singla, 2011). In other words, when conflict or strain occurs, individuals may psychologically attribute blame to the domain which is the source of the conflict or strain (Amstad et al., 2011).

In summary, all the direct and indirect hypotheses in Model B were supported. It seems that Model B (subjective well-being mediating the relationship between acculturation and WFC) is relatively better than Model A (WFC mediating the relationship between acculturation and subjective well-being).

### **Strain-based WIF/FIW Having Stronger Influence than Time-based WIF/FIW**

Additionally, we found that only strain-based WIF/FIW, but not time-based WIF/FIW, were associated with the subjective well-being in Model A. For Chinese immigrants, the effect of time-based conflict may be indirectly transmitted to strain-based conflict. Traditionally, researchers considered that time-based WIF/FIW and strain-based WIF/FIW are respectively associated with the physical amount of time cost and the psychological amount of energy depleted (Steiber, 2009). However, time-based conflict is also closely related to psychological energy depletion (Rothbard &

Ramarajan, 2009). That is, when individuals spend considerable time on work or family, energy is bound to be consumed (Steiber, 2009), which will result in increased strain-based WFC. In other words, individuals' primary appraisal regarding the potential impact of time-based WIF/FIW could account for the transmission of effect from time-based WIF/FIW to strain-based WIF/FIW. This is understandable, as the immigrants are likely to make a great effort to adjust their work and family roles in order to meet the new prescribed expectations, even sacrificing their time. This argument is also supported by the large correlations of time-based WIF<sub>T2</sub> with strain-based WIF<sub>T2</sub> ( $r = .55, p < .01$ ), and of time-based FIW<sub>T2</sub> with strain-based FIW<sub>T2</sub> ( $r = .56, p < .01$ ) in our study (see Table 1). Hence, strain-based WIF/FIW rather than time-based WIF/FIW appears to play a pivotal role to predict subjective well-being.

### **Theoretical implications**

The present longitudinal study has significant implications for the work-family literature in several ways. First, this is the first longitudinal study to investigate the interactions among acculturation, WFC, and subjective well-being. As previously outlined, work-family experiences of immigrants are far more complex, and Model B does not fully capture the reciprocal relationships between WFC and subjective well-being. However, our results reveal that the Model B (subjective well-being mediating the relationship between acculturation and WFC) is relatively better than Model A (WFC mediating the relationship between acculturation and subjective well-being). Specifically, acculturation directly predicts the levels of subjective well-being, which then influence the levels of WFC. Therefore, Model B may offer an appropriate framework for future work-family research on immigrant populations.

Our study also contributes to the work-family literature by highlighting the predictive role of acculturation in the work-family experiences of Chinese immigrants. This is important, as acculturation can reshape immigrants' values that will influence their attitudes, expectations and behaviors towards their family and work (Lazarova et al., 2010). The current study provides evidence that acculturation could indirectly predict immigrants' work-family conflict experiences by the mediator of subjective well-being. In previous work-family research, the correlates of WFC are mostly around organizational and family context (Byron, 2005). But immigrants' personal acculturation has received less attention. Therefore, our study broadens the lens that can be used to better understand work-family experiences among immigrant populations by addressing the role of acculturation in WFC models.

Moreover, this study contributes to the recent argument among non-immigrant populations about whether reciprocal relationships between WFC and subjective well-being exist. Our results show that WFC and subjective well-being have reciprocal relationships, which is consistent with Matthews et al. (2014) and Nohe et al. (2015). However, there are some limitations of the two studies regarding subjective well-being. Matthews et al. (2014) examined only general well-being, while Nohe et al. (2015) investigated only work-related strain. This study simultaneously examined job satisfaction, family satisfaction, and psychological health, which extend previous findings in this area. In doing so, this study extends the argument about the direction of the relationship between WFC and well-being from non-immigrant populations to immigrant populations. Future work-family research might extend this study by testing these reciprocal relationships among other immigrant populations.

Additionally, our results contribute to the ongoing debate among the same-domain, cross-domain, and boundary-permeability perspectives, by testing the relationships of

WIF/FIW with job/family satisfaction, and the reverse relationships. We found that the effects between WIF/FIW and job/family satisfaction in both directions are aligned with the same-domain perspective. This finding enriches the work-family literature in two ways. Firstly, we extend the debate largely conducted among non-immigrants to an immigrant population. Secondly, previous research on the debate mainly focused on the same-domain and cross-domain perspectives (e.g., Amstad et al., 2011; Nohe et al., 2015). However, this study brought the boundary-permeability perspective into the debate. Future work-family research might incorporate all three perspectives while investigating the relationships between WIF/FIW and job/family satisfaction, especially among immigrant populations.

### **Practical implications**

For organizations, it is crucial to understand how work-family conflict affects immigrant employees in diverse working environments (Olson et al., 2013). This study provides insight to aid human resource managers to function in an increasingly diverse workforce. Because our results show that acculturation directly influences immigrants' subjective well-being, one of the most obvious implications is that managers could facilitate immigrant employees' well-being by fostering acculturation to host work environments. For example, organizations could conduct workshops to comprehensively explain organizational guidelines, policies, and culture for immigrant employees to fit into the new working environments, which could positively contribute to their work-related acculturation. In addition, organizations could provide cultural adjustment training programs for all employees, especially managers, to gain some insight into nuanced cultural differences, which would assist both human resource managers and immigrant employees to operate successfully within a diverse workforce (Meyer, 2014).

Our results illustrate that WIF and job-related outcomes are mutually related (the same-domain perspective, and reciprocal relationships between WFC and subjective well-being). Therefore, organizations should create or continue to improve their family-friendly work policies, incorporating the concerns and demands of immigrants. The policies can serve as tools and resources for immigrant employees to minimize work interfering with their families. For example, policies should allow immigrant workers to have a flexible work schedule, and they can shift their work to stay with their family especially during important ethnic festivals which should be emphasized by human resource managers. Furthermore, relevant training should be provided for managers to understand that subjective well-being has a negative relationship with immigrant employees' WFC, and fostering immigrant employees' subjective well-being should be high on the agenda of human resource managers. For example, managers can assess immigrant employees' well-being in a certain period to know their status of well-being timely and make corresponding actions to address their immediate needs. In doing so, organizational effectiveness could also be enhanced (Amstad et al., 2011).

Additionally, we found strain-based WFC had more effects on subjective well-being than did time-based WFC. Work-family policies normally mainly focus on how to relieve time-based WFC, such as providing flexible time schedule and allowing home office. In order to continue to improve the well-being of immigrant employees, managers should also strive to alleviate strain-based WFC. For example, managers should pay more attention to the work-related stress caused by acculturation, such as managing the interpersonal conflict at workplace due to the cultural misunderstandings between immigrant employees and local employees (Shang, O'Driscoll, & Roche, 2016).



**Limitations**

Our study has several limitations. First, all the measures were self-reports, which could have some inherent bias in participants' responses (Olson et al., 2013). Our longitudinal data and higher-order statistical approaches (e.g., CFA and SEM) would help reduce this common method bias (Haar, Russo, Suñe, & Ollier-Malaterre, 2014). Second, although a 6-month gap longitudinal design was applied in the current study, a longitudinal design over decades is needed to provide full insight into the role of acculturation. That is because acculturation progresses at a very slow pace in the first ten years (Taras, Rowney, & Steel, 2013). Third, it should be noted that value acculturation was not measured in the current study. Acculturation generally occurs not only at the surface level, but also at the core value level (Pooyan, 1984). It would be worthwhile for future work-family researchers to examine the role of value acculturation. Fourth, caution is needed in generalizing our findings, because our study only focused on Chinese immigrants in one country, New Zealand. The current findings may not generalize to immigrants from other cultures, or to Chinese immigrants in countries other than New Zealand. Fifth, the size of immigrant populations in organizations may influence acculturation levels of immigrant employees. However, in our survey, we were not able to identify the size of immigrant populations in the organizations our participants worked for.

**CONCLUSION**

The present longitudinal study compared two theory-based mediation models to illustrate the complex relationships among acculturation, WFC, and subjective well-being in Chinese immigrants in New Zealand. We found that subjective well-being mediated the relationship between acculturation and WFC, although there was no direct relationship between acculturation and WFC. Our study provides convincing evidence

for the reciprocal relationships between WFC and subjective well-being, as well as the same-domain perspective. In addition, we found that strain-based WFC, but not time-based WFC, exerted significant effects on subjective well-being. Overall, the findings offer a fresh picture of the work-family experiences among immigrant populations, which we hope will encourage work-family researchers to further explore the work-family interface among immigrants, and human resource managers to further improve immigrant employees' well-being.

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## FIGURES AND TABLES

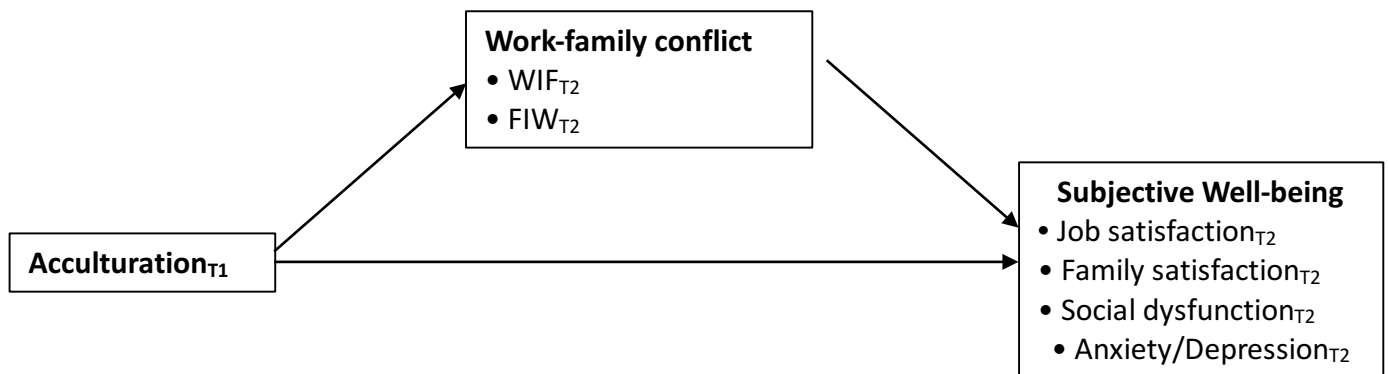


Figure 1. Model A: work-family conflict mediating the relationship between acculturation and subjective well-being. T1 = Time 1; T2 = Time 2; WIF = Work interference with family; FIW = Family interference with work.

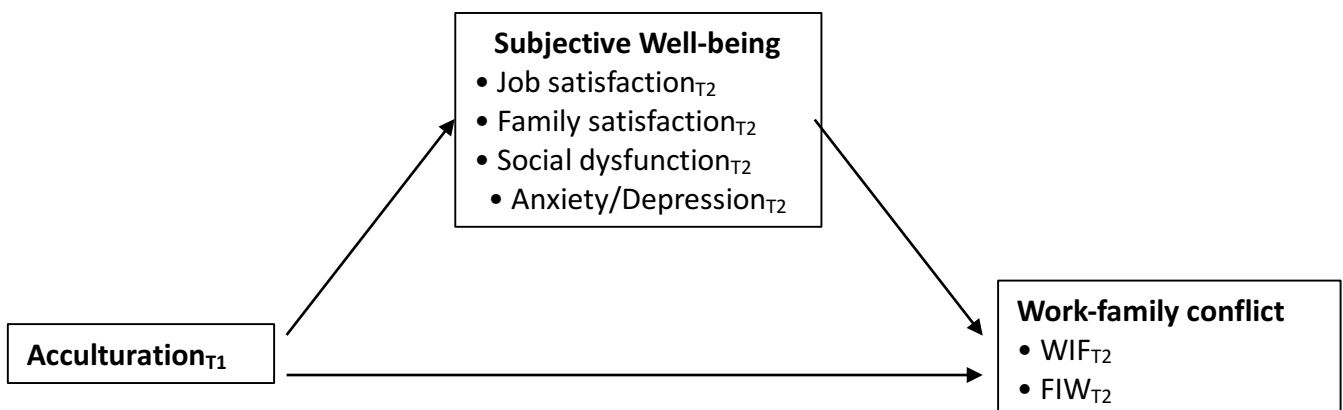


Figure 2. Model B: subjective well-being mediating the relationship between acculturation and work-family conflict. T1 = Time 1; T2 = Time 2; WIF = Work interference with family; FIW = Family interference with work.

Table 1. Descriptive Statistics and Correlations for Major Variables (N = 264)

variables	<i>M</i>	<i>SD</i>	Gender	Age	No. of depends	Resident length	Education	Job tenure	1	2	3	4	5	6	7	8	9
1.SWIF <sub>T2</sub>	2.54	.81	.18**	-.06	-.02	.07	.01	-.07	(.79)								
2.TWIF <sub>T2</sub>	2.62	.96	.07	-.16**	.00	.04	-.02	-.12**	.55**	(.87)							
3.SFIW <sub>T2</sub>	2.26	.81	.04	-.09	.09	-.13*	-.05	-.04	.50**	.28**	(.90)						
4.TFIW <sub>T2</sub>	2.58	.80	.07	-.18**	.13*	-.09	-.10	-.17**	.40**	.50**	.56**	(.77)					
5.ACC <sub>T1</sub>	3.17	.64	.07	-.07	.05	.28**	.38**	.22**	-.02	-.02	-.18**	-.12*	(.92)				
6.JS <sub>T2</sub>	5.25	1.16	-.07	.04	.03	.00	.11*	.09	-.34**	-.15**	-.30**	-.17**	.28**	(.81)			
7.FS <sub>T2</sub>	5.52	1.30	-.09	-.09	-.04	.06	.10*	.05	-.27**	-.17**	-.41**	.27**	.23**	.38**	(.97)		
8.SD <sub>T2</sub>	2.09	.61	.00	.03	.04	.03	-.10*	-.05	.41**	.27**	.43**	.32**	-.21**	-.47**	-.51**	(.78)	
9.AD <sub>T2</sub>	2.05	.71	.16**	-.17**	-.05	-.02	.07	-.11*	.46**	.27**	.41**	.21**	-.06	-.32**	-.38**	.48**	(.83)

*Note.* SWIF = Strain-based work interference with family; TWIF = Time-based work interference with family; SFIW = Strain-based family interference with work; TFIW = Time-based family interference with work; ACC = Acculturation; JS = Job satisfaction; FS = Family satisfaction; SD = Social dysfunction; AD = Anxiety/depression; T1 = Time 1; T2 = Time 2.

Internal reliabilities are reported along the diagonal in the brackets.  $p < .05^*$ ;  $p < .01^{**}$  (One-tailed).

Table 2. Direct and indirect coefficients in Model A and Model B

Mediated Paths in Model A	Indirect effect ( $a \times b$ )	Mediated Paths in Model B	Indirect effect ( $a \times b$ )
$ACC_{T1} \rightarrow SWIF_{T2} \rightarrow JS_{T2}$	-.00 (.01 $\times$ -.33 <sup>***</sup> )	$ACC_{T1} \rightarrow JS_{T2} \rightarrow SWIF_{T2}$	-.03 <sup>*</sup> (.30 <sup>**</sup> $\times$ -.11 <sup>**</sup> )
$ACC_{T1} \rightarrow SWIF_{T2} \rightarrow FS_{T2}$	-.00 (.01 $\times$ -.09 )	$ACC_{T1} \rightarrow JS_{T2} \rightarrow TWIF_{T2}$	-.00 (.30 <sup>**</sup> $\times$ -.01 )
$ACC_{T1} \rightarrow SWIF_{T2} \rightarrow SD_{T2}$	.00 (.01 $\times$ .12 <sup>**</sup> )	$ACC_{T1} \rightarrow JS_{T2} \rightarrow SFIW_{T2}$	-.01 (.30 <sup>**</sup> $\times$ -.04 )
$ACC_{T1} \rightarrow SWIF_{T2} \rightarrow AD_{T2}$	.00 (.01 $\times$ .21 <sup>***</sup> )	$ACC_{T1} \rightarrow JS_{T2} \rightarrow TFIW_{T2}$	.00 (.30 <sup>**</sup> $\times$ .01 )
$ACC_{T1} \rightarrow TWIF_{T2} \rightarrow JS_{T2}$	-.00 (-.01 $\times$ .04 )	$ACC_{T1} \rightarrow FS_{T2} \rightarrow SWIF_{T2}$	-.00 (.17 $\times$ -.00 )
$ACC_{T1} \rightarrow TWIF_{T2} \rightarrow FS_{T2}$	-.00 (-.01 $\times$ .00 )	$ACC_{T1} \rightarrow FS_{T2} \rightarrow TWIF_{T2}$	-.00 (.17 $\times$ .01 )
$ACC_{T1} \rightarrow TWIF_{T2} \rightarrow SD_{T2}$	.00 (-.01 $\times$ .00 )	$ACC_{T1} \rightarrow FS_{T2} \rightarrow SFIW_{T2}$	-.02 (.17 $\times$ -.10 <sup>**</sup> )
$ACC_{T1} \rightarrow TWIF_{T2} \rightarrow AD_{T2}$	.00 (-.01 $\times$ .02 )	$ACC_{T1} \rightarrow FS_{T2} \rightarrow TFIW_{T2}$	-.02 (.17 $\times$ -.11 <sup>*</sup> )
$ACC_{T1} \rightarrow SFIW_{T2} \rightarrow JS_{T2}$	.03 (-.13 $\times$ -.23 <sup>**</sup> )	$ACC_{T1} \rightarrow SD_{T2} \rightarrow SWIF_{T2}$	-.03 <sup>*</sup> (-.10 <sup>*</sup> $\times$ .27 <sup>***</sup> )
$ACC_{T1} \rightarrow SFIW_{T2} \rightarrow FS_{T2}$	.04 (-.13 $\times$ -.27 <sup>**</sup> )	$ACC_{T1} \rightarrow SD_{T2} \rightarrow TWIF_{T2}$	-.03 <sup>*</sup> (-.10 <sup>*</sup> $\times$ .29 <sup>**</sup> )
$ACC_{T1} \rightarrow SFIW_{T2} \rightarrow SD_{T2}$	-.02 (-.13 $\times$ .18 <sup>***</sup> )	$ACC_{T1} \rightarrow SD_{T2} \rightarrow SFIW_{T2}$	-.02 <sup>*</sup> (-.10 <sup>*</sup> $\times$ .23 <sup>**</sup> )
$ACC_{T1} \rightarrow SFIW_{T2} \rightarrow AD_{T2}$	-.03 (-.13 $\times$ .24 <sup>***</sup> )	$ACC_{T1} \rightarrow SD_{T2} \rightarrow TFIW_{T2}$	-.03 <sup>*</sup> (-.10 <sup>*</sup> $\times$ .28 <sup>**</sup> )
$ACC_{T1} \rightarrow TFIW_{T2} \rightarrow JS_{T2}$	-.01 (-.12 $\times$ .08 )	$ACC_{T1} \rightarrow AD_{T2} \rightarrow SWIF_{T2}$	-.01 (-.05 $\times$ .27 <sup>***</sup> )
$ACC_{T1} \rightarrow TFIW_{T2} \rightarrow FS_{T2}$	.01 (-.12 $\times$ -.12 )	$ACC_{T1} \rightarrow AD_{T2} \rightarrow TWIF_{T2}$	-.01 (-.05 $\times$ .18 <sup>*</sup> )
$ACC_{T1} \rightarrow TFIW_{T2} \rightarrow SD_{T2}$	-.00 (-.12 $\times$ .02 )	$ACC_{T1} \rightarrow AD_{T2} \rightarrow SFIW_{T2}$	-.01 (-.05 $\times$ .23 <sup>***</sup> )
$ACC_{T1} \rightarrow TFIW_{T2} \rightarrow AD_{T2}$	.00 (-.12 $\times$ -.10 )	$ACC_{T1} \rightarrow AD_{T2} \rightarrow TFIW_{T2}$	-.00 (-.05 $\times$ .05 )

Note.  $a$  = the unstandardized path coefficients of path from predictor to mediator;  $b$  = the unstandardized path coefficients of path from mediator to outcome; T1 = Time 1; T2= Time 2; ACC = Acculturation; SWIF = Strain-based work interference with family; TWIF = Time-based work interference with family; SFIW = Strain-based family interference with work; TFIW = Time-based family interference with work; JS = Job satisfaction; FS = Family satisfaction; SD = Social dysfunction; A/D = Anxiety/depression.  $p < .05^*$ ,  $p < .01^{**}$ ,  $p < .001^{***}$ .

<sup>1</sup> Behaviour-based conflict was not included in the present study, as it usually happens among individuals with very unique occupations. For example, correctional staff at work may have developed behaviours that are not necessarily appropriate in family life, such as questioning family members or barking orders (Lambert, Hogan, Camp, & Ventura, 2006). Except for these unique occupations, appropriate behaviours at work (home) may not be greatly incompatible with appropriate behaviours at home (work).

## CHAPTER 6

### STUDY FOUR

#### **Paper Title**

when East meets West: What are the antecedents of work-family conflict and coping strategies among Chinese immigrants juggling the different cultures?

#### **Declaration**

I developed the theoretical model for the paper. I took the whole responsibility for launching and completing the data collection. I was also responsible for interview transcription and translation. In order to ensure the reliability of the coding, the fourth co-author and I together coded all the interview transcripts. I then wrote the first full draft of the paper. The theoretical contributions are my own. My two supervisors (the second and third co-authors) provided constructive feedback on the paper and editing. In general, I contributed 80% to this paper, and my two supervisors equally contributed 15%, and the fourth author contributed 5% to it.

#### **Publication Status**

Shang, S., O'Driscoll, M. P., Roche, M, & Wang, M. (*submitted in January 2017 and under review*). When East meets West: What are the antecedents of work-family conflict and coping strategies among Chinese immigrants juggling the different cultures? *Journal of Vocational Behavior*. [Impact Factor: 2.764; ABDC List Ranked A\*].

The following paper follows the layout, referencing and language required by the journal editors.

### **ABSTRACT**

In response to the growing ethnic diversity in the labour force, this qualitative study explored, the value acculturation, the antecedents of work-family conflict (WFC) and ways of coping with WFC among Chinese immigrants. Participants ( $n = 33$ ) were selected from a longitudinal survey in New Zealand and those who obtained the lowest 10% and the highest 10% of scores on work-family conflict were selected for inclusion in the present study. Responses from the two extreme groups (high and low WFC) were compared. This study found that most Chinese immigrants had a low level of value acculturation, and strongly held their traditional Chinese cultural values, which largely affected the antecedents of WFC and their coping strategies. The present study sheds light on the antecedents of WFC and coping strategies among immigrant populations, and expands the scope of work-family research among immigrants.

**Keywords:** Work-family conflict, acculturation, Chinese immigrants, coping strategy

## **When East Meets West: What are the Antecedents of Work-Family Conflict and Coping Strategies among Chinese Immigrants Juggling the Different Cultures?**

### **1. Introduction**

Considerable attention has been given to the way individuals manage work and family responsibilities (Reddick, Rochlen, Grasso, Reilly, & Spikes, 2012). Work-family conflict (WFC) is “complex”, and many factors can contribute to high levels of this form of conflict (Ahmad, 2008, p.58). In recent years, increasing migration has fuelled the complexity of WFC among immigrant populations (Shang, O'Driscoll, & Roche, 2017). Immigrants are exposed to both local and home cultures, and thus expectations of work and family roles are intricate. However, sparse attention has been given to the work-family experiences of immigrants. This is somewhat surprising given the increasing rate of immigrants worldwide. In New Zealand, for example, the Chinese ethnic group is a fast growing and critical part of the current and future labour market (Badkar & Tuya, 2010). In 2013, Chinese immigrants accounted for 4.3% of the total population of New Zealand, with 73.4% born overseas (New Zealand Census Statistics, 2013). Therefore, it is critical to expand research on the work-family field in response to the emerging ethnic diversity in the labour force in many countries. The current study explores the WFC experiences among a unique population that has received limited attention within the work-family literature: Chinese immigrants in New Zealand.

A series of in-depth interviews was conducted to achieve the following three objectives. First, we examined Chinese immigrants' value acculturation related to work and family. Second, we sought to explore antecedents of WFC among Chinese immigrants in New Zealand. Third, we evaluated coping responses by comparing participants with high WFC and those with low WFC. In doing so, this study contributes to the work-family literature by evaluating the effect of home and local cultural values on immigrants' WFC and coping strategies. This study enriches our understanding of the complex WFC experiences among immigrant



populations, and their specific coping strategies in the context of acculturation. The improved understanding would not only guide future work-family research among immigrant populations, but also provide practical recommendations for Chinese immigrants in aiming to balance their work and family, as well as for aiding the ability of organizations and governments to develop policies and training programs to support immigrants.

### *1.1. Antecedents of work-family conflict in the context of acculturation*

Work-family conflict (WFC) generally refers to “a form of inter-role conflict in which the role pressures from the work and family domains are mutually incompatible in some respect” (Greenhaus & Beutell, 1985, p.77). WFC has been widely recognized as a bidirectional concept: work interference with family and family interference with work (Michel, Kotrba, Mitchelson, Clark, & Baltes, 2011). Researchers have classified various antecedents of WFC into two main groups: work-related antecedents (e.g. job pressure, working overtime, and work role conflict) and family-related antecedents (e.g. family role overload, family time demands, and parental demands) (Michel et al., 2011). The linkage between those antecedents and WFC can be interpreted by the combination of role theory (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964) and conservation of resources theory (Hobfoll, 2011). Specifically, individuals seek to achieve their various work and family role expectations (role theory), and the two roles are constantly competing for their finite personal resources, such as time and energy (conservation of resources theory), which then leads to the frequent interface between work and family.

However, the above findings are based on the assumption that individuals only function in a single cultural context, and it might be inappropriate to generalize previous findings to immigrant workers living in dual cultures. In the context of migration, when an individual steps into another country, he/she inevitably confronts a different social reality and culture which might impose different expectations for both work and family roles, compared to the expectations of those living in their home country (Lazarova, Westman, & Shaffer, 2010).

Therefore, many behaviors and concepts which were appropriate in immigrants' country of origin may not be accepted in the new country. In order to create psychological comfort with various aspects of the new host culture, many immigrants strive hard to adjust themselves to fit into their new culture (Lazarova et al., 2010). This process of adjustment is called *acculturation* (Berry, 2002). Grzywacz et al. (2007) suggested that acculturation may play a crucial role in the work-family nexus among immigrants. The key rationale is that acculturation could reshape a person's values on work and family roles when they confront challenges in new work and family contexts (Lazarova et al., 2010).

To better understand work and family interfaces during acculturation, we utilized the cultural dimension of individualism-collectivism, which refers to "the degree to which people in a country prefer to act as individuals as opposed to preference to act as members of groups" (Yang, 2005, p.293). The values of work and family are distinct in individualistic and collectivistic cultures. Individualists usually refer to their family as a nuclear family, while collectivists view their family as an extended family. Individualists typically regard work as a crucial expression of their achievement and personal interest, while collectivists generally see work as a tool for gaining benefit for their families. Furthermore, the nexus between work and family may also vary in the two cultures. For example, cultures differ largely in how people prioritize their work and family (Yang, 2005). In individualistic cultures, devoting more time to work is regarded as sacrificing family for career success, which may result in dissatisfaction among family members. When conflict between work and family happens, individualists would like to side with their families. However, in collectivistic cultures, sacrificing family time for work is perceived as striving for family welfare. When WFC occurs, people are likely to give higher priority to work, because this is seen as supporting the family in the long run. Additionally, cultures also differ in how people set the boundary between work and family domains (Yang, 2005). In individualistic cultures, employees usually have a clear boundary

between their family and work. In contrast, people in collectivistic cultures tend to integrate work and family. Given the above differences between the two cultures, antecedents of WFC for people in collectivistic cultures may differ from those individuals in more individualistic cultures (Aycan, 2008).

Chinese immigrants, who were born in a collectivistic culture but are adapting into a predominantly individualistic New Zealand culture, may unconsciously lose some home cultural values, and simultaneously learn some local cultural values during acculturation. Therefore, the values of Chinese immigrants may fall somewhere between those from their home country and those of their adopted country. The antecedents of WFC among Chinese immigrants may be more complex than for non-immigrants in either an individualistic culture or a collectivistic culture, and have not yet been well understood (Shang et al., In press).

### *1.2. Coping strategies in the context of acculturation*

Overwhelming evidence demonstrates that WFC exerts substantial negative consequences on individuals' work, families, and organizations (e.g., O'Driscoll, Brough, & Kalliath, 2004). Therefore, exploring coping strategies that can ease the conflict is crucial. According to Lazarus and Folkman (1984), WFC coping can be defined as cognitive, behavioural or emotional efforts individuals devote to managing taxing demands from work and family appraised as exceeding their personal resources. Although much research on coping with WFC has been carried out, little is known about "how people actually cope and, more importantly, which strategies are most effective in which circumstances" (O'Driscoll, 2013, p.90). Specifically, it is uncertain whether the coping strategies found in previous Western research are efficacious for Chinese immigrants, since acculturation is a process of changing values and beliefs which may influence people's coping strategies (Lam & Zane, 2004). Previous cross-cultural research suggested that coping strategies in individualistic cultures may be inappropriate in collectivistic cultures, and vice versa (Lam & Zane, 2004). For example, in a

collectivistic culture, a personal problem would become a problem for the group, and all people related to the person (e.g. family, friends, and even neighbours) will work together to deal with the problem. However, in an individualistic culture, a personal problem would be at most shared among family members, and the person prefers to resolve it independently (Yeh & Wang, 2000). In addition, collectivists tend to seek help from family members rather than professionals such as counsellors, while individualists may prefer the other way around (Yeh & Wang, 2000). Chinese immigrants may deliberately or accidentally lose some coping strategies in their home culture, and, simultaneously, adopt some coping strategies used in the host culture. Hence, the coping strategies of Chinese immigrants may also become more complex than for non-immigrants. The present study extends our understanding into complex coping strategies among Chinese immigrants.

Overall, given the complexity of work-family experiences among Chinese immigrants, the use of qualitative methods may be a preferred way to help further in understanding antecedents of WFC and coping strategies in the context of acculturation. Although many qualitative studies on work-family experiences have been conducted, few have considered the effects of value acculturation on antecedents and coping strategies. In addition, previous qualitative research on coping strategies has categorized the narratives provided by the participants, but has not compared the results from people who have different levels of WFC. The present study compared the discourses of low and high WFC participants to garner insight into the complexity of coping WFC among Chinese immigrants.

## **2. Method**

### *2.1. Participants and procedures*

This study focused on Chinese who were born outside of New Zealand, but working and living with their families in New Zealand. In order to undertake in-depth face-to-face interviews, we took three steps to collect data. At the initial phase, 577 Chinese immigrants in total took

part in the Time-1 survey. Approximately six months later, all the participants at Time-1 were invited to participate in Time-2 survey, and a total of 264 of them completed this second survey (response rate = 45.8%). Time-2 participants who received the lowest 10% and the highest 10% scores on WFC were invited to participate in interviews. Highest and lowest scoring participants were chosen in order to compare their coping strategies.

Among the targeted participants from the Time-2 survey (approximately 53), a total of 33 participants (response rate = 62.3%) volunteered to take part in interviews. Twenty-nine were from mainland China, 2 from Malaysia, 1 from Singapore, and 1 from Hong Kong. Of the interviewees, 49.0% were male, 75.8% had dependents at home, and 87.9% held a Bachelors' degree or a higher tertiary qualification. The average age was 40.60 years ( $SD = 9.23$ ). The average time of residence in New Zealand was 12.43 years, ranging from 2.92 to 22.50 years ( $SD = 5.10$ ). Participants were employed from a variety of organizations, including universities, Chinese companies, Chinese associations and Chinese churches in New Zealand, and the average job tenure was 6.02 years, ranging from .75 to 15.50 years ( $SD = 3.99$ ).

## 2.2. Interview questions

Three open-ended interview questions were derived from relevant literature on WFC, coping strategies, and acculturation. These questions were piloted in interviews with two participants from the Time-2 survey. The three questions were administered to all participants face-to-face. Responses were digitally recorded. The questions were:

- (1) Since you came to New Zealand, do you notice that any of your values related to work and family have changed? Please explain.
- (2) What are the causes of your work-family conflict? Please give some examples.
- (3) How do you cope with the work-family conflict you experience?

## 2.3. Coding and analyses

All 33 interviews were transcribed verbatim. As the languages used for the interviews were Mandarin (29), and English (4), the transcripts of the interviews conducted in Chinese were translated into English. The original English transcripts and translated transcripts were sent to the interviewees to review for accuracy, and then all transcripts were loaded into NVivo 11.0. We used inductive thematic development to guide our coding of the qualitative responses. Using an inductive approach, we sought to identify antecedents and coping strategies that were not cited in previous research.

Two coders (one university professor and one doctoral candidate) independently used open-coding approach to read the transcripts. The coders then labelled each interviewee's response relevant to research questions. Subsequent responses were listed under either existing labels, or new labels we created if the responses did not fit existing labels. Following this process, the coders continued creating labels until they finished coding the last transcript. Subsequently, all labels were categorized into relevant overarching themes. At the same time, the coders reviewed all themes to ensure that the responses within each theme accurately represented them. For research question 3, since we aimed to explore the coping strategies, the coders compared the themes between the high and low WFC groups. To ensure validity of coding, the two coders met to compare and discuss the labels and themes after their independent open coding. Any coding discrepancies were discussed and adjustments were made until consensus was reached between the two coders. As well as the thematic analysis, we also applied word frequency analysis in order to further understand Chinese immigrants' acculturation (the words chosen were those used by the 29 immigrants from Mainland China, since the rest 4 immigrants spoke in English and used a different way of phraseology).

#### **4. Results**

As respondents discussed their work-family experiences, a number of significant themes and sub-themes emerged to describe acculturation, antecedents of WFC, and coping strategies.

Those themes and sub-themes are presented in the following sections<sup>1</sup>. The relevant quotes of some themes and sub-themes are not exhibited, if they have been repeatedly demonstrated by previous research. In order to protect respondent confidentiality, all the names appearing below are pseudonyms.

#### *4.1. Acculturation*

We firstly examined how acculturation influenced work and family values, in order to provide insights into the antecedents of WFC and coping strategies. Approximately three quarters (72.7%) of our interviewees felt that they were juggling Chinese and New Zealand cultures, and indicated that they had to learn from locals. However, 60.1% reported that learning the New Zealand culture was via the visible artefacts (such as clothing styles, language, and living styles), rather than at a value level, which is consistent with Shang et al. (In press). In this section, we only included the themes of value acculturation, which are more related to the nature of work-family experiences than visible artefacts of acculturation. For instance, Fei, living in New Zealand for more than 12 years, provided insight into the strength of, and the resistance to changing traditional values, *“I agree with local values, but that doesn’t mean I will need to accept them.”* Overall, participants perceived that the traditional Chinese values were the main drives affecting their work and family. Values related to family and work, and examples reflecting value acculturation are presented below.

##### *4.1.1. Family value*

Firstly, 54.5% believed that a family refers to an extended family rather than a nuclear family. This family concept was described by Chris, a 40-year-old male university lecturer from Singapore, *“for us (Chinese), the family is not just mom, dad, and kids. We would also include our extended family members.”* Similarly, for taking care of elderly parents, Chinese

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<sup>1</sup> Since responses provided by an interviewee for any given question could be categorized into multiple nodes, percentages of sub-themes under each theme identified, as indicated in Tables 1-2, may add to more than the percentage of the theme itself.

immigrants would like to live with, or at least nearby, their parents. Catherine, a 46-year-old woman, mentioned that *“I’m living with my 3 boys (two sons, and her nephew), husband, and father-in-law as well.”* Living together or nearby reflects one popular Chinese norm, *Si Shi Tong Tang*, meaning that generations of a family live under the same roof (Upton-McLaughlin, 2013). Living together or nearby also increases responsibility for caring for their elderly parents, which is a predominant value, *Xiao*, meaning filial piety in the Chinese culture (Li, 2013). *Xiao* requires adult children to defer to parental needs, and unconditionally offer support and care for their old parents (Li, 2013). Single mother Erin (47-year-old) said *“if my parents are healthy and happy, there is no problem for me. My family pressure is mainly depended on their physical condition.”*

Related to the role of *Si Shi Tong Tang* is the importance of looking after offspring. Children are more likely to be raised by grandparents among Chinese immigrants, which is a normal and prevalent phenomenon in Chinese culture. This norm is called *Ge Dai Zhao Gu*, meaning grand-parenting or looking after children by grandparents (Liang, 2010). Hui, living with his family in New Zealand for more than 13 years, suggested *“you can see a young couple are walking in the front followed by their old parents holding their children everywhere in New Zealand. This is the most typical Chinese family.”* In addition, many Chinese immigrants still maintain the traditional value of supporting, or even sacrificing, for the next generations to achieve success, since care of offspring is a life-long commitment for parents in Chinese culture (Aycan, 2008). Henry (50-year-old) living in New Zealand for more than 11 years, commented, *“it is not enough for us to have a good life, and we will do whatever we can do to help our next generations achieve a good life as well.”*

#### 4.1.2. Work value

The Chinese culture of hard work is conducive to high efficiency and productivity (Pew Research Center, 2012). 42.4% mentioned that keeping the hard-work value is to most Chinese



immigrants' benefit, since that value is associated especially with financial success, which can enhance the stability of Chinese immigrants' lives in New Zealand. Henry stated that he and his Chinese colleagues "*try to get opportunities to work extra hours to earn more money for a good life.*" In addition, Xian, an English lecturer in one college, mentioned that "*working hard is a way for Chinese immigrants to settle down their families and to achieve their sense of security in the new country.*" Maintaining the traditional hard-work value reflects that Chinese high levels of long-term orientation (Hofstede, Hofstede, & Minkov, 2010), which means they tend to feel insecure when facing an uncertain future life, and attempt to cope with the difficulty they confront by enduring working hard.

#### 4.1.3. Expressions, interaction with locals and acculturation

According to the word frequency analysis, our participants preferred to identify themselves as *Zhong Guo Ren* (a citizen of China,  $M = 4.45$ ,  $SD = 3.16$ ) rather than *Hua Ren* (a Chinese person living outside of China with or without Chinese citizenship,  $M = 1.90$ ,  $SD = 2.64$ ). When they mentioned something in China, 93.1% would like to use *Guo Nei* ( $M = 5.76$ ,  $SD = 4.09$ ), meaning "domestic". Surprisingly, 93.1% described locals, especially white people, as *Yang Ren* or *Wai Guo Ren* ( $M = 3.90$ ,  $SD = 3.93$ ), which literally means foreigners. Those particular words may signify that Chinese immigrants generally hold a strong Chinese identity, which may imply that they have a low level of value acculturation.

Furthermore, many Chinese immigrants rarely interacted with locals outside of their work, as they found it was hard to communicate with them in-depth. Barbara, who had an international education background and English as her first language, found it was hard to make connections with locals, because "*it's very superficial, and also the things they talk about are not interesting to me.*" She also indicated that "*most of my friends are still Asians.*" The rare interaction with locals and frequent contact with Asians may even reverse the acculturation

process, which prevents value acculturation (Taras, Roney, & Steel, 2013). The low level of value acculturation may strengthen Chinese to attach themselves more to their in-groups (similar members) but detach from their out-groups (non-similar members) (Nisbett, 2010).

#### *4.2. WFC and its antecedents among Chinese immigrants*

In the interviews, the overwhelming majority of the participants admitted that they experienced some degree of WFC in their daily life. It seems that few people are immune from the influence of this conflict. Responses to the question ‘what are the causes of your work-family conflict?’ prompted 195 usable responses, with each participant providing a mean of 5.91 responses. Four identified themes (see Table 1) are interpreted below.

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*INSERT TABLE 1 ABOUT HERE*

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##### *4.2.1. Family-related antecedents*

As shown in Table 1, approximately three quarters (72.7%) of participants indicated that family-related antecedents were more likely to lead to family interference with work. Under this theme, the most prevalent overarching sub-theme was family responsibilities (54.5%), including doing household chores, looking after children and caring for elderly parents. Participants who reported heavy family responsibilities suffered more WFC than their counterparts who reported light family responsibilities.

Family responsibilities, as mentioned above, are bound to produce considerable pressure for people. In addition, 30.3% of respondents indicated that they experienced significant pressure from family members and family issues, which depleted their available personal resources. Erin said that her family pressure was not only from looking after her child and taking caring of her parents, but also from performing as a translator for her parents, “*no matter*

*where my parents go, I have to accompany them, because they couldn't speak English well."*

Furthermore, family pressure could also be caused by family members who are not geographically around them. Some immigrants expressed anxiety and pressure due to concern over potential demands, health, or safety of their relatives living overseas, especially their elderly parents. Sara, a 50-year-old woman, explained "*there is always a pain hidden in the heart of us immigrants, which is about our elderly parents. Both of my parents, in their 80s, are still living in China, and are in poor health. ... Every year, I have 4 weeks' annual leave, but normally I don't take it. I save it till the end of year for flying back China to look after my parents.*"

Given the above, family responsibilities and pressure were identified as antecedents of WFC, which echoes previous work-family research (e.g., Michel et al., 2011). Those findings seem universal, however they are salient if interpreted with the results of acculturation. In the context of migration, the rooted values of *Xiao* can also exert much pressure on Chinese adult children on a daily basis, since their elderly parents, who are not able to function well in the host country, demand more from adult children, who tend to defer to their elderly parents. Furthermore, the concern Chinese immigrants expressed about their elderly parents indicates that the value of *Xiao* (filial piety) could intensify the existing family pressure. Alongside the Chinese norm, *Si Shi Tong Tang*, thus leading to large extended families, substantial housework needs to be performed, which would induce greater family pressure.

Another sub-theme was interpersonal conflict among family members (12.1%). Arguments or bad relationships among family members can generate negative emotion, which would then spill over into their workplace and result in a sapping impact on work. Tao complained that conflict between husband and wife could also generate WFC. He said "*if husband and wife are in harmony, that is no problem (between work and family). But if the relation is not good, more trouble will come out.*" In addition, Gina, a 25-year-old woman,

indicated that conflict with her parents could directly influence her mood in the workplace, which further resulted in less productivity. Therefore, severe interpersonal relationship difficulties among family members could elevate WFC. In a big extended family, interpersonal conflict issues are likely to happen, such as spousal conflict and intergenerational conflict, since cultural values may vary across different people because of their different levels of acculturation (Shang et al., In press). Furthermore, immigrants and their accompanying family members tend to be more dependent on each other, as migration can cause loss of family and friend networks built in the home country. Therefore, the family relationship is likely to become a precious personal resource for immigrants. They cannot afford to make family relationships worse, because the potential or actual loss of resources will lead to considerable stress, worsening the work-family relationship (loss spiral) (Hobfoll, 2011). Overall, the mixture of Chinese values and migration experiences is likely to intensify domestic responsibilities and pressure of Chinese immigrants, which may escalate WFC.

#### *4.2.2. Occupation-related antecedents*

As illustrated in Table 1, approximately two third (66.7%) of the participants indicated that occupation-related antecedents were the main causes of their WFC. Under this theme, two overarching sub-themes were work overtime (36.4%) and high workload (30.3%), both of which resulted in considerable work-related stress. They felt that their pressure at work significantly impaired the amount of time and effort (or energy) which they could devote to their families. Furthermore, approximately 15.2% indicated that negative emotion generated from work could spill over into their family. The negative emotion could be due to the stressful work or bad relationships with colleagues or supervisors. Finally, 12.1% reported that they focused too much on their work, either because of giving priority to work or their early career stage, which further led to giving less attention to their family. Those antecedents have been repeatedly demonstrated by past research among non-immigrant populations (e.g., Michel et

al., 2011), and suggest that Chinese immigrants can also be influenced by some universal antecedents of WFC.

#### 4.2.3. *Acculturative stress*

Notably, more than one third (39.4%) of respondents pointed out that acculturative stress was one of the main culprits causing WFC. However, the acculturative stress mostly happened at their workplaces rather than in their families, and can intensify their work pressure, which then results in more WFC. First, some interviewees indicated that the value of hard work played an important role in arousing work-related stress. Chinese immigrants tended to devote more effort towards their work. For example, Jing, who has resided in New Zealand for more than 20 years and worked at one university for 12 years, said the hard-working value engendered much psychological pressure for her, “*we Chinese always want to do better than the locals. To do everything better, we work harder and spend more energy and time on work (than them). ... Sometimes I can't live up to my expectation. Then I will feel very depressed and upset.*” In addition, Chinese immigrant workers felt the traditional Chinese values could not appropriately function in a local workplace. Qiang expressed that working hard could cause interpersonal conflict at the workplace, “*Chinese always work meticulously and hard, which will definitely impress the boss. (But) this is a threat to the local colleagues. So they get jealous, and then say something bad behind your back. Sometimes conflicts may happen as well.*” Hence, Chinese immigrants are under considerable work-related stress by virtue of emphasizing hard work.

Second, the immigrant identity could generate work-related stress. Chinese immigrants may like to work even harder to compensate for their culture-related shortcomings, such as low English proficiency, and to receive more recognition from colleagues and supervisors. Xian felt that most of his work-related stress was associated with his identity as a Chinese immigrant. He said “*as an immigrant, I'm not a native (English) speaker, so students may doubt my ability*

*to teach English in their minds. ... Due to this, I have a lot of pressure, although they don't directly express their feeling in front of me. So I want to do better, and even beyond the level of my (local) colleagues, in order to block other people's mouths.*" Not only Xian, but Sara shared the same feeling *"I'm the only Chinese in my company, so what I do shouldn't let others (locals) look us Chinese down."* As mentioned earlier, many Chinese immigrants still strongly maintained the traditional Chinese cultural values, which could further reinforce their immigrant identities (Yang, 2010). Failure to adjust the identities (such as increased endorsement of local values) could reduce immigrants' success at the workplace and escalate their psychological stress (Olson, Huffman, Leiva, & Culbertson, 2013).

Third, even though Chinese value hard work, they also emphasize family reunion during certain important occasions. In this study, Chinese immigrants would be concerned more about family rather than work if they still work on shift during some important Chinese festivals. Sara complained that Chinese festivals were neglected by her managers, and she could not stay with family during the special time, *"the Middle Autumn Day will fall on this Sunday. But according to my working schedule, I still have to work at the weekend."* Chinese immigrants, like Sara, may psychologically attribute blame to work that is the source of their WFC, as work prevents them from reuniting with their families to celebrate festivals.

#### 4.2.4. Financial difficulties

Another overarching theme across responses was that financial difficulties (39.4%) caused them to feel psychological stress on their work and family. For example, Qiang had to do extra work every day *"in order to make enough money to reach my expectation... So it turns out that I won't be able to spare my time for family and entertainment."* Striving hard for more money to tackle the financial difficulties reflects the characteristic of avoiding uncertainty in future life.

### 4.3. Coping strategies

To handle the prevalent WFC, participants reported a variety of coping strategies. Across the responses, 189 usable responses were identified, with each of the interviewees reporting an average of 5.73 responses. Six identified themes (see Table 2) are presented below.

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*INSERT TABLE 2 ABOUT HERE*

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#### 4.3.1. Social support

Social support refers to accessing help or support from other people or organizations, and there has been strong evidence that social support can attenuate the conflict between work and family (Dewe, O'Driscoll, & Cooper, 2010). Over three quarters (78.8%) of the interviewees endeavoured to handle WFC by accessing available social support, including family support (72.7%), organizational support (18.2%), and religious beliefs (18.2%).

For family support, over one third (39.4%) indicated that their parents played a role in reducing their family demands, which then interfered less with work. In the Chinese culture, elderly parents are important providers of childcare and household assistance to their adult children (Upton-McLaughlin, 2013). Hui described the importance of his parents in handling WFC, “*our parents can help us deal with chores and look after my child, which is quite common in Chinese families. This largely reduced our stress.*” However, 9.1% who did not want to bother their parents reported relatively high WFC. Therefore, parental support seems an effective strategy to alleviate WFC, which is an advantage of living with elderly parents. In addition to parental support, approximately half (45.5%) perceived that spousal support was helpful to reduce WFC. Consistent with previous research, sufficient spousal support could protect each other from experiencing high levels of WFC (Beatty, 1996). However, 36.4%

experienced a low level of WFC, while 9.1% still experienced high WFC. Therefore, spousal support alone may be not sufficient to handle WFC for everybody.

Furthermore, almost one fifth (18.2%) indicated that accessing organizational support could effectively reduce WFC, including taking advantage of organizational policy, and obtaining supervision support. Among this group, 15.2% reported low WFC. On the other hand, 3.0% who indicated that there was a lack of supervisor support at the workplace reported high WFC, which further illustrates the importance of organizational support for reducing WFC. Our results, consistent with previous research, show that organizational support can provide timely help for employees to reduce WFC, which would potentially save their energy to spend on family activities (Lapierre & Allen, 2006).

Finally, it should be noted that nearly one fifth (18.2%) perceived that religious belief, such as believing in God, could help decrease WFC. The rationale underlying this might be that people could obtain sufficient consolation and help from religious belief by establishing a good relationship with the God in whom they believe. Fei always attended services in church and explained the benefit of religious belief, *“for Christians, maintaining a good relationship with the God is the best healing (for work-family conflict). That is, although you’re very busy and tired sometimes, you are also able to get relief if your spirit can come to the God.”* However, only 6.1% of them reported a low level of WFC, while 12.1% indicated that they still experienced a high level of WFC. This may be because that some people simply assume that everything happening for them is God’s will, which prevents them from proactively coping with their work-family issues.

#### 4.3.2. Prioritization

More than half (54.5%) of interviewees placed their prioritization for either family or work as a strategy to handle the WFC they experienced. Among them, over a third (39.4%) indicated



that they preferred to prioritize family over work. Xia, who has lived with his family in New Zealand for 12 years, noted that *“I centre my life on family but not on work, because I can change my work and career, but can’t change my wife and children.”* Although those respondents perceived that prioritizing family was a helpful strategy for coping with WFC, 21.2% still experienced high WFC. On the contrary, 9.1% indicated that they preferred to prioritize their work over family to cope with WFC. Most of those people believed that the more time and energy they spent on work, the more money they could earn for family. Mu, who has lived with his family in New Zealand for 15 years, stated, *“I would like to work hard or even to get a better job to make more money. Money will be a tool for me to satisfy my family.”* However, all of these participants experienced relatively high WFC.

Finally, another 9.1% of respondents indicated that flexible prioritization of work and family would be beneficial for balancing work and family, and all of them experienced relatively low WFC. In other words, those people would like to regulate the prioritization of work and family to cater for different family situations. 43-year-old Thomas, living in New Zealand for 12 years, noted that when he sensed *“something wrong”* in his life, he would try to improve the situation, *“actually for family, every certain period, there could be certain duty for it. Just suppose we have a new born baby. Then looking after the kid should be the main duty of my family, and the work I do have to match the family schedule.”* Additionally, he gave another example that *“if a young couple just moved from China to New Zealand, and desire to have a stable life, such as purchasing a house, they may need to take their work as priority to earn sufficient money to secure the quality of their life here.”*

Given the above, the relation between work and family among people who prioritized family was little better than the relation among their counterparts who prioritized work. Therefore, always prioritizing either work or family may not be an effective strategy. Rather, flexible prioritization may be more advantageous.

#### 4.3.3. Relationship management

As mentioned earlier, interpersonal conflict among family members could cause considerable WFC. More than one third (36.4%) of the interviewees stated the importance of relationship management. It may imply that keeping a harmonious relationship with family members is crucial for Chinese immigrants. This is consistent with the notion from previous cross-cultural research (e.g., Ling & Powell, 2001; Nisbett, 2010).

Some maintained and managed the interpersonal relationship at home by actively engaging in family activities (24.3%). Mandy, living in New Zealand for about 5 years, felt this approach was helpful because it could enhance her sense of family satisfaction, *“at weekends, I would like to spend more time going out with my family, staying with my husband and chatting with him. This kind of state of feeling is great.”* All of them experienced a low level of WFC. This result provides further evidence that maintaining a harmonious interpersonal relationship between family members can be used by Chinese immigrants to replenish much needed resources, which can be used to reduce WFC.

Furthermore, 24.2% of the interviewees believed that communicating and coordinating with family members, especially with their partners, would help them not only reduce the personal stress, but also enhance understanding among family members. In doing so, the personal resource pool would be subtly enriched, which is benefit for alleviating WFC. Dong noted that he always communicated with his wife *“to enhance understanding between us. ... So we two get along very well. Because of that, I can save much time and energy from my family.”* Interestingly, half of them (12.1%) under this sub-theme still experienced high WFC. This may be, firstly, because additional energy and time has been expended when an individual communicates with his/her family members to deal with conflict between them (Shang et al., In press). Secondly, communicating and coordinating with family members may not

necessarily deal with issues causing WFC. For example, a person uses substantial effort to tackle a tough professional problem at work, leaving less time and energy for his/her family. Communicating with his/her partner who does not have the relevant knowledge will not help reduce the effort the person devotes to this/her work.

Somewhat surprisingly, no one reported that managing relationships with colleagues would help cushion WFC. Xia stated that the interpersonal relationships at the workplace was of no importance, and he considered that the conflict between him and his colleagues “*is only about the work. After work, it’s not necessary to talk with someone I don’t like... and we live our own life.*” The result echoes the notion that Chinese tend to attach themselves to their in-groups (family) but detach from their out-groups (local colleagues). They may feel more comfortable to be embedded in their family rather than their work group.

#### 4.3.5. Time flexibility

Work and family demands could impose considerable strain on people with finite time. To tackle the time restriction, almost one quarter (24.3%) discussed coping with WFC through time flexibility, with 18.2% reporting a low level of WFC and 6.1% a high level of WFC. They generally managed their time in two ways. First, creating a business allowed people to work at home and make a more flexible time schedule, which was helpful to balance his work and family. Jason suggested, “*many Chinese prefer to do their own business in New Zealand, because they can arrange their time freely and have more time to be with family.*” Second, a flexible time schedule enacted by organizations is also beneficial for balancing work and family. Xia commented that his company “*allows us to work 3 days with 12 hours per day, and then rest 3 days.*” which is helpful for him. Notably, 6.1% reported high WFC, and indicated that they had used time flexibility to balance their work and family until some unforeseen events happened in their family life or work, which further highlighted the importance of time

flexibility to cope WFC. Overall, a flexible work arrangement seems an effective strategy to cope with WFC, which is consistent with previous research that a flexible time arrangement is negatively related to time-based WFC (e.g., Michel et al., 2011). This is because a flexible work arrangement could increase individuals' perceptions and capabilities of controlling their family and work (Thomas & Ganster, 1995).

#### 4.3.6. *Compartmentalization*

As mentioned earlier, work demands could spillover into family life, and vice versa. Approximately one fifth (21.2%) of interviewees perceived that they coped with WFC through compartmentalization. Compartmentalization is defined as whether an individual could focus on his/her work at the workplace and could focus on his/her home at home (Reddick et al., 2012). Sheree, living in New Zealand for 20 years, would like to separate her work from family by *“trying to solve my work problems at work.”* Similarly, Gina tried *“to handle family issues at home. So in this way, my family will affect my work less.”* However, only 9.1% in fact benefited from this strategy, with low WFC. This is because it may be impossible to set up a clear boundary between work and family domain. First, fluid emotion can spill over between work and family, which could prompt the integration between family and work. Second, recent work-family studies have evidenced that work-related technologies have frequently invaded into an individual's family life, such as dealing work-based emails and phone calls at home (Boswell & Olson-Buchanan, 2007). Third, under the context of migration, the permeability between work and family could be enhanced, since family members are more dependent on each other for support and companionship in the host country than in their home country (Lazarova et al., 2010).

## 5. Discussion

In response to the emerging ethnically diverse labour force in many countries, the present study sheds light on the antecedents of work-family conflict (WFC) and coping strategies

among Chinese immigrants in the context of acculturation, and provides insights into ways to expand the scope of work-family research.

### *5.1. Acculturation*

According to the interviews, most Chinese immigrants obtained a relatively low level of value acculturation, since they still maintained the traditional Chinese values, although they have lived in New Zealand for a fairly long time. This finding is consistent with Taras et al. (2013). In the family domain, the Chinese values or norms of *Si Shi Tong Tang*, *Xiao*, and *Ge Dai Zhao Gu* were still prevalent among Chinese immigrants. In the work domain, many kept the crucial Confucius value of hard work to stabilize their lives in the new country. Those values exert considerable influences on family and work, which is beneficial for interpreting work-family experiences in immigrant populations, since values can govern individuals' perceptions and help explain their reactions in work-family experiences (Ayman, 2008). However, acculturation of immigrant's values related to work and family has remained largely unexplored in previous research. Hence, the exploration of value acculturation in this study may pave a fruitful avenue for future work-family research on immigrant populations.

### *5.2. Antecedents*

The Chinese immigrants' discourses in this study revealed four themes of antecedents. First, the negative effect of family-related antecedents on WFC, including family responsibilities, family pressure, and interpersonal conflict at home, can be intensified by traditional Chinese values which Chinese immigrants preserve. In this way, our study broadens the comprehension of family domain antecedents of WFC among Chinese immigrants by addressing the role of cultural family values and acculturative levels in influencing the antecedents of WFC. Thus, it may be particularly important that future work-family research

considers the moderating role of family values obtained from home cultures when testing work-family models among immigrant populations.

Second, Chinese immigrants experienced similar occupation-related antecedents identified in previous research on non-immigrant populations, including work overtime, high workload, and negative emotion generated from the workplace. This finding suggests that organizations should further strengthen their stress management for employees, and assess employees' stress levels regularly. As such, organizational level intervention can play a role in mitigating employees' WFC.

Third, this study shows that acculturative stress at the workplace could contribute to elevated WFC. Acculturative stress is caused by Chinese hard-work values, immigrant identity, and managers' neglect of Chinese festivals. Therefore, the present study broadens our understanding of work-family experiences by addressing the role of acculturation in the antecedents of WFC. Empirically testing the proposition that acculturative stress positively impacts WFC among immigrants seems warranted in future research. In addition, it is important for organizations to provide workshops for all employees to understand the different cultural values in different cultures, and make programs for immigrant workers to adjust to the work roles. Moreover, when scheduling work times, human resource managers should consider the importance of important cultural events such as festivals. Except for organizational intervention, Chinese immigrants who are willing to alleviate WFC through reducing the acculturative stress at work may need to proactively interact with locals, since frequent contact with locals can speed up individuals' acculturative level (Taras et al., 2013).

Fourth, financial difficulties contribute to WFC for many Chinese immigrants. The more financial difficulties they confront, the harder they work, which is likely to undermine satisfaction among family members. To resolve this issue, Chinese immigrants may need

assistant from the local government, which can provide services to ease their financial worries, such as securing work, securing housing, and providing child care.

### *5.3. Coping strategies*

The Chinese immigrants' narratives revealed five main themes of coping strategies, including social support (e.g. parental support, spousal support, organizational support, and religious belief), prioritization (e.g. prioritizing family, prioritizing work, and flexible prioritization), relationship management (e.g. actively engaging into family activities, communicating and coordinating with family members), time flexibility, and compartmentalization.

Through comparisons between high and low WFC groups, four coping strategies emerged as being relatively effective. First, parental support is a crucial way to reduce WFC. However, when Chinese immigrants think of using parental support, they need to also consider the negative effect of parental demands on WFC, and to weigh up the advantages and disadvantages between parental support and parental demands. Therefore, Chinese immigrants may be caught between useful parental support and stressful parental demands. Second, a more flexible but not fixed prioritization of work and family might be beneficial for people. In other words, people could adjust the priorities according to the change of their work and family situations. This finding may inspire future research to explore the mitigating effect of flexible prioritization of work and family.

Third, consistent with previous research, our results show that some Chinese immigrants successfully accessed available organizational support to cope with WFC caused by occupation-related stress. However, the relatively low level (15.2%) of utilization of organizational support in our participants could be due to inadequacy of support provided by many organizations. It also could be because Chinese immigrants are unfamiliar with how to

access the appropriate organizational support, or they are reluctant to do so since approaching a leader is somewhat uncomfortable for them, which is a significant characteristic of high power distance<sup>2</sup>. Hence, more organizations should enact their family-friendly policies, and encourage more immigrant employees to utilize the policies. While implementing the policies, managers should be aware that the characteristic of high power distance among Chinese immigrants may inhibit their use of policies. Fourth, flexible time arrangement is an effective strategy, however it may suffer some constraints. Some interviewees narrated that self-employment could help them achieve a flexible arrangement, which is not realistic for everyone to do so. Furthermore, whether an individual can utilize a flexible arrangement is largely reliant on whether his/her organization could grant that. This finding further highlights the importance of organizational support, and encourages organizations to continue to enact flexible schedules for their employees.

The remaining strategies all exhibit the pros and cons (which have been mentioned in the result section). This suggests that one strategy will not work for everyone to deal with WFC. In fact, whether a coping strategy is effective depends largely on the type of stress an individual confronts (Dewe et al., 2010). Therefore, it is crucial for individuals to identify the antecedents of WFC, and be aware of the effect of cultural values on WFC. In doing so, they can utilize a specific strategy to cope with the conflict. Importantly, a single coping strategy might not work efficaciously, and people may need to utilize a number of strategies rather than a single isolated strategy to cope with the WFC they experience. For example, a flexible working policy (accessing organizational support) allows employees to manage their own time to arrange their work and family duties (flexible time management). However, how employees arrange their

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<sup>2</sup> Power distance refers to the extent to which individuals accept hierarchical authority and they are willing to subordinate themselves to people on higher positions (Hofstede et al., 2010).



time depends on how they prioritize their work and family (prioritization). Therefore, further research could address the efficaciousness of different patterns of combination of coping strategies, which will pave a way in enhancing people's capability to balance their work and family.

It may also be advantageous to consider our results in light of the boundary between work and family, which has been widely discussed in work-family literature in the past several decades. Our results suggest that the widespread stereotype that compartmentalization could reduce WFC may not be as effective as people perceive, since the boundary between work and family is prone to be permeable, and placing a clear boundary between family and work to prevent WFC seems impossible in the contemporary era. Therefore, further empirical attention which draws on boundary theory seems warranted to figure out how people should function to ameliorate WFC when work and family are integrated, rather than to excessively investigate how to make people separate their work and family domains.

Additionally, some Chinese immigrants mentioned religious belief as a type of social support which could help reduce WFC they experienced. However, the effect of it on WFC is still blurred according to our results. Therefore, future work-family research should include religious activities and perceptions to further examine their impacts on WFC.

One of the limitations in this study is that we used the scores on general WFC rather than the scores on each dimension of WFC to divide the compared groups. Future qualitative research on coping WFC might utilize the dimensions of WFC to categorize participants to explore more specific coping strategies aimed at reducing different types of WFC. Another limitation is that the sample size was relative small, which constrains us from generalizing the findings to the whole Chinese immigrant population. In addition, most of the participants were born in Mainland China, and the findings may not apply to Chinese immigrants from other

regions or countries. In short, a larger sample including Chinese immigrants from different regions would provide more opportunities to evaluate antecedents and coping strategies in the context of migration and a richer understanding of their value acculturation.

To conclude, the present research serves as an initial step in investigating value acculturation, antecedents of WFC, coping strategies among immigrant populations through a qualitative method. This study demonstrates that WFC among immigrant populations is eminently culture-related and is a complex and important research domain in need of additional consideration.

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## Tables

**Table 1**

Content themes and sub-themes for research question 1 with response percentage (n=33)

<b>RQ 2: What are the reasons for causing your work-family conflict?</b>	<b>Percentage</b>
<b>Family-Related Antecedents</b>	72.7%
<i>Family responsibilities</i>	54.5%
<i>Pressure from family members and family issues</i>	30.3%
<i>Interpersonal conflict among family members</i>	12.1%
<b>Occupation-Related Antecedents</b>	66.7%
<i>Work overtime</i>	36.4%
<i>High workload</i>	30.3%
<i>Negative emotion from work spilling over into family</i>	15.2%
<i>Priority on work Focus on work too much</i>	12.1%
<b>Acculturative Stress</b>	39.4%
<b>Financial difficulties</b>	36.4%

*Note.* Themes are in bold, sub-themes in italics.



**Table 2**

Content themes and sub-themes for research question 2 with response percentages (n=33)

RQ 3: How do you cope the work-family conflict you experience?	Percentage			
Social Support (81.8%)				
Family support (78.8%)				
• Parental support	9.1%	High-WFC	39.4%	Low-WFC
• Spousal support	9.1%	High-WFC	36.4%	Low-WFC
Organizational support (18.2%)				
• Accessing the good organizational policy	0	High-WFC	9.1%	Low-WFC
• Supervision support	3.0%	High-WFC	6.1%	Low-WFC
Religious belief	12.1%	High-WFC	6.1%	Low-WFC
Prioritization (54.5%)				
Prioritizing family	21.2%	High-WFC	18.2%	Low-WFC
Prioritizing work	9.1%	High-WFC	0	Low-WFC
Flexible prioritization of work and family	0	High-WFC	9.1%	Low-WFC
Relationship management (36.4%)				
Actively engage family activities	0	High-WFC	24.3%	Low-WFC
Communicate and coordinate with family members	12.1%	High-WFC	12.1%	Low-WFC
Time flexibility	6.1%	High-WFC	18.2%	Low-WFC
Compartmentalization	12.1%	High-WFC	9.1%	Low-WFC

*Note.* Themes are in bold, sub-themes in italics. WFC = work-family conflict.

## **CHAPTER 7**

### **GENERAL DISCUSSION**

Understanding immigrants' work-family experiences is warranted in the diverse workplace. Chinese immigrants' functioning in dual cultures increases the complexity of their work-family experiences. Without a deep comprehension of these experiences, it is impossible to meet the needs of immigrants in a diverse working environment, and hence foster organizational success. Therefore, investigating the work-family experiences among immigrant populations is paramount. The opening paragraphs of this thesis stated that the primary aims of this research were to identify the antecedents and consequences of work-family conflict among Chinese immigrants, to examine the role of acculturation in work-family experiences, and to explore possible coping strategies to reduce this conflict. The research articles that followed have demonstrated that acculturation could exert considerable influence on their work-family experiences, including antecedents, and coping strategies. Overall, this thesis research makes an original contribution to the work-family literature by broadening our comprehension of work-family experiences among immigrant populations.

In this conclusion, the sections that follow address the specific research questions outlined in Chapter 1 and provide an in-depth answer to each research question, along with theoretical and practical implications. Additionally, this chapter concludes with the limitations of this study, as well as highlighting future research areas to be investigated.

#### **Specific Conclusions**

Each of the separate research articles contained within this thesis (Chapters 3, 4, 5, and 6) has provided an in-depth theoretical introduction, research method, analysis results, discussion, implication, conclusion and limitations. Therefore, this chapter takes a global overview of the research questions. To reiterate, the specific questions this thesis sought to answer were:

Question 1: What are the antecedents of work-family conflict among Chinese immigrants in New Zealand?

Question 2: What are the consequences of work-family conflict among Chinese immigrants in New Zealand?

Question 3: What is the role of acculturation in the work-family experiences among Chinese immigrants in New Zealand?

Question 4: What kinds of coping strategies can help Chinese immigrants reduce work-family conflict?

**Antecedents.** The antecedents of WFC among Chinese immigrants might be more complex than non-immigrants in either an individualistic culture or a collectivistic culture, and have not been well understood to date. In response to the complexity of their work-family experiences, this thesis research firstly investigated the relationships between several common antecedents identified in previous research and four dimensions of WFC among Chinese immigrants, through cross-sectional data in Study One (presented in Chapter 3). Study One provides a theoretical framework for further exploring the antecedents among Chinese immigrants. Secondly, this research further examined the predicting role of interpersonal conflict in WFC through two-wave longitudinal data in Study Two (presented in Chapter 4) based on the findings from Study One. Thirdly, in order to achieve an in-depth understanding of the causes of WFC among Chinese immigrants, this research also qualitatively inspected the antecedents of WFC in Study Four (presented in Chapter 6).

In general, this thesis research found that most of the antecedents of Chinese immigrants' WFC are culture-related. That is, the negative effect of family-related antecedents on WFC, including family responsibilities, family pressure, and interpersonal conflict among family

members, can be intensified by traditional Chinese values which Chinese immigrants preserve. Secondly, acculturative stress caused by Chinese hard-work values, immigrant identity, and managers' neglect of Chinese festivals also imposes considerable effects on WFC. Thirdly, interpersonal conflict at work is a significant strain-based predictor of WFC for Chinese immigrants. Nevertheless, some universal antecedents found in previous research also can exert significant influence on their WFC, such as number of working hours and work overload.

According to the above findings, this research suggests that organizations should further enhance their stress management for employees, such as evaluating employees' stress levels regularly, and figuring out immigrants' biggest concerns about organizations. As such, organizational level intervention can play a role in mitigating immigrant employees' WFC. Theoretically, this thesis extends our knowledge of the antecedents of WFC experienced by immigrants. Future work-family research on immigrant populations should consider the influences of the home culture on antecedents. In addition to the universal antecedents of WFC, future research should also address the cultured-related antecedents.

**Consequences.** This thesis research also undertook studies in order to ascertain the relationships between WFC and subjective well-being, including job satisfaction, family satisfaction and psychological health, which have been overwhelmingly recognised as crucial consequences of WFC in previous research (e.g., O'Driscoll et al., 2004; Zhang, Griffeth, & Fried, 2012). Three publication papers contained in this thesis investigated those relationships. How WFC predicts subjective well-being was examined in the cross-sectional Study One (presented in Chapter 3), as well as in the longitudinal Study Two and Three (presented in Chapter 4 and 5 respectively). In addition, Study Three also investigated the inverse relationship between WFC and subjective well-being, that is, whether subjective well-being could predict the level of WFC among Chinese immigrants.

Overall, the results suggest that strain-based WFC has more effects on subjective well-being than does time-based WFC, since people can engage in multiple activities at the same time (Kaufman, Lane, & Lindquist, 1991) and utilise the time flexibility arrangement to reduce time-based WFC. This finding encourages organizations to continue to improve the well-being of immigrant employees through alleviating their strain-based WFC. Furthermore, this research found that reciprocal relationships between WFC and subjective well-being exist among Chinese immigrants, that is, high levels of WFC can predict decreased subjective well-being, and high subjective well-being can also induce low levels of WFC. This finding contributes to the recent on-going argument about the reciprocal relationships by extending it into an immigrant population (Nohe, Meier, Sonntag, & Michel, 2015).

In addition, family interference with work (FIW) can significantly influence both job and family satisfaction. Studies One, and Three (presented in Chapters 3, and 5 respectively) support the perspective of role boundary permeability, but not the cross-domain and same-domain perspectives. However, work interference with family (WIF) was significantly associated with job satisfaction only but not family satisfaction in Study Three (Chapter 5), which echoes the same-domain perspective. The above discussion extends the debate about the mechanism of WIF/FIW with job/family satisfaction into an immigrant population. Those different findings reflect the complexity of work-family experiences among immigrant populations, and require further investigation in the future.

**Acculturation.** Although researchers have suggested that acculturation plays a crucial role in work-family experiences, little attention has been given to the role of acculturation in work-family research. This thesis research consists of several studies to explore the role of acculturation in work-family experiences among Chinese immigrants. Specifically, Study One (Chapter 3) and Study Two (Chapter 4) examined its moderation role between WFC and several antecedents/consequences. Study Three (Chapter 5) investigated the role of

acculturation in predicting WFC. Study Four (Chapter 6) further inspected the value acculturation of Chinese immigrants, and whether value acculturation influenced their work-family experiences, using a qualitative approach.

Generally, this research found that visible artefact acculturation (e.g. customs, eating habits, language usage) has little moderation effect on the relationships of antecedents and consequences with WFC. The rationale behind this finding would be that Chinese immigrants prefer to maintain their traditional Chinese cultural values (Lu, Samaratunge, & Härtel, 2012), which has been confirmed in Study Four. Study Four found that most Chinese immigrants had a low level of value acculturation, and strongly held their traditional Chinese cultural values, which largely affected their work-family experiences. In addition, this thesis research also found that acculturation could transfer its influence to WFC via the mediator of subjective well-being. It means that when immigrants obtain a high/low level of acculturation, they will have high/low subjective well-being, which may then induce a low/high level of WFC.

This research contributes to the work-family literature by highlighting the role of acculturation in the work-family experiences of Chinese immigrants. This is important, as immigrants' values, which can be adjusted during the process of acculturation, will influence their expectations and behaviors towards family and work (Lazarova et al., 2010). The exploration of value acculturation in this study may pave a fruitful avenue for future work-family research on immigrant populations. That is, value acculturation should be included when researchers investigate work-family experiences among immigrants in the future.

Practically, the findings suggest that immigration services should include programs not only focusing on the surface levels of acculturation, such as English learning programs, but also trying to introduce the differences between host and home cultural values. These programs could help Chinese immigrants to understand host values and get involved in the mainstream

culture and society actively. Furthermore, organizations should conduct workshops to comprehensively interpret organizational guidelines, policies, and culture for immigrant employees to engage into the new working environments, which could facilitate their work-related acculturation. In addition, cultural adjustment training programs should be enacted by organizations for all employees, especially for managers, to improve their understanding of nuanced cultural differences, which would aid both human resource managers and immigrant employees to function successfully in a diverse workforce (Meyer, 2014).

**Coping strategies.** It is crucial to explore strategies that can be used to cope with WFC, which has negative influence on individuals' work, family and organization. However, it is uncertain whether the coping strategies found in previous Western research are efficacious for Chinese immigrants, since coping mechanisms may be influenced by immigrants' changing values and beliefs in the acculturative process (Lam & Zane, 2004). Accordingly, Study Four (presented in Chapter 6) investigated how Chinese immigrants cope with the WFC they experienced. Several important findings are below. First, some coping strategies of Chinese immigrants were also largely influenced by Chinese values they preserved. Second, one strategy will not be effective enough for everyone to handle WFC, as almost all coping strategies have advantages and disadvantages. Individuals need to search for a number of strategies rather than a single strategy to cope with WFC. Third, since some immigrants utilizing the strategy of compartmentalization still experienced high WFC, the widespread belief that separation of work and family can reduce WFC is not as effective as people may perceive. The third finding implies that whether the strategy of compartmentalization is effective or not may depend on people's perceived control over the boundaries between work and family domains which are increasingly blurring in the contemporary era (Kossek & Lautsch, 2012). For example, if an individual perceives him/herself to have a high level of control over his/her work-family relationship, he/she may have the capability to intentionally

prevent emails and calls related to work from impinging upon his/her family (Kossek & Lautsch, 2012). Overall, this research enriches the growing literature of coping with the conflict between home and work by qualitatively investigating Chinese immigrants' coping mechanisms of WFC within the context of acculturation, and demonstrates that this is an important research area in need of additional empirical consideration.

### **Limitations**

The present study has several limitations. First, the results of this research may be constrained by the self-report data this research used, since these data may have influenced participants' responses. However, this research adopted a longitudinal design and employed structural equation modelling, which could help reduce the effects of common method variance generated in the process of self-report (Doty & Glick, 1998; Kenny, 2008).

Second, the quantitative studies (Studies Two and Three) may be limited by the partial-longitudinal design. Cole and Maxwell (2003) described the two-wave longitudinal panel which was used in the current research as a partial-longitudinal design. Therefore, those findings in Studies Two and Three might not be able to provide definitive evidence for the causal relationships hypothesized. Furthermore, different time intervals in a longitudinal design may result in different effect sizes, and short time intervals may cause less causal effects (Zapf, Dormann, & Frese, 1996). The 6-month longitudinal design in this research may underestimate the effect of acculturation on the relationships this research examined.

Third, caution is needed in generalizing our findings. One of the reasons is that our study only focused on Chinese immigrants in one country, New Zealand. The current findings may not generalize to immigrants from other cultures, or to Chinese immigrants in countries other than New Zealand. Furthermore, the size of immigrant populations in organizations may influence acculturation levels of immigrant employees. However, in our survey, we were not



able to identify the size of immigrant populations in the organizations our participants worked for, which may also prevent the findings from generalizing. In addition, this research only concentrated on the first generation of Chinese immigrants (who were born overseas). Therefore, the findings may not be suitable to apply to Chinese who were born in New Zealand.

Fourth, the sample size of Study Four was relatively small ( $n = 33$ ), which constrains us from applying the findings to the whole Chinese immigrant population. Fifth, the qualitative Study Four divided the two compared groups (high and low WFC) according to the overall scores of WFC rather than the scores of each dimension of WFC. Therefore, the coping strategies identified in Study Four may lack the ability to reduce a specific type of WFC.

### **Recommendations for Future Research**

Although the present research contributed to the knowledge about work-family experiences among Chinese immigrants, more work-family research on immigrant populations is warranted, and future research should continue to investigate the work-family experiences among those populations in order to keep pace with the prevalence of migration worldwide. According to the limitations addressed and discussion in each study, several recommendations for future work-family research among immigrant populations are presented below.

Regarding research methods, a full-longitudinal design with at least three waves may be necessary, as this kind of design will be beneficial for obtaining definitive evidence of causal relationships between variables (Cole & Maxwell, 2003). For the time gap between every two waves, over long periods of time or a life course may be needed to provide full insight into the role of acculturation, since acculturation progresses at a very slow pace in the first decade (Taras et al., 2013).

In regard to antecedents of WFC, there has been an abundance of research that has investigated the antecedents, however, antecedents related to acculturation are still under-

researched, since the current research found that some antecedents of WFC among immigrants are culture-related. As such, it may be particularly important that future work-family researchers should be further dedicated to investigating culture-related antecedents of WFC among immigrant populations juggling dual cultures.

Regarding consequences of WFC, this thesis research contributes to the ongoing debate about the same-domain and cross-domain, and boundary-permeability perspectives, by testing the relationships of WIF/FIW with job/family satisfaction. However, some results are contradictory (mentioned in page 183). Therefore, future work-family research might need to further investigate those relationships in different populations or different cultural settings in order to draw a clear picture of those relationships.

With respect to coping with WFC, this research found that most of the coping strategies identified among Chinese immigrants exhibit pros and cons. This suggests that one strategy will not work for everyone to deal with WFC. Therefore, it is crucial for future research to seek particular coping strategies to match a certain group of people who have similar personality or characteristics. Moreover, people may not be able to effectively cope with WFC by using one single coping strategy, and future research could address the efficaciousness of different combinations of coping strategies, which will enhance people's capability to balance their work and family. Besides, future research should draw more attention to how people should function to alleviate WFC when work and family are integrated, rather than attempting to figure out methods of separating work and family domains. Importantly, when future work-family researchers examine coping strategies among immigrants, they should be aware of the effect of home cultures on these strategies. Finally, future qualitative research on coping with WFC may need to categorize participants according to scores on the dimensions of WFC, and more specific coping strategies aiming at reducing a certain type of WFC may obtain.

Regarding acculturation, not only is visible artefact acculturation needed to be further investigated, but also value acculturation should be emphasized and scrutinized in-depth in work-family research on immigrant populations. In response to that, a comprehensive instrument for measuring value acculturation is needed, since acculturation of immigrants' values related to work and family has remained largely unexplored in previous research. An appropriate instrument will enrich the work-family research in the context of acculturation in the future.

### **Overall Conclusion**

To conclude, this research utilized cross-sectional data, longitudinal data, and interviews to investigate the work-family experiences among Chinese immigrants in New Zealand setting, which adds new knowledge to the work-family literature, and extends work-family research to an immigrant population. It is also apparent from this study that more research is needed to examine the impact of acculturation, including both visible artefact acculturation and value acculturation, on work-family experiences among immigrant populations. The findings in this research provide information that will be useful to immigrants, organisations, management practitioners, and the New Zealand Immigration Department.

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## **APPENDICES**

**Appendix 1: Demographic characteristics of the respondents at Time-1 (n = 577)**

<b>Demographic variables</b>	<b>N</b>	<b>%</b>
<b>Gender</b>		
- Male	286	49.7
- Female	284	49.3
<i>Missing</i>	6	1.0
<b>The highest level of education you have completed</b>		
Before coming to New Zealand		
- Less than high school	79	13.7
- High school graduate	118	20.5
- Diploma	81	14.1
- Undergraduate degree	189	32.8
- Postgraduate degree (e.g. MA, PhD, etc)	81	14.1
<i>Missing</i>	28	4.9
From New Zealand		
- Less than high school	3	.5
- High school graduate	6	1.0
- Diploma	59	10.2
- Undergraduate degree	169	29.3
- Postgraduate degree (e.g. MA, PhD, etc)	119	20.7
<i>Missing</i> <sup>1</sup>	220	38.2
<b>Type of job</b>		
- Agriculture, mining and construction	11	1.9
- Administration (clerical and administrative services, public administration)	59	10.2
- Education and training	82	14.2
- Financial, insurance, accounting, investment, tax and real estate	31	5.4
- Food and accommodation services	51	8.9
- Health care and social assistance	32	5.6
- Manufacturing (factory), transportation and logistics	19	3.3
- Personal services (e.g. tourism, cleaning, laundry, protective services etc.)	61	10.6
- Professional, scientific and technical services	126	21.9
- Wholesale, retail, sales and trade	46	8.0
- Others	6	1.0
<i>Missing</i>	52	9.0
<b>Number of people who are dependent on you at home</b>		
- Mean		1.41
- SD		1.23
- Range 0	154	26.7
1	157	27.3
2	142	24.5
3	68	11.8
4	19	3.3
5	9	1.6
7	1	.2
<i>Missing</i>	27	4.7
<b>Age (years)</b>		
- Mean		38.40
- SD		10.18
- Minimum		19
- Maximum		65
<i>Missing</i>		22 (3.8%)

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**How long have you lived in New Zealand (months)**

- Mean	132.54
- SD	74.94
- Minimum	1
- Maximum	540
<i>Missing</i>	20 (3.5%)

**How long have you been working in your current job  
in New Zealand (months)**

- Mean	64.70
- SD	58.59
- Minimum	1
- Maximum	540
<i>Missing</i>	13 (2.3%)

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<sup>1</sup> *Missing* does not fully mean that participants omitted this question, because most of them did not get any of the represented degrees in New Zealand.

## Appendix 2: Demographic characteristics of the respondents at Time-2 (n = 264)

Demographic variables	N	%
<b>Gender</b>		
- Male	137	51.9
- Female	127	48.1
Missing	0	0
<b>The highest level of education you have completed</b>		
Before coming to New Zealand		
- Less than high school	31	11.7
- High school graduate	57	21.6
- Diploma	43	16.3
- Undergraduate degree	89	33.7
- Postgraduate degree (e.g. MA, PhD, etc)	42	15.9
Missing	2	.8
From New Zealand		
- Less than high school	2	.8
- High school graduate	0	0
- Diploma	32	12.1
- Undergraduate degree	76	28.8
- Postgraduate degree (e.g. MA, PhD, etc)	61	23.1
Missing <sup>1</sup>	93	35.2
<b>Have NZ education experience</b>		
- NO	93	35.2
- YES	171	64.8
<b>Type of job</b>		
- Agriculture, mining and construction	21	8.0
- Administration (clerical and administrative services, public administration)	13	4.9
- Education and training	41	15.5
- Financial, insurance, accounting, investment, tax and real estate	15	5.1
- Food and accommodation services	24	9.7
- Health care and social assistance	22	8.3
- Manufacturing (factory), transportation and logistics	14	5.3
- Personal services (e.g. tourism, cleaning, laundry, protective services etc.)	12	4.5
- Professional, scientific and technical services	50	18.9
- Wholesale, retail, sales and trade	28	10.6
- Others	21	8.0
Missing	3	1.1
<b>Number of people who are dependent on you at home</b>		
- Mean		1.42
- SD		1.31
- Range 0	75	28.4
1	81	30.7
2	56	21.2
3	35	13.3
4	12	4.5
5	2	.8
6	2	.8
7	1	.4
<b>Age (years)</b>		
- Mean		39.77
- SD		10.50
- Minimum		20
- Maximum		65
Missing		2 ( .8%)
<b>How long have you lived in New Zealand (months)</b>		
- Mean		140.23



- SD	82.16
- Minimum	9
- Maximum	720
<b>How long have you been working in your current job in New Zealand (months)</b>	
- Mean	66.67
- SD	58.05
- Minimum	0
- Maximum	324
<i>Missing</i>	2 ( .8%)

<sup>1</sup> *Missing* does not fully mean that participants omitted this question, because most of them did not get any of the represented degrees in New Zealand.

**Appendix 3: Demographic characteristics of the interviewees (n = 33).**

Demographic variables	N
<b>Gender</b>	
- Male	16
- Female	17
<b>Age (years)</b>	
- Mean	40.60
- Range 18 - 29	4
30 - 39	8
40 - 49	14
50 +	7
<b>Number of dependents</b>	
- Mean	1.45
- Range 0	8
1	14
2	2
3	6
4	3
<b>Resident length (months)</b>	
- Mean	149.15
- Minimum	35
- Maximum	270
<b>Job tenure (months)</b>	
- Mean	72.27
- Minimum	9
- Maximum	186
<b>Highest educational level</b>	
- Less than high school	1
- High school graduate	0
- Diploma	3
- Undergraduate degree	14
- Postgraduate degree (e.g. MA, PhD, etc)	15
<b>Had educational experience in New Zealand</b>	
- Yes	24
- No	9

#### Appendix 4: Contact Letter to Organization for Survey

Sudong Shang  
 School of Psychology  
 University of Waikato  
 Telephone: 022 1019880,  
 E-mail: ss447@students.waikato.ac.nz

Date.....

Dear.....

My name is Shang Sudong. I am a doctoral student in the School of Psychology at the University of Waikato in New Zealand. I am conducting PhD research on “Work-Family Conflict: A Study of Chinese Immigrants in New Zealand”.

The objectives of this study are: (a) to investigate the degree of work-family conflict among Chinese employees; (b) to determine the causes and outcomes of work-family conflict in this group; (c) to examine effects of cultural adaptation on their work and family and (d) to explore possible methods to reduce this conflict. This research may be helpful for organizations with diverse employees to develop appropriate programs to deal with work-family matters.

My research focuses on the Chinese immigrants who are working at least 15 hours per week and came from mainland China, Hong Kong, Taiwan, Singapore or Malaysia. I will appreciate it if you could introduce this research to your Chinese employees. All responses will be treated in strict confidence and used for research purposes only. Your organization’s participation will be valuable to my academic research, and will provide more comprehensive understanding of work-family issues. I will contact you in 10 days to discuss this research and your organization’s possible participation.

This research has received ethics approval from the Research and Ethics Committee of the School of Psychology, University of Waikato. You are assured that the principles of ethical conduct of this research will be upheld in all respects. My supervisors for this study are Professor Michael O’Driscoll, Dr. Donald Cable and Dr. Maree Roche who work in the School of Psychology at the University of Waikato. If you have any questions relating to this study, you may contact me, my chief supervisor or the ethics committee.

**Professor Michael O’Driscoll**

Email: m.odriscoll@waikato.ac.nz Phone: 07 838 4466 extn. 8899

**Ethics Committee of the Psychology Department, University of Waikato:**

**Dr Nicola Starkey**

Email: nstarkey@waikato.ac.nz Phone: 078384080 extn. 6472

Your sincerely,

Sudong Shang

## Appendix 5: Introduction to Survey (in English)

Dear participant,

My name is Shang Sudong. I am a doctoral student in the School of Psychology at the University of Waikato in New Zealand. I would like to invite you to participate in my research on work-family conflict, if you are currently working at least 15 hours per week and came from mainland China, Hong Kong, Taiwan, Singapore or Malaysia. The purpose of this research is to examine work-family conflict experienced by Chinese immigrants, and explore ways to improve their well-being.

This questionnaire will take about 20-25 minutes to complete. All responses will remain strictly confidential and will be used for research purposes only. Your organization won't have access to individual responses. In any report I might publish, I will not include any information that will make it possible to identify a participant. Research records will be kept in a secured file, which only I can access.

This research is a longitudinal study which means that there are two data collection points separated by a six month interval. After completing the Time 1 questionnaire, six months later you will be re-invited to respond to the Time 2 questionnaire.

This research has received ethics approval from the Research and Ethics Committee of the Psychology Department, University of Waikato. You are assured that the principles of ethical conduct of this research will be upheld in all respects. You can withdraw from this research at any time for any reason without any disadvantages.

In order to match the Time 1 and Time 2 questionnaires, you will need to create your own code-word. **Please be advised that the initials of your name, date of birth, month of birth and all responses you give won't be seen by your organization. There is no possibility that the information you provide can lead to your identification.**  
**How to create your code-word:**

1. Insert the initials of your name. For example, if your name is Zhang San (family name/given name) = zs
2. Insert day of your birth. For example, if you were born on the 5<sup>th</sup> = 05, 21<sup>th</sup> = 21 etc.
3. Insert the month of your birth. For example, if you were born in April = 04, October = 10 etc.

For example, if your name is Zhang San, born on 5<sup>th</sup> April, your code-word would then be: zs/05/04

Please insert your code-word here:

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
(Initials)      (Day of birth)      (Month of birth)

(For the Time 1 survey)

If you change your name during the next six months, please use your original name on the subsequent survey.

(For the Time 2 survey)

If you changed your name during the last six months, please use your original name that you used in the Time 1 survey.

Please contact me with any questions relating to this study through any of the following means:

**Researcher: Shang Sudong**

Email: ss447@waikato.ac.nz.

Phone: 0221019880

**Chief Supervisors: Professor Michael O'Driscoll**

Email: m.odriscoll@waikato.ac.nz      Phone: 07 838 4466 extn. 8899

**Ethics Committee of the Psychology Department, University of Waikato: Dr Nicola Starkey**

Email: nstarkey@waikato.ac.nz

Phone: 078384080 extn. 6472

## Appendix 6: 问卷调查说明 (in Simplified Chinese)

尊敬的朋友,

我是商苏东, 新西兰怀卡托大学心理学系博士研究生。如果您当前每周至少工作15小时, 并且来自中国大陆、香港、台湾、新加坡或者马来西亚这几个地区。真诚的希望您能参与我的研究中来。这项研究旨在研究中国移民工作和家庭状况, 以及如何提高他们的生活幸福感。

这份调查只需要大约15-20分钟来完成。所有结果都将受到严格的保密, 并且仍将只用于研究。在我可能发表的报告中, 不会泄漏任何人的个人信息。调查结果将会保存在一个安全的地方, 只有我本人才能查看。您所在的公司或者组织也不会看到你的问卷。这项研究采用纵向研究, 也就是在六个月内对同一个参与者要收集两次数据。当你完成第一次问卷调查(时间1)后六个月, 您将会重新邀请去参与第二次问卷调查(时间2)。

这项研究已获得怀卡托大学心理学系道德与伦理委员会的批准。确保您的各项权利不会被此次研究伤害。您可以在递交问卷前任何时间以任何理由退出这项研究。如果填好的问卷已经交给我, 问卷将不会被退回。

为了匹配第一次和第二次问卷, 将需要您创建您自己的代码。你所在的单位不会看到你的名字缩写、出生日期、出生地点以及所有你提供的信息。这些信息也不会泄漏你的身份。如何创建您的代码:

1. 您的姓名首字母缩写。例如, 如果您的姓名是 张三 (姓/名) =zs
2. 您的出生的月份。例如, 如果您是出生在4月=4, 10月=10以此类推。
3. 您的出生日。例如, 如果你出生在5号=05, 21号=21以此类推。

例如, 如果您的姓名是张三, 出生于4月5日, 您的代码为:zs/04/05

请创建您的代码: \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_

(首字母缩写) (出生月) (出生日)

在今后六个月期间, 如果您可能会更改您的名字, 请在后续的调查问卷中使用此次调查的名字。如果你有任何问题请通过以下任何一个联系方式联系我们:

研究员: 商苏东

邮件: ss447@students.waikato.ac.nz 电话: 022 1019880

导师: Pro. Michael O'Driscoll

邮件: m.odriscoll@waikato.ac.nz 电话: 07 8384466 转 8899

怀卡托大学心理学伦理委员会: Dr. Nicola Starke

邮件: nstarkey@waikato.ac.nz 电话: 07 8384080 转 6472

## Appendix 7: 問卷調查說明 (in Traditional Chinese)

尊敬的朋友,

我是商蘇東, 新西蘭懷卡托大學心理學系博士研究生。如果您當前每周至少工作 15 小時, 並且來自中國大陸、香港、臺灣、新加坡或者馬來西亞這幾個地區。真誠的希望您能參與我的研究中來。這項研究旨在研究中國移民工作和家庭狀況, 以及如何提高他們的生活幸福感。

這份調查只需要大約 15-20 分鐘來完成。所有結果都將受到嚴格的保密, 並且仍將只用於研究。在我可能發表的報告中, 不會洩漏任何人的個人信息。調查結果將會保存在壹個安全的地方, 只有我本人才能查看。您所在的公司或者組織也不會看到妳的問卷。這項研究採用縱向研究, 也就是在六個月內對同壹個參與者要收集兩次數據。當妳完成第壹次問卷調查 (時間 1) 後六個月, 妳將會重新邀請去參與第二次問卷調查 (時間 2)。

這項研究已獲得懷卡托大學心理學系道德與倫理委員會的批准。確保您的各項權利不會被此次研究傷害。您可以在遞交問卷前任何時間以任何理由退出這項研究。如果填好的問卷已經交給我, 問卷將不會被退回。

為了匹配第壹次和第二次問卷, 將需要您創建您自己的代碼。妳所在的單位不會看到妳的名字縮寫、出生日期、出生地點以及所有妳提供的信息。這些信息也不會洩漏妳的身份。如何創建您的代碼:

1. 您的姓名首字母縮寫。例如, 如果您的姓名是 張三 (姓/名) =zs

2. 您的出生的月份。例如, 如果您是出生在 4 月=4, 10 月=10 以此類推。

3. 您的出生日。例如, 如果妳出生在 5 號=05, 21 號=21 以此類推。

例如, 如果您的姓名是張三, 出生於 4 月 5 日, 您的代碼為:zs/04/05

請創建您的代碼: \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_

(首字母縮寫) (出生月) (出生日)

在今後六個月期間, 如果您可能會更改您的名字, 請在後續的調查問卷中使用此次調查的名字。

如果妳有任何問題請通過以下任何壹個聯系方式聯系我們:

研究員: 商蘇東

電子郵件: ss447@waikato.ac.nz 電話: 022 1019880

導師: Professor Michael O'Driscoll

電子郵件: m.odriscoll@waikato.ac.nz 電話: 07 8384466 轉 8899

懷卡托大學心理學系倫理委員會: Dr. Nicola Starkey

電子郵件: nstarkey@waikato.ac.nz 電話: 07 8384080 轉 6472

## Appendix 8: Time-1 and Time-2 Questionnaire (English Version)

Were you born in Mainland China, Hong Kong, Taiwan, Malaysia or Singapore?

Yes ☐

No ☐ → Thank you for your interest. You can quit this survey.

Do you work at least 15 hours per week (including self-employment)?

Yes ☐

No ☐ → Thank you for your interest. You can quit this survey.

Are you living with at least one of following family members in New Zealand: your spouse, partner (girl/boy friend), parents, children, siblings, or some other relatives?

Yes ☐

No ☐ → Thank you for your interest. You can quit this survey.

**If you answered “Yes” to all the three questions above, please proceed to the following items.**

### SECTION A:

In modern life, work and family are the two main domains of our lives. For each of the statements below, please indicate **to what extent you agree or disagree** with the statement. Circle the number in the boxes according to the scales below:

1=Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly agree

1. My work keeps me from my family activities more than I would like.	1	2	3	4	5
2. The time I must devote to my job keeps me from participating equally in household responsibilities and activities.	1	2	3	4	5
3. I have to miss family activities due to the amount of time I must spend on work responsibilities.	1	2	3	4	5
4. The time I spend on family responsibilities often interfere with my work responsibilities.	1	2	3	4	5
5. The time I spend with my family often causes me not to spend time in activities at work that could be helpful to my career.	1	2	3	4	5
6. I have to miss work activities due to the amount of time I must spend on family responsibilities.	1	2	3	4	5
7. When I get home from work I am often too frazzled to participate in family activities/ responsibilities.	1	2	3	4	5
8. I am often so emotionally drained when I get home from work that it prevents me from contributing to my family.	1	2	3	4	5

9. Due to all the pressures at work, sometimes when I come home I am too stressed to do the things I enjoy.	1	2	3	4	5
10. Due to stress at home, I am often preoccupied with family matters at work.	1	2	3	4	5
11. Because I am often stressed from family responsibilities, I have a hard time concentrating on my work.	1	2	3	4	5
12. Tension and anxiety from my family life often weakens my ability to do my job.	1	2	3	4	5

## SECTION B:

13. How many hours do you normally work per week? \_\_\_\_\_

Please indicate **how often** the following working statuses happen to you. Circle the number in the boxes according to the scales below:

1= Never;                      2= Once or twice per month;                      3=Once or twice per week;  
4=Once or twice per day;                      5=Several times per day

14. My job requires me to work very fast.	1	2	3	4	5
15. My job requires me to work very hard.	1	2	3	4	5
16. My job leaves me with little time to get things done.	1	2	3	4	5
17. There is a great deal to be done.	1	2	3	4	5
18. I have to do more work than I can do well.	1	2	3	4	5

Please indicate **how often** or **to what extent** the following working statuses happen to you. Circle the number in the boxes according to the scales below:

1=Never;    2=Very Little;    3=Some;    4=A Moderate Amount;    5=A lot

19. To what extent is there conflict about the work between me and my colleagues?	1	2	3	4	5
20. How often does the conflict about ideas happen between me and my colleagues?	1	2	3	4	5
21. How often do my colleagues disagree with me on opinions of the work?	1	2	3	4	5
22. To what extent are there differences of opinions between me and my colleagues?	1	2	3	4	5



Please indicate **to what extent you agree with** the following statements regarding your workplace. Circle the number in the boxes according to the scales below:

1=Strongly disagree      2=Moderately disagree      3=Slightly disagree 4=Slightly agree  
5=Moderately agree      6=Strongly agree

23. The atmosphere here is often charged with hostility.	1	2	3	4	5	6
24. Backbiting is a frequent occurrence.	1	2	3	4	5	6
25. One party frequently undermines the other.	1	2	3	4	5	6
26. There are often feelings of hostility among parties.	1	2	3	4	5	6
27. Much "plotting" takes place "behind the scenes" (幕后操作经常发生).	1	2	3	4	5	6

Your employment status: Employee ☐

Self-employed ☐

**If you choose “Self-employed”, you can skip items 28-41. But if you choose “Employee”, please continue. Thanks.**

Please indicate **to what extent you agree** that each of the following statements represents the philosophy or beliefs of your organization (**remember, these are not your own personal beliefs —but pertain to what you believe is the philosophy of your organization**). Circle the number in the boxes according to the scales below:

1=Strongly disagree;    2=Disagree;    3=Neutral;    4=Agree;    5=Strongly agree

28. Work should be the primary priority in a person’s life.	1	2	3	4	5
29. Long hours inside the office are the way to achieving advancement.	1	2	3	4	5
30. It is best to keep family matters separate from work.	1	2	3	4	5
31. It is considered taboo to talk about life outside of work.	1	2	3	4	5
32. Expressing involvement and interest in non-work matters is viewed as healthy.	1	2	3	4	5
33. Employees who are highly committed to their personal lives cannot be highly committed to their work.	1	2	3	4	5
34. Attending to personal needs, such as taking time off for sick children is frowned upon.	1	2	3	4	5
35. Employees should keep their personal problems at home.	1	2	3	4	5

36. The way to advance in this company is to keep non-work matters out of the workplace.	1	2	3	4	5
37. Individuals who take time off to attend to personal matters are not committed to their work.	1	2	3	4	5
38. It is assumed that the most productive employees are those who put their work before their family life.	1	2	3	4	5
39. Employees are given ample opportunity to perform both their job and their personal responsibilities well.	1	2	3	4	5
40. Offering employees flexibility in completing their work is viewed as a strategic way of doing business.	1	2	3	4	5
41. The ideal employee is the one who is available 24 hours a day.	1	2	3	4	5

### SECTION C:

Please indicate **how often** the following statuses happen to you. Circle the number in the boxes according to the scales below:

1= Never;      2= Seldom;      3= Sometimes;      4= Often;      5= Very Often

42. My family makes too many demands on me.	1	2	3	4	5
43. I have too much family-related work to do.	1	2	3	4	5
44. In general, I am overwhelmed by demands of my family.	1	2	3	4	5

The following items (45-53) might be sensitive for you. If you feel uncomfortable with any of the issues below, please contact Shakti Community Council, Landline 0800 742584 (0800 SHAKTI).

Please indicate **to what extent** you think the following item is **true**. Circle the number in the boxes according to the scales below:

1= Mostly true;      2= Somewhat true;      3= Somewhat false;      4= Mostly false

45. We quarrel a lot in our family.	1	2	3	4
46. Family members rarely become openly angry.	1	2	3	4
47. Family members sometimes get so angry they throw things.	1	2	3	4
48. Family members hardly ever lose their tempers.	1	2	3	4
49. Family members often criticize each other.	1	2	3	4
50. Family members sometimes hit each other.	1	2	3	4

51.If there is a disagreement in our family, we try hard to smooth things over and keep the peace.	1	2	3	4
52.Family members often try to one-up or out-do each other (家庭成员见经常争强好胜).	1	2	3	4
53.In our family, we believe you don't ever get anywhere by raising your voice.	1	2	3	4

Please indicate **to what extent you agree** that each of the following statements. Circle the number in the boxes according to the scales below:

1=Very strongly disagree;      2=Strongly disagree;      3=Mildly disagree;  
4=Neutral;      5=Mildly agree;      6=Strongly agree;      7=Very strongly agree

54. My family really tries to help me.	1	2	3	4	5	6	7
55. I get the emotional help and support I need from my family.	1	2	3	4	5	6	7
56. I can talk about my problems with my family.	1	2	3	4	5	6	7
57. My family is willing to help me make decisions.	1	2	3	4	5	6	7

#### SECTION D:

Please indicate **to what extent you agree** that each of the following statements. Circle the number in the boxes according to the scales below:

1=Strongly disagree;      2=Disagree;      3=Slightly disagree;  
4=Neither agree nor disagree;      5=Slightly agree;      6=Agree;      7=Strongly agree

58. Generally, I am satisfied with my job.	1	2	3	4	5	6	7
59. In general, I don't like my job.	1	2	3	4	5	6	7
60. In general, I like working here.	1	2	3	4	5	6	7
61. My family life is very enjoyable.	1	2	3	4	5	6	7
62. Generally, the family life I have is great.	1	2	3	4	5	6	7
63. In general, I am satisfied with my family life.	1	2	3	4	5	6	7

Please indicate **how often you have experienced** each of the following events **in the past three months**. Circle the number in the boxes according to the scales below:

1=Never; 2=Very occasionally ; 3=Sometimes often; 4=Very often; 5=All the time

64. Been able to concentrate on what I am doing.	1	2	3	4	5
65. Lost much sleep over worry.	1	2	3	4	5
66. Felt I am playing a useful part in things.	1	2	3	4	5
67. Felt capable of making decisions about things.	1	2	3	4	5
68. Felt constantly under strain.	1	2	3	4	5
69. Felt I couldn't overcome my difficulties.	1	2	3	4	5
70. Been able to enjoy my normal day-to-day activities.	1	2	3	4	5
71. Been able to face up to my problems.	1	2	3	4	5
72. Been feeling unhappy or depressed.	1	2	3	4	5
73. Been losing confidence in myself.	1	2	3	4	5
74. Been thinking of myself as a worthless person.	1	2	3	4	5
75. Been feeling reasonably happy, all things considered.	1	2	3	4	5

Please indicate **how often you have experienced** each of the following symptoms **over the past month**. Circle the number in the boxes according to the scales below:

1=Not at all; 2=Once or twice over the past month;  
3=Once or twice per week; 4=Most days; 5=Every day

76. Nausea or vomiting	1	2	3	4	5
77. Backache	1	2	3	4	5
78. Trouble sleeping	1	2	3	4	5
79. Headache	1	2	3	4	5
80. Acid indigestion or heartburn	1	2	3	4	5
81. Eye strain	1	2	3	4	5
82. Diarrhoea	1	2	3	4	5
83. Stomach cramps (Not menstrual)	1	2	3	4	5
84. Constipation	1	2	3	4	5

85. Ringing in the ears	1	2	3	4	5
86. Loss of appetite	1	2	3	4	5
87. Dizziness	1	2	3	4	5
88. Tiredness or fatigue	1	2	3	4	5

## SECTION E: Acculturation

Immigrants will experience a complicated process of adapting to a new culture and society, which is called acculturation. Please circle the number that **best represents your view** on each item of acculturation.

1=Not very much;    2=A little;    3=Somewhat;    4=Much;    5=Very much

89. How well do I speak English language?	1	2	3	4	5
90. How well do I understand English language?	1	2	3	4	5
91. How well do I read and write in English language?	1	2	3	4	5
92. How much do I like New Zealand food?	1	2	3	4	5
93. How knowledgeable am I about the history of mainstream New Zealanders?	1	2	3	4	5
94. How knowledgeable am I about New Zealand culture and traditions?	1	2	3	4	5
95. How much do I practice New Zealand traditions and keep the New Zealand holidays?	1	2	3	4	5
96. How much do I feel I have in common with mainstream New Zealanders?	1	2	3	4	5
97. How much do I interact and associate with mainstream New Zealanders?	1	2	3	4	5
98. How much would I like to interact and associate with mainstream New Zealanders?	1	2	3	4	5
99. How proud am I to be part of mainstream New Zealanders?	1	2	3	4	5
100. How negative do I feel about mainstream New Zealanders?	1	2	3	4	5

Please circle the number that **best represents your view** on the following two items of acculturation.

1= Never;      2= Seldom;      3=Sometimes;      4= Often;      5= Very Often

101. How often do I listen to music, look at movies and magazines similar with mainstream New Zealand culture?	1	2	3	4	5
102. How often do I eat New Zealand food?	1	2	3	4	5

## SECTION F: Demographic Information

1. What is your gender?

Male ☐

Female ☐

2. How old are you? \_\_\_\_\_ (Years)

3. Number of people who are dependent on you at your home? \_\_\_\_\_

4. How long have you lived in New Zealand? \_\_\_\_\_ Years \_\_\_\_\_ Months

5. What is the highest level of education you have completed?

	Less than high school	High school graduate	Diploma	Undergraduate degree	Postgraduate degree (e.g. MA, PhD, etc.)
Before you came to New Zealand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
From New Zealand (Please don't choose, if you don't get any of following degrees from New Zealand.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. How long have you been working in your current job? \_\_\_\_ Years \_\_\_\_ Months

7. What is the type of your job (e.g. education, administration, and engineering)?

\_\_\_\_\_

***--Thank you for completing this questionnaire and for being part of my study. I appreciate the time and energy you have given to this study, and value your contribution to its outcomes.-- ☺***

Could you please record your contact details below? Because there are follow-up studies after this survey, and I can return the summary report for you. This Contact information will be separated from the questionnaire, so no other person can match your information with your responses to the questionnaire.

Name: \_\_\_\_\_

Email: \_\_\_\_\_

Or

Phone number: \_\_\_\_\_

Or

Address: \_\_\_\_\_

Or

QQ: \_\_\_\_\_ WeChat: \_\_\_\_\_

### Appendix 9: Time-1 and Time-2 Questionnaire (Simplified Chinese Version)

你出生于中国大陆，香港，台湾，马来西亚或者新加坡吗？

是的☐

不是☐→ 谢谢你的参与，你可以现在停止回答。

你每周至少工作 15 个小时吗(包括自雇)？

是的☐

没有☐→ 谢谢你的参与，你可以现在停止回答。

你和你的家庭成员一起生活在新西兰吗（家庭成员可以是：你的配偶，或者孩子，或者父母，或者男/女朋友，或者兄弟姐妹,或者其他亲属）？

是的☐

没有☐→ 谢谢你的参与，你可以现在停止回答。

如果以上三个问题你都回答“是的”，请继续回答以下问题。谢谢。

#### 第一部分：

下面关于家庭和工作的表述，请指出在何种程度上你同意或不同意。根据下面的量表，圈出符合你的选项：

1=非常不同意； 2=不同意； 3=中立/没意见； 4=同意； 5=非常同意

1. 工作导致我无法参与家庭活动。	1	2	3	4	5
2. 工作使我没有时间做家务并且参与家庭活动。	1	2	3	4	5
3. 由于完成工作需要大量时间，我不得不错过一些家庭活动。	1	2	3	4	5
4. 如果我在家庭上花费时间过多，就会影响我的工作。	1	2	3	4	5
5. 与家人在一起的时间过多，使自己经常无法参与对职业发展有益的活动。	1	2	3	4	5
6. 由于花费大量时间处理家庭事务，我不得不错过一些与工作相关的活动。	1	2	3	4	5
7. 下班回家后经常身心疲惫以至于无法参与家庭活动并履行家庭责任。	1	2	3	4	5
8. 下班回家后经常情绪低落，我无法对家庭承担应有的责任。	1	2	3	4	5
9. 工作压力经常导致我回家后过于紧张而无法做自己喜欢的事情。	1	2	3	4	5
10. 家庭压力导致自己在工作时经常想起家里的事情。	1	2	3	4	5
11. 来自家庭的压力使自己很难集中精力工作。	1	2	3	4	5
12. 来自家庭生活的紧张和焦虑经常削弱我的工作能力。	1	2	3	4	5



**第二部分：**

13. 你每周工作**多少小时**? \_\_\_\_\_

请指出下列工作状况发生在你身上的**频率**。根据下面的量表，圈出符合你的选项：

1=从来没有； 2=每月一两次； 3=每周一两次； 4=每天一两次； 5=一天好几次

14. 我不得不快速工作。	1	2	3	4	5
15. 我需要拼命工作。	1	2	3	4	5
16. 我要在短时间内完成工作。	1	2	3	4	5
17. 我要应付大量的工作。	1	2	3	4	5
18. 我不得不超负荷工作。	1	2	3	4	5

请指出下列工作状况发生在你身上的**频率或者程度**。根据下面的量表，圈出符合你的选项：

1=从来没有； 2=很少； 3=有时； 4=不多也不少； 5=很多

19. 我和同事在工作上的冲突。	1	2	3	4	5
20. 我和同事经常会在观点上发生冲突。	1	2	3	4	5
21. 针对工作，我和同事各执己见。	1	2	3	4	5
22. 我和同事在工作上的观点差异。	1	2	3	4	5

请指出在**多大程度**上你**同意**以下关于工作场所的描述。根据下面的量表，圈出符合你的选项：

1=非常不同意； 2=不同意； 3=有点不同意；  
4=有点同意； 5=同意； 6=非常同意

23. 工作环境里经常充满敌意。	1	2	3	4	5	6
24. 经常有人在背后说人坏话，搬弄是非。	1	2	3	4	5	6
25. 某个团队会经常打击其他团队。	1	2	3	4	5	6
26. 各个团队之间经常相互敌视。	1	2	3	4	5	6

27. 幕后操作经常发生。	1	2	3	4	5	6
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你的雇佣状态： 雇员 ☐

自雇经营 ☐

如果你选择“自雇经营”可以不做28-41，选择“雇员”请继续。谢谢

请指出在多大程度上你同意以下关于组织信念（Organizational beliefs）的陈述（**注意，不是你个人的观念，而是你认为你的公司有什么样的信念**）。根据下面的量表，圈出符合你的选项：

1=非常不同意； 2=不同意； 3=中立/没意见； 4=同意； 5=非常同意

28. 工作应该是最优先考虑的事情。	1	2	3	4	5
29. 长时间在办公室工作有利于职位的晋升。	1	2	3	4	5
30. 最好能够把家庭事务和工作分开。	1	2	3	4	5
31. 工作期间只允许谈论工作相关的话题，不允许谈论个人生活之类的话题。	1	2	3	4	5
32. 工作中谈论自己参与或者感兴趣的事情，尽管与工作无关的事，但是有益身心健康的。	1	2	3	4	5
33. 员工投入过多精力在个人生活上会影响工作。	1	2	3	4	5
34. 工作中不允许处理私事，比如请假去照顾生病的孩子。	1	2	3	4	5
35. 员工应该把私人问题保留在家里。	1	2	3	4	5
36. 在工作过程中处理与工作本身无关的事情，不利于职务晋升。	1	2	3	4	5
37. 在工作过程中处理私事被视为一种不负责任的表现。	1	2	3	4	5
38. 一个高效的员工是那些把重心放在工作上而非家庭上的人。	1	2	3	4	5
39. 应该给予员工足够多的机会既能很好的完成工作又处理好私人事务。	1	2	3	4	5
40. 为员工提供弹性工作时间是商业运作的有效途径。	1	2	3	4	5
41. 一个称职的员工应该是一天 24 小时待命。	1	2	3	4	5

**第三部分：**

请指出以下陈述发生在你身上的**频率**。根据下面的量表，圈出符合你的选项：

1=从来没有； 2=偶尔； 3=有时候； 4=经常； 5=总是

42. 我的家庭太依赖于我。	1	2	3	4	5
43. 我有太多家庭的事情要处理。	1	2	3	4	5
44. 整体而言，我觉得家庭负担太重。	1	2	3	4	5

下列问题（45-53）可能有些敏感。如果你对这些问题感到不适，请联系 Shakti Community Council, 电话：0800 742584（0800 SHAKTI）。

请指出在**多大程度**上你认为以下陈述是**正确**的。根据下面的量表，圈出符合你的选项：

1=正确； 2=某种程度上正确； 3=某种程度上错误； 4=错误

45. 在家里，家庭成员之间经常争吵。	1	2	3	4
46. 家庭成员很少会当众愤怒。	1	2	3	4
47. 家庭成员有时候特别生气以至于会摔东西。	1	2	3	4
48. 家庭成员之间相处融洽很少发脾气。	1	2	3	4
49. 家庭成员之间经常互相批评。	1	2	3	4
50. 家庭成员之间有时候会大打出手。	1	2	3	4
51. 如果家里有争执，我们会尽力调解并保持家庭和谐。	1	2	3	4
52. 家庭成员之间经常争强好胜。	1	2	3	4
53. 在家里，我们相信争吵是不会有结果的。	1	2	3	4

请指出在**多大程度**上你**赞同**以下陈述。根据下面的量表，圈出符合你的选项：

1=完全同意； 2=非常同意； 3=同意； 4=中立/没意见；

5=不同意； 6=非常不同意； 7=完全不同意

54. 家人会尽量帮助我。	1	2	3	4	5	6	7
55. 家人给予我情感上的帮助和支持。	1	2	3	4	5	6	7
56. 我能够同家人谈论我的个人问题。	1	2	3	4	5	6	7

57. 家人愿意帮助我做决定。	1	2	3	4	5	6	7
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#### 第四部分：

请指出在**多大程度**上你**赞同**以下陈述。根据下面的量表，圈出符合你的选项：

1=非常不同意； 2=不同意； 3=有点不同意； 4=中立/没意见；

5=有点同意； 6=同意； 7=非常同意

58. 总的来说，我对工作非常满意。	1	2	3	4	5	6	7
59. 总体来说，我不喜欢我的工作。	1	2	3	4	5	6	7
60. 总体来说，我喜欢在这里工作。	1	2	3	4	5	6	7
61. 我的家庭生活非常愉悦。	1	2	3	4	5	6	7
62. 总的来说，我的家庭生活非常棒。	1	2	3	4	5	6	7
63. 总的来说，我对我的家庭生活非常满意。	1	2	3	4	5	6	7

请指出在**过去三个月**你经历以下状况的**频率**。根据下面的量表，圈出符合你的选项：

1=从来没有； 2=偶尔； 3=有时候； 4=经常； 5=总是

64. 能够专注于目前所做的事情。	1	2	3	4	5
65. 因为忧虑而睡不着觉。	1	2	3	4	5
66. 感受到自己的价值。	1	2	3	4	5
67. 有能力做决定。	1	2	3	4	5
68. 一直倍感压力。	1	2	3	4	5
69. 感到困难无法克服。	1	2	3	4	5
70. 能够从日常生活中找到乐趣。	1	2	3	4	5
71. 能够面对自己的问题。	1	2	3	4	5
72. 感到不开心或者沮丧。	1	2	3	4	5
73. 对自己逐渐失去信心。	1	2	3	4	5

74. 把自己看成一个毫无价值的人。	1	2	3	4	5
75. 总的来说，觉得自己很快乐。	1	2	3	4	5

请指出在**过去一个月**你经历以下症状的**频率**。根据下面的量表，圈出符合你的选项：  
1=根本没有； 2=一两次； 3=一星期一两次； 4=经常； 5=每天都有发生

76. 恶心或者呕吐	1	2	3	4	5
77. 背部疼痛	1	2	3	4	5
78. 失眠	1	2	3	4	5
79. 头痛	1	2	3	4	5
80. 胃酸过多或胃灼热	1	2	3	4	5
81. 眼部疲劳	1	2	3	4	5
82. 腹泻	1	2	3	4	5
83. 胃绞痛（不是月经导致的）	1	2	3	4	5
84. 便秘	1	2	3	4	5
85. 耳鸣	1	2	3	4	5
86. 没有胃口	1	2	3	4	5
87. 头晕目眩	1	2	3	4	5
88. 疲惫	1	2	3	4	5

## 第五部分

移民会经历一个非常复杂的文化适应过程去融入新的文化和社会。在以下关于**文化适应程度**的表述，请根据以下量表，圈出**最能代表你的观点**的选项：

1=很低； 2=较低； 3=一般； 4=较高； 5=很高

89. 我的英语口语水平。	1	2	3	4	5
90. 我对英语的理解能力。	1	2	3	4	5
91. 我的英语阅读和写作水平。	1	2	3	4	5

92. 我喜欢新西兰当地食物。	1	2	3	4	5
93. 我对新西兰的历史了解程度。	1	2	3	4	5
94. 我对新西兰主流社会的文化以及传统了解程度。	1	2	3	4	5
95. 我对新西兰主流社会的文化认同程度，以及对他们的传统节日看重程度。	1	2	3	4	5
96. 我和新西兰主流群体的相似程度。	1	2	3	4	5
97. 我同新西兰主流群体交往联系程度。	1	2	3	4	5
98. 我喜欢和新西兰主流群体交往甚至打成一片。	1	2	3	4	5
99. 我为成为新西兰主流社会的一员而骄傲。	1	2	3	4	5
100. 我不喜欢新西兰主流群体。	1	2	3	4	5

请根据以下量表，圈出**最能代表你的观点**的选项：

1=从来没有； 2=偶尔； 3=有时候； 4=经常； 5=总是

101. 我经常收听西方主流社会的音乐，观看他们的电影以及浏览他们的杂志。	1	2	3	4	5
102. 我经常吃新西兰当地食物。	1	2	3	4	5

## 第六部分: 背景信息

1. 性别： 男 ☐ 女 ☐
2. 年龄： \_\_\_\_\_ (岁)
3. 家庭成员中，有几个人依赖于你的工作而生活？ \_\_\_\_\_
4. 你已经在新西兰生活多久了？ \_\_\_\_\_ (年) \_\_\_\_\_ (月)
5. 你已获得的最高学历：

	高中以下	高中	专科	本科	研究生（硕士，博士等）
来新西兰之前	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
在新西兰获得（请不要选择，如果你没有在新西兰获得以下学位。）	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. 当前工作你已经工作了多久？ \_\_\_\_\_ (年) \_\_\_\_\_ (月)
7. 你的工作类别是什么（例如：教育，行政，工程等）？  
\_\_\_\_\_

-- 感谢您的合作。非常感谢您参与此次研究。 *Thank you for completing this questionnaire and for being part of my study. I appreciate the time and energy you have given to this study, and value your contribution to its outcomes.* -- ☺

希望我们6个月后可以再次合作来完成第二次（最后一次）调查。我们之所以要做两次调查是因为你的家庭工作状况可能会不断的变化，我们希望能够了解这些变化所带来的影响。你可以留下你的联系方式吗(任意一个即可)? 谢谢

这一页的信息会与问卷单独分开保存，不会有人把你的信息与回答匹配起来。

您的称呼\*：\_\_\_\_\_

(注\*：此项不是问你的真实姓名，而是你愿意我们如何称呼你。)

电子邮件: \_\_\_\_\_

或者

电话: \_\_\_\_\_

或者

微信：\_\_\_\_\_

或者

QQ: \_\_\_\_\_

或者

地址: \_\_\_\_\_

我们会根据以上的联系方式及时把你的报告结果反馈给你。



### Appendix 10: Time-1 and Time-2 Questionnaire (Traditional Chinese Version)

你出生於中國大陸，香港，臺灣，馬來西亞或者新加坡嗎？

是的☐

不是☐→ 謝謝你的參與，你可以現在停止回答。

你每週至少工作 15 個小時嗎(包括自雇)？

是的☐

沒有☐→ 謝謝你的參與，你可以現在停止回答。

你和你的家庭成員一起生活在新西蘭嗎（家庭成員可以是：你的配偶，或者孩子，或者父母，或者男/女朋友，或者兄弟姐妹,或者其他親屬）？

是的☐

沒有☐→ 謝謝你的參與，你可以現在停止回答。

如果以上三個問題你都回答“是的”，請繼續回答以下問題。謝謝。

#### 第一部分：

下面關於家庭和工作的表述,請指出在何種程度上你同意或不同意。根據下面的量表，圈出符合你的選項:

1=非常不同意; 2=不同意; 3=中立/沒意見; 4=同意; 5=非常同意

1. 工作導致我無法參與家庭活動。	1	2	3	4	5
2. 工作使我沒有時間做家務並且參與家庭活動。	1	2	3	4	5
3. 由於完成工作需要大量時間，我不得不錯過一些家庭活動。	1	2	3	4	5
4. 如果我在家庭上花費時間過多，就會影響我的工作。	1	2	3	4	5
5. 與家人在一起的時間過多，使自己經常無法參與對職業發展有益的活動。	1	2	3	4	5
6. 由於花費大量時間處理家庭事務，我不得不錯過一些與工作相關的活動。	1	2	3	4	5
7. 下班回家後經常身心疲憊以至於無法參與家庭活動並履行家庭責任。	1	2	3	4	5
8. 下班回家後經常情緒低落，我無法對家庭承擔應有的責任。	1	2	3	4	5
9. 工作壓力經常導致我回家後過於緊張而無法做自己喜歡的事情。	1	2	3	4	5
10. 家庭壓力導致自己在工作時經常想起家裡的事情。	1	2	3	4	5
11. 來自家庭的壓力使自己很難集中精力工作。	1	2	3	4	5
12. 來自家庭生活的緊張和焦慮經常削弱我的工作能力。	1	2	3	4	5

## 第二部分：

13. 你每週工作多少小時? \_\_\_\_\_

請指出下列工作狀況發生在你身上的**頻率**。根據下面的量表，圈出符合你的選項：

1=從來沒有;                      2=每月一兩次;                      3=每週一兩次;  
4=每天一兩次;                      5=一天好幾次

14. 我不得不快速工作。	1	2	3	4	5
15. 我需要拼命工作。	1	2	3	4	5
16. 我要在短時間內完成工作。	1	2	3	4	5
17. 我要應付大量的工作。	1	2	3	4	5
18. 我不得不超負荷工作。	1	2	3	4	5

請指出下列工作狀況發生在你身上的**頻率或者程度**。根據下面的量表，圈出符合你的選項：

1=從來沒有;      2=很少;      3=有時;      4=不多也不少;      5=很多

19. 我和同事在工作上的衝突。	1	2	3	4	5
20. 我和同事經常會在觀點上發生衝突。	1	2	3	4	5
21. 針對工作，我和同事各執己見。	1	2	3	4	5
22. 我和同事在工作上的觀點差異。	1	2	3	4	5

請指出在**多大程度**上你**同意**以下關於工作場所的描述。根據下面的量表，圈出符合你的選項：

1=非常不同意;                      2=不同意;                      3=有點不同意;  
4=有點同意;                      5=同意;                      6=非常同意

23. 工作環境裡經常充滿敵意。	1	2	3	4	5	6
24. 經常有人在背後說人壞話，搬弄是非。	1	2	3	4	5	6
25. 某個團隊會經常打擊其他團隊。	1	2	3	4	5	6
26. 各個團隊之間經常相互敵視。	1	2	3	4	5	6

27. 幕後操作經常發生。	1	2	3	4	5	6
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你的僱傭狀態：雇員☐

自雇經營☐

如果你選擇“自雇經營”可以不答28-41，選擇“雇員”請繼續。謝謝

請指出在多大程度上你同意以下關於組織信念（Organizational beliefs）的陳述（注意，不是你個人的觀念，而是你認為你的公司有什麼樣的信念）。根據下面的量表，圈出符合你的選項：

1=非常不同意;

2=不同意;

3=中立/沒意見;

4=同意;

5=非常同意

28. 工作應該是最優先考慮的事情。	1	2	3	4	5
29. 長時間在辦公室工作有利於職位的晉升。	1	2	3	4	5
30. 最好能夠把家庭事務和工作分開。	1	2	3	4	5
31. 工作期間只允許談論工作相關的話題，不允許談論個人生活之類的话题。	1	2	3	4	5
32. 工作中談論自己參與或者感興趣的事情，儘管與工作無關的事，但是有益身心健康的。	1	2	3	4	5
33. 員工投入過多精力在個人生活上會影響工作。	1	2	3	4	5
34. 工作中不允許處理私事，比如請假去照顧生病的孩子。	1	2	3	4	5
35. 員工應該把私人問題保留在家裡。	1	2	3	4	5
36. 在工作過程中處理與工作本身無關的事情，不利於職務晉升。	1	2	3	4	5
37. 在工作過程中處理私事被視為一種不負責任的表現。	1	2	3	4	5
38. 一個高效的員工是那些把重心放在工作上而非家庭上的人。	1	2	3	4	5
39. 應該給予員工足夠多的機會既能很好的完成工作又處理好私人事務。	1	2	3	4	5
40. 為員工提供彈性工作時間是商業運作的有效途徑。	1	2	3	4	5
41. 一個稱職的員工應該是一天 24 小時待命。	1	2	3	4	5

## 第三部分：

請指出以下陳述發生在你身上的**頻率**。根據下面的量表，圈出符合你的選項：

1=從來沒有;      2=偶爾;      3=有時候;      4=經常;      5=總是

42. 我的家庭太依賴於我。	1	2	3	4	5
43. 我有太多家庭的事情要處理。	1	2	3	4	5
44. 整體而言，我覺得家庭負擔太重。	1	2	3	4	5

下列問題（45-53）可能有些敏感。如果你對這些問題感到不適，請聯繫 Shakti Community Council, 電話：0800 742584（0800 SHAKTI）。

請指出在**多大程度**上你認為以下陳述是**正確**的。根據下面的量表，圈出符合你的選項：

1=正確;      2=某種程度上正確;      3=某種程度上錯誤;      4=錯誤

45. 在家裡，家庭成員之間經常爭吵。	1	2	3	4
46. 家庭成員很少會當眾憤怒。	1	2	3	4
47. 家庭成員有時候特別生氣以至於會摔東西。	1	2	3	4
48. 家庭成員之間相處融洽很少發脾氣。	1	2	3	4
49. 家庭成員之間經常互相批評。	1	2	3	4
50. 家庭成員之間有時候會大打出手。	1	2	3	4
51. 如果家裡有爭執，我們會盡力調解並保持家庭和諧。	1	2	3	4
52. 家庭成員之間經常爭強好勝。	1	2	3	4
53. 在家裡，我們相信爭吵是不會有任何結果的。	1	2	3	4

請指出在**多大程度**上你**贊同**以下陳述。根據下面的量表，圈出符合你的選項：

1=完全同意;      2=非常同意;      3=同意;      4=中立/沒意見;  
5=不同意;      6=非常不同意;      7=完全不同意

54. 家人會儘量幫助我。	1	2	3	4	5	6	7
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55. 家人給予我情感上的幫助和支持。	1	2	3	4	5	6	7
56. 我能夠同家人談論我的個人問題。	1	2	3	4	5	6	7
57. 家人願意幫助我做決定。	1	2	3	4	5	6	7

#### 第四部分：

請指出在**多大程度**上你**贊同**以下陳述。根據下面的量表，圈出符合你的選項：

1=非常不同意;    2=不同意;    3=有點不同意;    4=中立/沒意見;  
5=有點同意;    6=同意;    7=非常同意

58. 總的來說，我對工作非常滿意。	1	2	3	4	5	6	7
59. 總體來說，我不喜歡我的工作。	1	2	3	4	5	6	7
60. 總體來說，我喜歡在這裡工作。	1	2	3	4	5	6	7
61. 我的家庭生活非常愉悅。	1	2	3	4	5	6	7
62. 總的來說，我的家庭生活非常棒。	1	2	3	4	5	6	7
63. 總的來說，我對我的家庭生活非常滿意。	1	2	3	4	5	6	7

請指出在**過去三個月**你經歷以下狀況的**頻率**。根據下面的量表，圈出符合你的選項：

1=從來沒有;    2=偶爾;    3=有時候;    4=經常;    5=總是

64. 能夠專注於目前所做的事情。	1	2	3	4	5
65. 因為憂慮而睡不著覺。	1	2	3	4	5
66. 感受到自己的價值。	1	2	3	4	5
67. 有能力做決定。	1	2	3	4	5
68. 一直倍感壓力。	1	2	3	4	5
69. 感到困難無法克服。	1	2	3	4	5
70. 能夠從日常生活中找到樂趣。	1	2	3	4	5

71. 能夠面對自己的問題。	1	2	3	4	5
72. 感到不開心或者沮喪。	1	2	3	4	5
73. 對自己逐漸失去信心。	1	2	3	4	5
74. 把自己看成一個毫無價值的人。	1	2	3	4	5
75. 總的來說，覺得自己很快樂。	1	2	3	4	5

請指出在過去一個月你經歷以下症狀的頻率。根據下面的量表，圈出符合你的選項：

1=根本沒有； 2=一兩次； 3=一星期一兩次； 4=經常； 5=每天都有發生

76. 噁心或者嘔吐	1	2	3	4	5
77. 背部疼痛	1	2	3	4	5
78. 失眠	1	2	3	4	5
79. 頭痛	1	2	3	4	5
80. 胃酸過多或胃灼熱	1	2	3	4	5
81. 眼部疲勞	1	2	3	4	5
82. 腹瀉	1	2	3	4	5
83. 胃絞痛（不是月經導致的）	1	2	3	4	5
84. 便秘	1	2	3	4	5
85. 耳鳴	1	2	3	4	5
86. 沒有胃口	1	2	3	4	5
87. 頭暈目眩	1	2	3	4	5
88. 疲憊	1	2	3	4	5

## 第五部分：

移民會經歷一個非常複雜的文化適應過程去融入新的文化和社會。在以下關於**文化適應程度**的表述，請根據以下量表，圈出**最能代表你的觀點**的選項:

1=很低;      2=較低;      3=一般;      4=較高;      5=很高

89. 我的英語口語水準。	1	2	3	4	5
90. 我對英語的理解能力。	1	2	3	4	5
91. 我的英語閱讀和寫作水準。	1	2	3	4	5
92. 我喜歡新西蘭當地食物。	1	2	3	4	5
93. 我對新西蘭的歷史瞭解程度。	1	2	3	4	5
94. 我對新西蘭主流社會的文化以及傳統瞭解程度。	1	2	3	4	5
95. 我對新西蘭主流社會的文化認同程度，以及對他們的傳統節假日看重程度。	1	2	3	4	5
96. 我和新西蘭主流群體的相似程度。	1	2	3	4	5
97. 我同新西蘭主流群體交往聯繫程度。	1	2	3	4	5
98. 我喜歡和新西蘭主流群體交往甚至打成一片。	1	2	3	4	5
99. 我為成為新西蘭主流社會的一員而驕傲。	1	2	3	4	5
100. 我不喜歡新西蘭主流群體。	1	2	3	4	5

請根據以下量表，圈出**最能代表你的觀點**的選項:

1=從來沒有;      2=偶爾;      3=有時候;      4=經常;      5=總是

101. 我經常收聽西方主流社會的音樂，觀看他們的電影以及流覽他們的雜誌。	1	2	3	4	5
102. 我經常吃新西蘭當地食物。	1	2	3	4	5

## 第六部分: 背景資訊

1. 性別： 男 ☐ 女 ☐
2. 年齡： \_\_\_\_\_ (歲)
3. 家庭成員中，有幾個人依賴於你的工作而生活？ \_\_\_\_\_
4. 你已經在新西蘭生活多久了？ \_\_\_\_\_ (年) \_\_\_\_\_ (月)
5. 你已獲得的最高學歷：

	高中以下	高中	專科	本科	研究生（碩士，博士等）
來新西蘭之前	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
在新西蘭獲得（請不要選擇，如果你沒有在新西蘭獲得以下學位。）	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. 當前工作你已經工作了多久？ \_\_\_\_\_ (年) \_\_\_\_\_ (月)
7. 你的工作類別是什麼（例如：教育，行政，工程等）？

\_\_\_\_\_ -

- 謝謝您的合作。非常感謝您參與此次研究。 *Thank you for completing this questionnaire and for being part of my study. I appreciate the time and energy you have given to this study, and value your contribution to its outcomes.--☺*



希望我們6個月後可以再次合作來完成第二次（最後一次）調查。我們之所以要做兩次調查是因為你的家庭工作狀況可能會不斷的變化，我們希望能夠瞭解這些變化所帶來的影響。你可以留下你的聯繫方式嗎(任意一個即可)？謝謝

這一頁的資訊會與問卷單獨分開保存，不會有人把你的資訊與回答匹配起來。

您的稱呼：\_\_\_\_\_

（注\*：此項不是問你的真實姓名，而是你願意我們如何稱呼你。）

電子郵件：\_\_\_\_\_

或者

電話：\_\_\_\_\_

或者

微信：\_\_\_\_\_

或者

QQ：\_\_\_\_\_

或者

地址：\_\_\_\_\_

我們會根據以上的聯繫方式及時把你的報告結果回饋給你。

## **Appendix 11: Interview Protocol**

### **Introduction:**

My name is Shang Sudong. I am currently a full-time doctoral student of the School of Psychology at the University of Waikato in New Zealand. I would like to invite you to participate in my research. The title of my research is “Work-family conflict among Chinese immigrants”. The purpose of this research is to reduce work-family conflict experienced by Chinese immigrants, and improve the well-being of them.

Each interview will last around 30-60 minutes, which will be arranged at the place and time for your convenience. All interviews will be audio-recorded if you agree, but I will take notes if you find recording uncomfortable.

In this study, your participation is voluntary and you have the right to withdraw from the study at any time up until data analysis has commenced. You have the opportunity to add, delete or change anything you said to me when I return you the summaries of individual interviews. You also have the right to refuse to answer any questions.

The data received from you will be confidential, and only I can assess to it. Every effort will be made to keep the participants unidentifiable. The analyzed data from the study will be used in my PhD degree thesis, and possibly in some publications or presentations that arise from it.

Please contact me with any questions relating to this study through any of the following means:

Shang Sudong

Email: ss447@waikato.ac.nz. Phone: 0221019880

The consent form is attached here. Ticking the consent form indicates your agreement to participate in my study.

Thank you very much for your support.

Your sincerely,

Shang Sudong

### **Warm up**

1. How long have you lived in New Zealand?
2. Tell me about your family.
  - How many kids/elder parents in your family?
  - How much time do you usually spend in a week on your housework and family chores?
3. Tell me about your work.
  - What is your job?
  - How long have you worked on this position?
  - How long have you worked in New Zealand?
  - How much time do you usually spend in a week on your work?
4. Interviewer introduces what is work-family conflict to interviewee.

### **Questions**

1. Since you came to New Zealand, do you notice that any of your values related to work and family have changed? Please explain.
2. Interviewer introduces what is work-family conflict to interviewee.

What are the causes of your work-family conflict? Please give some examples.
3. How do you cope with the work-family conflict you experience? Please give some examples.
4. Do you have anything else which you think is related to dealing with work-family conflict?

Tell interviewees how information will be used and how to feedback the result to them.

### **End of interview**

## Appendix 12: Interview Consent Form

I,..... (participant's name), have read an explanation of the study conducted by Shang Sudong.

I have read and understood that:

- My participation in this study is completely voluntary, and I can withdraw at any time up until data analysis has commenced.
- If I withdraw, any raw data will also be removed.
- My identity will be anonymous, and any information I provide will be treated with confidentiality.
- The data from the study will be used in Shang Sudong's PhD thesis, and possibly in some publications or presentations that arise from it.
- Signing this form indicates my agreement to participate in the study.

I understand that I have the right to:

- change, delete or add information up to the time I return the transcripts;
- refuse to answer any of the researcher's questions during the interviews;
- withdraw from the study at any time without any question from the researcher and without any disadvantage of any kind.

I agree to: (Please tick the box ✓)

- participate in this interview; ☐
- have my interview audio-recorded. ☐

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Researcher: Shang Sudong**

Email: ss447@waikato.ac.nz. Phone: 0221019880

**Chief Supervisors: Professor Michael O'Driscoll**

Email: m.odriscoll@waikato.ac.nz Phone: 07 838 4466 extn. 8899

**Ethics Committee of the School of Psychology, University of Waikato:**

**Dr Nicola Starkey**

Email: nstarkey@waikato.ac.nz Phone: 078384080 extn. 6472