

# Identifying and addressing loneliness among Chinese late-life immigrants in New Zealand

Yan (Ivy) Zhao

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School of Clinical Sciences

Faculty of Health and Environmental Sciences

Auckland University of Technology

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## **Abstract**

### **Background:**

Chinese late-life immigrants frequently resettle in New Zealand for the purpose of being reunited with their adult children. Evidence indicates they are more prone to experiencing social isolation and loneliness than the general population. However, little is known about how their loneliness manifests and how it might be addressed.

### **Method:**

A mixed methods design was used. Purposive recruitment was conducted through venues where Chinese late-life immigrants frequented. The study's 23 participants had emigrated from mainland China, aged 65 to 80 years on arrival, and had resided in New Zealand between 2.5 and 16 years. Qualitative data were gathered through in-depth, individual interviews conducted in Mandarin. Each participant then completed interview based standardised measures of loneliness, social support, quality of life, and everyday functioning. Co-design workshops were undertaken with 10 participants' involvement as co-researchers.

### **Findings:**

The results of this study indicate experiences of loneliness and social isolation are common among Chinese late-life immigrants. From the qualitative interviews, the evidence for participants' cultural loneliness makes an original contribution to knowledge in the social gerontology field. Participants' feelings of a deep sense of imbalanced intergenerational reciprocity was identified. The imbalanced reciprocity combined with Chinese culture, such as 'Three obedience and the four virtues', 'Filial piety', and 'Saving face', impact negatively on their understandings and experiences of loneliness. Those over 80 years of age reported greater social isolation and loneliness. Loneliness was identified by study participants as a risk factor for anxiety, chest distress, sleeplessness, depression, and loss of self-confidence. Quantitatively, the overall loneliness scores ranged from 0 to 6 with a mean of 2.44. The emotional loneliness and social loneliness scores had a mean of 1.09 (0-3) and 1.35 (0-3) respectively. In response to the direct question about loneliness, 11 participants (48%)

reported that they were lonely. Co-designed community navigation needs and public housing recommendations resulted in collaborative actions with stakeholders, Age Concern Auckland and Housing New Zealand.

**Conclusion:**

The study's design illustrates how analysis of disparate forms of data helped crystallise the culturally-bound understandings of loneliness. These data reveal new knowledge about Chinese late-life immigrants' loneliness in New Zealand. The 6-item De Jong loneliness scale score was identified as having discordance with the participant interview findings. It is essential to consider Chinese culture when researching or addressing loneliness with older Chinese. The benefits of involving Chinese late-life immigrants as co-researchers outweighed the challenges.

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## **Attestation of Authorship**

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Signed:

Date: 18<sup>th</sup> August, 2020

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# Chapter 1 Introduction

## 1.1 Chapter introduction

Social isolation and loneliness are risk factors for older people's poor health, serious illness, and mortality (Steptoe, Shankar, Demakakos, & Wardle, 2013). In accord, the New Zealand Ministry of Health's (2017) update of the Health of Older Persons' Strategy identified them as priority health and social concerns. The update encouraged further systematic study in order to increase the recognition of, and interventions for, addressing older people's social isolation and loneliness (Ministry of Health, 2017; Steptoe et al., 2013). Priority actions included enhancing understanding of the links between loneliness and health status and promoting research into building population resilience (Ministry of Health, 2017). More recently, the Better Later Life-He Oranga Kaumatua 2019 to 2034 strategy (The Office for Seniors, 2019), released by the New Zealand Ministry of Social Development's Office for Seniors, called for addressing loneliness as integral to a key action area for enhancing opportunities for participation and social connection.

Research evidence identifies social isolation and loneliness as a particular problem for some population groups of older people, such as ethnic communities' members or immigrant populations. For instance, Chinese late-life immigrants have reported experiencing significant social isolation and loneliness in New Zealand (W. W. Li, 2012). Older Chinese in the United States (US) reported being at greater risk of loneliness than citizens born in US (X. Dong, Chang, Wong, & Simon, 2012). Furthermore, over 25 percent of older Chinese Americans reported the lack of companionship, compared to less than 17 percent for general older American adults (Simon, Chang, Zhang, Ruan, & Dong, 2014).

The population in New Zealand is becoming more culturally diverse. To meet the needs of older people belonging to other ethnic groups, health and social service providers have been encouraged to be culturally responsive; that is, develop culturally sensitive and appropriate services (Stewart et al., 2011). Cultural responsiveness could enable older people to have access to services designed to meet their cultural and language needs. For instance, to answer their culturally specific questions, look at culturally

sensitive diets, and pay attention to culturally appropriate medicines (Stewart et al., 2011).

Older Chinese people constitute New Zealand's largest Asian late-life immigrant group (Statistics New Zealand, 2013a). Given that the negative effects of loneliness can be more pronounced for late-life immigrants, compared to non-immigrants (W. W. Li, 2012), understanding and addressing the experiences of loneliness and social isolation in Chinese late-life immigrants is an important topic. Yet, little is known about Chinese late-life immigrants' experiences of loneliness and social isolation in New Zealand. Thus, the focus of this study is to explore the implications of loneliness and social isolation in Chinese late-life immigrants and how they impact their health status, function, and quality of life. Based on these data, the study aims to co-design community-based resources or services to alleviate their loneliness.

Chapter One continues from the opening concern of social and emotional loneliness of Chinese late-life immigrants in New Zealand. Firstly, I will introduce the background and context in New Zealand. Following, I will summarise the history and culture of China owing to its relevance for the current generation of older Chinese and Chinese late-life immigrants. Next, I will outline my personal perspectives and health promotion values as a Chinese researcher and the significance of the present research. Subsequently, I will present the research aims, design, and purpose of the current study. Lastly, an overview of this thesis will be outlined.

## **1.2 Background and context in New Zealand**

New Zealand's changing demographic structure and ageing population is similar to that of other developed countries, such as Australia, Canada, and US. They share a pattern of both a growing number of older people and an increasing proportion of older people in the population. In addition, New Zealand is a colonised nation with a 150-year history of immigrant settlers (Spoonley, 2013). The 2013 Census reveals that New Zealand's population is becoming increasingly ethnically diverse (Statistics New Zealand, 2013a). For instance, there has been a significant increase in older Chinese immigrants in New Zealand (Statistics New Zealand, 2015).

Changing immigration policies have played a key role in the change of ethnic age structure. The immigration boom could be traced back to the late 1980s, when the New Zealand Government altered its policy to attract skilled immigrants (Wright-St Clair & Nayar, 2016). Implementation of the 1987 Immigration Act of New Zealand facilitated the entry of emigrants from China (Ho, 2006; Ho & Bedford, 2008; Ward & Lin, 2005). After the July of 1997, when the Great Britain returned the sovereignty of Hong Kong back to China, numerous Hong Kong professionals and managers moved to western countries by technical or investment immigration (L. K. R. Ip & Chui, 2002). The pattern was similar for many Taiwan-born Chinese. When the Taiwanese government opened its gate for the opportunities of overseas travel and investment, more citizens of Taiwan moved to western countries as investment migrants in the late-1980s (D. Ip, Liu, & Chui, 2007). Thus, Hong Kong-born and Taiwan-born Chinese usually migrated in their early life as young working adults.

More mainland China-born Chinese, whose official language is Mandarin (*Pu Tong Hua*, 普通话), have immigrated to New Zealand in the last two decades compared with Hong Kong-born Chinese, who usually speak Cantonese (*Yue Yu* 粤语), (Statistics New Zealand, 2013b). In 2001, approximately 26, 418 Chinese immigrants in New Zealand identified as Mandarin speaking. Twelve years later, the number doubled to 51, 915 Mandarin speakers, as a result of higher immigration from mainland China. In comparison, the number of Cantonese speakers remained fairly consistent from 2001 to 2013, around 36, 945 and 44, 226 respectively (Statistics New Zealand, 2013b). Thus, Chinese immigrants from mainland China feature as the most recent arrivals among the ethnic Chinese immigrants to New Zealand (L. N. S. Liu, 2011).

Following the immigration wave of Chinese young working adults, a large number of older dependent parents from mainland China immigrated to New Zealand. They arrived predominantly under Immigration New Zealand's then Parent Category family reunion policy. According to the policy, older adults could apply to live in New Zealand permanently if they had an adult child who was a non-dependent New Zealand citizen or resident. Until the end of 2016, the Parent Category family reunion policy of Immigration New Zealand led to a significant increase in Chinese late-life immigrants who intended to reunite with their children (J. Zhang, 2014). This category has since



been suspended indefinitely for new applications by the Government. According to the announcement on Immigration New Zealand's website, sufficient numbers of people have applied, or been invited to apply, for residence in New Zealand ( Immigration New Zealand, 2017).

There have been a variety of claims from society that health and welfare costs, linked with immigration of older dependent parents, have risen in recent years. The claim is particularly related to those people who have emigrated from countries that do not have social security agreements with New Zealand (Bedford & Liu, 2013). New Zealand has bilateral social security agreements with several countries, such as the United Kingdom, Australia, and Canada. Such agreements allow migrants from those countries access to certain benefits or pensions of original countries when moving to New Zealand. It also means New Zealand pensions do not carry the full costs of superannuation for immigrants from those countries (Work and Income, 2019). However, China is not on the list of countries having a social security agreement with New Zealand.

A responsibility that adult children to look after their older parents is widely accepted within Chinese culture. Along with the legacy of the one-child family policy, being a sponsor for ageing parents moving to New Zealand is normally required by Chinese for family reunification. Thus, older parents have to rely on their children's sponsorship and support before meeting eligibility for New Zealand superannuation.

Furthermore, adjustments to life in a new country can be especially difficult for Chinese late-life immigrants, compared to non-immigrants, because of language barriers, the effect of changing family filial relationships, culture shock, and social isolation (W. W. Li, 2012). The problems they face are potential causal risks for loneliness and social isolation, as reported by Chinese late-life immigrants in New Zealand (W. W. Li, Hodgetts, & Ho, 2010). Chinese late-life immigrants in the USA, the United Kingdom, and Canada reported high rates of loneliness, ranging from 40 to 50 percent (Dong, 2012; Wu, 2013 & Victor, 2012). Immigrants reported more significant feelings of loneliness than the non-immigrants (Wu & Penning, 2013). All these studies indicated that culturally isolated immigrant populations were at special risk for poor health. However, these groups tend to be under-represented in national demographic

studies. Although enabling local solutions to address loneliness and social isolation in older adults has become a major health and social concern for New Zealand's government (Office for Senior Citizens, 2015), limited research has been undertaken among Chinese late-life immigrants in New Zealand.

### **1.3 The history and culture of China**

Following the Chinese civil war, the People's Republic of China was founded on the 1<sup>st</sup> October 1949. Since then, the new Chinese government has introduced a series of political, economic, and cultural projects. Examples of such projects are the Great Leap Forward, Anti-Rightist Campaign, and the Cultural Revolution in mainland China, all of which lead Chinese people into 30 years of impoverishment, insufficient daily supplies, and lack of job opportunities (Clark, 2008; Meng & Gregory, 2002).

The situation was even worse in the cultural domain, including Chinese traditional culture and morale. The introduction of the Criticize Confucius Campaign in 1973 encouraged public discussion focusing on criticising Confucius and Confucianism, and arguing the issues of slavery, feudalism and the relationship between Confucianism and legalism. Young people were encouraged to turn against the Confucian values underpinning the relationships between teacher and student, emperor and people, father and son, husband and wife, and importance of family unity (Confucian Weekly Bulletin, 2016). Although the criticism of Confucius continued until the end of the Cultural Revolution in 1976, the inherited value of filial piety was disrupted for around 10 years. In terms of the long-term interruption and the effects of world westernisation, younger generations became less confident with obeying filial piety in its original way.

China's economic underdevelopment lasted until 1978 when the country initiated the transition to a market-orientated economy. Subsequently, a remarkable improvement occurred in the country's financial state. In recent years, the re-establishment of Confucianism has been advocated and encouraged by society in general. At the 2565<sup>th</sup> birthday anniversary commemoration in 2014, the current President Xi Jinping endorsed the philosophy of Confucianism in his keynote speech (Confucian Weekly Bulletin, 2016). However, it did little to reverse the damage of the Criticize Confucius Campaign, primarily because the Chinese cultural and theoretical systems have been

further changed by Western cultures and values adopted during the Economic Reform. Thus, changing mindsets was particularly difficult for people who were born around the 1940-1950s, who were involved in the Criticize Confucius Campaign and the Economic Reforms. Their personal values, cultural perspectives, and relationships with others had been influenced accordingly.

### **1.3.1 Filial piety**

The concept of filial piety originated from Confucianism. The Chinese terms *xiao shun* (孝顺) and *xiao jin* (孝敬) are most commonly used for filial piety. Both of which incorporate a stance of compliancy and great respect to one's parents, older people, and senior managers. Filial piety is not unique to the Chinese. Those societies historically influenced by Confucianism, such as Japan and Korea, also value filial piety. However, filial piety was reportedly more valued by Chinese. For Chinese people, filial piety was considered as the principal ethical value and perceived to be the fundamental value of all virtues (Sun, 2008). Yeh (1999) suggested that the cultural factor of filial piety should be included when discussing parent-child conflict in Chinese societies. According to Yang and Hwang (2003, p. 78), filial piety has two types: *reciprocal filial piety* and *authoritarian filial piety*. The reciprocal filial piety emphasises the principles of reciprocity and favouring the intimate, while the authoritarian filial piety focuses on oppressing oneself and glorifying one's parents (Yang & Hwang, 2003). The beneficial and harmful effects of filial piety both exist in Chinese parent-child relationships (Yang & Hwang, 2003). The reciprocal filial factors usually result in beneficial effects, while the authoritarian factor would present as harmful ones (Yang & Hwang, 2003), especially when applying in caring for older parents (Yeh, Yi & Tsao, 2013).

In Chinese society, the family was regarded as the central unit around which one's life and ethical relationships revolved. In the family, the value of filial piety defined intergenerational relationships by emphasising respect and obedience of the children toward the parents. In the traditional multigenerational household, filial piety was the binder and a code of conduct, bringing the family together and orienting the family to a stable and harmonious state (Sun, 2008). According to Sun (2008) and Yang and Yeh (1995), 15 items traditionally constituted filial piety:

1. *love and respect for parents*
2. *obedience towards parents*
3. *rational counsel for parents to prevent them from committing immoral acts*
4. *treating parents in accordance with ritual propriety*
5. *inheriting parents' career or business*
6. *glorify parents' name*
7. *remembering and revering parents*
8. *entertaining parent*
9. *not causing parents to worry*
10. *attending to parents' needs*
11. *providing physical and emotional sustenance to parents*
12. *loving and caring for oneself*
13. *ensuring that the family line is carried on*
14. *burying parents in accordance with ritual propriety; and*
15. *conducting ancestral worship in accordance with ritual propriety*

However, as China has gradually developed into an urbanised, globalised, and industrialised country, the core value of family and the influence of filial piety have diminished. Extended families, overall, have transitioned to a modern nuclear family model of two biological parents and children. Accordingly, young generations prefer more *egalitarian* and *reciprocal* relationships between generations, rather than the traditional *authoritarian* and *patriarchal* relationships (Sung, 2001; Zhang, Harwood, & Hummert, 2005).

### **1.3.2 Face management and patterns of communication**

Face plays the primary role in the life of the Chinese. The Chinese concepts of face (*mian zi* 面子) are mostly influenced by Confucianism. If a person behaves against the principle of ritual propriety, the person will be regarded as bringing shame to himself/herself and his/her family and causing all involved to lose face. Giving face represents being accepted and respected by others. So, in dyadic relationships, such as father or mother and son, teacher and student, husband and wife, and relationships in the workplaces, appropriate behaviours are performed to ensure both self- and other's- face are preserved (Ji, 2000).

The Chinese concept of face is complicated and difficult to understand because of its underlying structure of Confucian culture. Interestingly, from Hwang's (2012, p. 267) report, Chinese concepts of face can be further differentiated into *social face* (*mian zi* 面子) and *moral face* (*lian* 脸). The difference between *mian zi* 面子 and *lian* 脸 are their usage for individual or society (Hu, 1994). *Lian* 脸 has been used only in recent modern times. In general, *mian zi* 面子 represents that Chinese people have a high value of social reputation (Hwang, 2012). For example, an adult child's successful career development or being able to send the adult child for overseas education make older Chinese parents feel having *mian zi* 面子 in the society. *Lian* 脸 is high morality of social respect for an individual offered by others, which is also considered as with an *internalised force of self-restriction* to meet moral standards (Hwang, 2012, p268). For example, if the adult child could not meet the standards of filial piety, older parents and the whole family would treat it as losing *lian* 脸.

It was reported that Chinese are concerned more about self-face than Japanese and Americans (Oetzel, Ting-Toomey, Masumoto, & Yokochi, 2001). Chinese people prefer to communicate in an implicit or indirect way to avoid hurting both self- and other's-face. For instance, an older Chinese mother would make a reference to the Chinese traditions or praise a neighbour's son to advocate filial piety, rather than blaming her son directly for not giving her sufficient support. The one-child policy and immigration intensified intergenerational reciprocity pressure and family dynamics (Zhang, 2014). With respect to the upholding of face, older Chinese immigrants are more likely to live with adult children. Although harmony between Chinese older parents and younger generations play an important role in Chinese extended family, intergenerational conflicts are indicated as being associated with generational differences in attitudes toward life and limited intergenerational effective communications (X. P. Lin, Bryant, Boldero, & Dow, 2015).

### **1.3.3 Female gender roles and gender egalitarianism in China**

A woman's role in respect to traditional Chinese culture is always positioned as being devoted to other family members. Women were educated to sacrifice themselves and obey their partner's or children's desires and wishes. Women were valued as a dutiful spouse and wise mother (*xian qi liang mu* 贤妻良母). The conventional concept of *men to deal with the external affairs and women to look after the family* (男主外, 女主内) (Sun, 2008), considered caring for young children, younger siblings, and grandchildren a domestic duty for women. Hence, women showed greater willingness than their husbands to emigrate for the purpose of supporting their children (Zhang, 2014). Moreover, reproduction was considered as one of the most important family responsibilities per traditional Chinese culture and arranged marriages by parents were very common in past times.

In 1979, the People's Republic of China introduced the one-child policy in an effort to control the population boom. According to the policy, couples in urban areas were only allowed to have one child and couples in rural areas were allowed to have two children due to the agriculture labour-activities supply (Hillier, 1988). However, the one-child policy was criticised universally as accentuating the stress on the child, who had to obey the traditional value of filial piety and support parents' old-age security (D. W. L Lai, 2010). To help address the current aging population issue in China, the National People's Congress Standing Committee passed a new policy of "two-child per couple", effective from 1 January 2016 (ABC Online, 2015). Chinese couples are now allowed to have two children. Yet, many young couples in China still tend to have one child or no children for reasons of economic pressure, personal career development, or westernised values. Whether or not the new birth control policy will relieve the stress of aging in China needs to be further ratified.

## **1.4 Personal perspective and health promotion values**

I grew up in mainland China. I was born in 1985, six years after the one-child policy was introduced to our country. My father has five siblings and my mother has two younger brothers and a sister, but I am the only child in my family. A three-member family was a typical nuclear family in China from 1979 to 2016. In my childhood, I was proud of being the only child in my family because the Chinese government rewarded families

with only one child. My parents could receive 5 yuan (Chinese dollar) per month and a “one-child glory certificate” award. However, nowadays, the one-child policy is indicated as a determining factor in accelerating China’s aging population (S. Y. Li & Lin, 2016).

Chen (2015), who is a demographer from Nanjing University of China, advised that the decreased number of women at childbearing age resulted in a reduced birth rate. In respect to the culture of filial piety, a “*four-two-one*” (four grandparents, two parents, one child) problem was raised as a significant challenge and burden for my generation. It means the only child encounters caring for two parents and four grandparents.

I will take myself as an example to further explain the “*four-two-one*” problem. As a law-enforced only-child, I have to provide support for my two parents and four grandparents when I come of childbearing age. Fortunately, my grandfather, maternal grandfather, and my parents have their own retirement pensions and medical insurances to support their life and medical expenses. If not, they would be left entirely dependent upon our very small family for assistance. If I were unable to care for them, they would face a lack of resources and necessities. Their health and wellness would be influenced as a whole.

My research interest in older adults’ health and wellness, community inclusiveness, and loneliness came through my life and educational experiences in mainland China, Hong Kong, and the US. I completed my bachelor’s degree (Nursing Science) in mainland China and Hong Kong, and my master’s degree (Health Promotion) in the US. I have good understandings of both Chinese and Western countries’ cultures and social systems. I believe that social security system and Chinese historical cultures need to be balanced for ageing well.

In China, many immigration agencies have currently advertised New Zealand as a paradise in which to retire (Chinese Herald, 2018). Auckland has become as a popular retirement area for Chinese immigrants owing to the warm, sunny climate, attractive natural environment, and government pensions. New Zealand superannuation is a universal payment for New Zealand citizens and residents who are 65 or older and have spent 10 years in New Zealand since age 20, with five of those years since age 50.

It sounds desirable for older immigrants who need a financial guarantee in their retirement life. However, retirement in New Zealand is far from perfect; especially so for those people who emigrated from China in the later phase of life.

I conducted this research to find out what are the experiences of Chinese late-life immigrants' social and emotional loneliness in New Zealand. I want to learn how to address their loneliness. I anticipate that all older adults in New Zealand will have the opportunity to achieve optimal physical, mental, spiritual, and social well-being irrespective of diversity and cultures.

## **1.5 Significance of research**

In respect to both the New Zealand and Chinese contexts, social exclusion and loneliness of Chinese late-life immigrants in New Zealand are related to the language barrier, the effect of changing family filial relationships, culture shock, and social isolation (W. W. Li et al., 2010; Morgan et al., 2019; Wright-St Clair & Nayar, 2016; Wright-St Clair & Nayar, 2019; Wright-St Clair, Neville, Forsyth, White, & Napier, 2017). Researchers, services providers, and policy makers are increasingly concerned with the consequences of such social forces. Although older adults' loneliness, in general, is frequently asserted (Gerst-Emerson & Jayawardhana, 2015), research regarding the implications and experience of loneliness or social isolation for Chinese late-life immigrants in New Zealand is limited.

To address a dearth of research on this topic, this study will focus on how to ascertain and address Chinese late-life immigrants' loneliness. Furthermore, the country-specific results of the current study are anticipated to help meet a priority health and social concern in the Ministry of Health's (2017) revised Health of Older Persons' strategy and the Ministry of Social Development's Better Later Life strategy (The Office for Seniors, 2019). It may help to promote community support for older immigrants, address loneliness of this group, and reduce inequities in health.

## **1.6 Overview of the thesis**

This thesis contains 9 chapters.



### **1.6.1 Chapter one: Introduction**

The first chapter was an overall introduction and background to study. It has covered the New Zealand context, as well as the history and culture of China experienced by Chinese late-life immigrants as they grew up. The chapter justified the need for more research on the loneliness of Chinese late-life immigrants, and outlined the significance, design, and purpose of the present study.

### **1.6.2 Chapter two: Literature review**

The literature review examines and presents a synthesis of existing empirical literature and knowledge on the loneliness and social isolation of Chinese late-life immigrants in New Zealand and other western countries. The relevant gap in knowledge that this study will aim to address is described.

### **1.6.3 Chapter three: The theoretical framework**

In chapter three, I develop a Chinese specific research theoretical framework to underpin the following study design and data analysis. An in-depth review of the interconnectedness of the parts of the framework are demonstrated here.

### **1.6.4 Chapter four: Research methodology**

In chapter four, I critique John Dewey's pragmatism (Dewey, 1922, 1929a, 1930) and justify why Dewey's pragmatism and mixed-method methodology have been chosen to guide the current study. I justify why mixed-method methodology was chosen for this study. I further discuss how the methodology informing the current study.

### **1.6.5 Chapter five: Research methods**

This chapter presents the research methods adopted to answer my research questions. The method used for moving from the philosophical framework to the process for participant selection and data analysis is described in this chapter.

### **1.6.6 Chapters six, seven and eight: Findings**

There are four chapters presenting the findings of Phases One and Two of the study.

### **1.6.7 Chapter nine: Discussion and conclusion**

The chapter presents a discussion and conclusion based on the findings in chapters six, seven, and eight. The strengths and limitations of this research are critically considered

in this chapter. At the end of the chapter, I provide recommendations for further research and action navigation.

## **1.7 Chapter summary**

Chapter one reviewed the current health strategy for older residents by the Ministry of Health in New Zealand. Chinese late-life immigrants' social isolation and/or loneliness in New Zealand were considered in this chapter. China's history and culture have been explored as background and context for this study. It provides an overall socio-cultural picture of the current generation of older Chinese as growing up and ageing in China, and how such social influences may influence their lives as late-life immigrants in New Zealand. In the following chapter, the literature review will be presented in detail.

## **Chapter 2 Literature review**

### **2.1 Chapter Introduction**

This chapter presents a review of the theoretical and empirical literature that was undertaken at the beginning of this project. In order to explore Chinese late-life immigrants' experience of loneliness in New Zealand, it is important that I consider the dynamic interactions between Chinese late-life immigrants and the New Zealand context. One purpose of a literature review is to examine what is known by systematically investigating the international and the New Zealand gerontological literature. In this chapter, I will present the search methods used to locate the literature. Following, I will present an overview of the literature, including definitions of loneliness and social isolation; models and theories that explain older people's loneliness and social isolation; demographic patterns and the current prevalence rates of loneliness; its impacts; Chinese late-life immigrants in New Zealand; loneliness and social isolation of Chinese late-life immigrants around the world; and existing formal or informal community interventions.

Another purpose of the literature review is to identify gaps in knowledge and limitations in research related to loneliness or social isolation of Chinese late-life immigrants. The outcome of the literature review will provide an overall background for the current study to generate research questions, as discussed in the postscript of this chapter.

### **2.2 Search methods**

The literature search was conducted between 1 April 2017 and 30 January 2019. No limitations were placed on publication date to include a full range of New Zealand and international studies. Initially, the international and local literature were scoped to capture insights of the topic and inform the search terms to be used. The breadth of the scholarly databases and the keywords of searching support the aim of this study to explore loneliness experience of Chinese late-life immigrants in New Zealand and other western countries. I searched literature for loneliness of older Chinese immigrants via scholarly databases such as Scopus, Web of Science, ProQuest, CHNAHL, MedLine, Dissertations, Thesis and Google scholar. I used relevant terms and combination of

terms: Loneliness\* OR isolat\* OR “social network” OR desolation OR remoteness OR segregation OR detachment OR reclusiveness OR withdrawal OR “social exclusion” OR “social integration” OR “social participation” OR lone\* OR alone\* or “social encouragement”; “Older adult” OR senior\* OR elder\* OR aged OR retire\* OR widow\* OR “old\* person” OR “older people” OR geriatric\* or “Later life”; Chinese OR Mandarin OR Cantonese; Immigrant\* OR migrat\* and New Zealand OR Aotearoa. Aotearoa is the Māori name for the country of New Zealand.

In addition, the work of important authors who have undertaken significant research in the field was searched, relevant journals were reviewed, and papers and books cited in reference lists of relevant papers were retrieved. Only peer-reviewed articles published in the English language and containing empirical evidence concerning the loneliness and social isolation of Chinese late-life immigrants were included. Both qualitative and quantitative studies were included, and studies were limited to primary research data or secondary data analysis of observational or intervention studies. There were 49 full text articles assessed for eligibility, of which 41 were considered as useful in locating primary literature and included for the review. Figure 1 presents this selection process, in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) format.

## **2.3 Models and theories of loneliness & social isolation**

### **2.3.1 Introduction to models and theories in the literature**

Several models and theories were examined and critiqued during the literature review phase. In this section, I will review the literature on the De Jong Gierveld Model of Loneliness, the Model of Older People’s Experience of Societal Alienation, and resilience to loneliness for their relevance to understanding older Chinese and/or late-life immigrants’ loneliness. Moreover, I will critically consider what I learned from these models and their relevance to this study’s topic. Subsequently, I review the Conceptual Model of Exclusion from Social Relations for Older People, Confucianism, and Arthur Kleinman’s social suffering theory as three highly relevant theoretical frameworks that contribute to understanding Chinese late-life immigrants’ loneliness and social isolation.



## PRISMA 2009 Flow Diagram

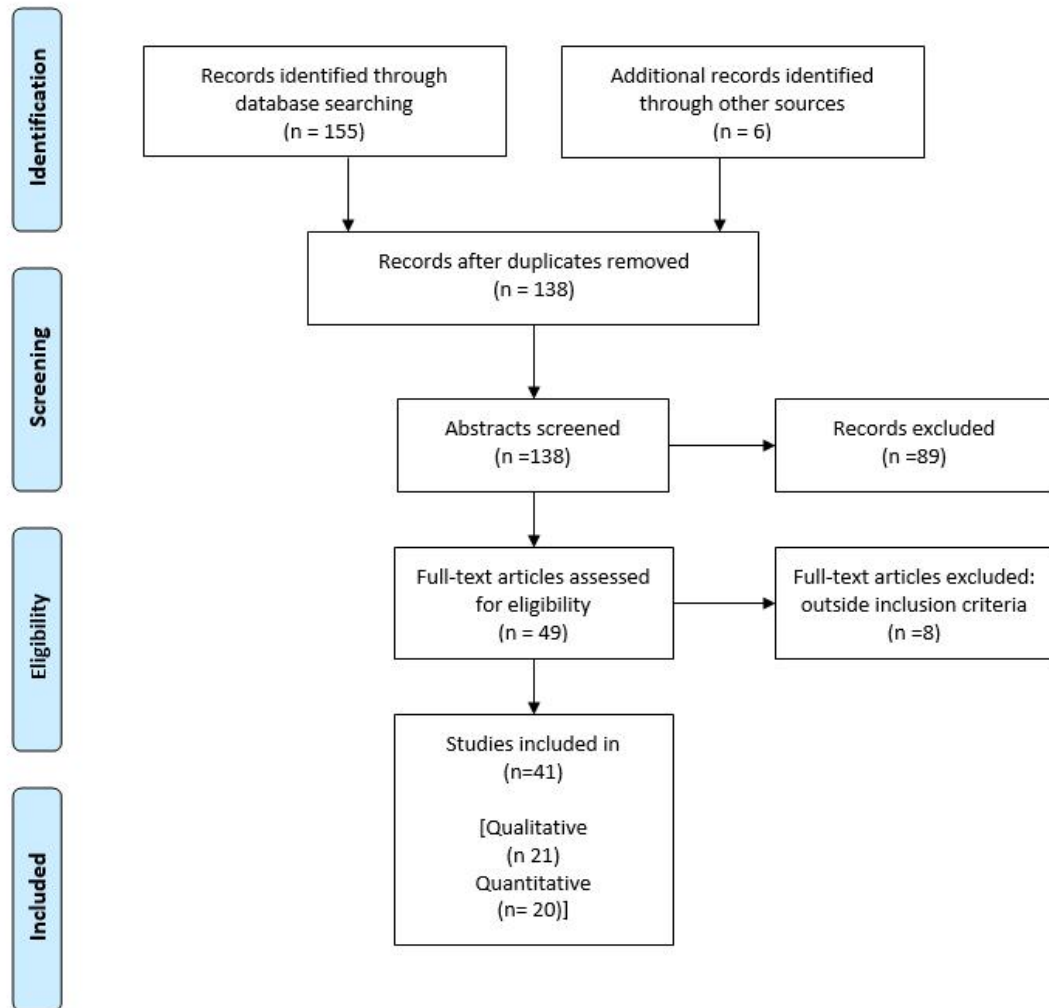


Figure 1 PRISMA Flow Diagram (Moher, Liberati, Tetzlaff, Altman, & Group, 2009)

### 2.3.2 The De Jong-Gierveld Model of Loneliness

De Jong-Gierveld's Model of Loneliness was examined in detail because of De Jong-Gierveld's significant, multiple research projects on loneliness. Moreover, it has been reported in the US as a useful framework to test older Asian immigrants' loneliness and health-related consequences (Hong, 1996). De Jong's 6-item scale distinguishes the direct causal influences of the various factors from the indirect ones in loneliness (de Jong-Gierveld.,1987). The underlying model incorporates the *background variables*, *living arrangements*, *personality characteristics*, *descriptive characteristics* and *subject*

*evaluations of the social network, and the experience of loneliness* (de Jong-Gierveld., 1987, P.120).

In De Jong's loneliness model, background variables (i.e., age, employment status, gender, type of housing, community size, and geographic mobility) and living arrangements are assumed to influence people's network of social relationships. These variables have relevance to the shift in background variables, such as employment status, community size, transportation and living arrangements for those who emigrate from China to New Zealand during their later-life. For such immigrants, a new social network needs to be created and maintained. For those who have difficulties in social network construction, it may cause them the feeling of loneliness (deficiency in an expected number or perceived quality of social relationships) and social isolation during this time. Moreover, the concepts related to personality characteristics (i.e., concept of self, social anxiety, and intro-extroversion) contribute to the person's desired and achieved levels of social contact (Hong, 1996). Based on these factors, language barriers and the Chinese specific culture, such as 'saving face' and filial piety could limit Chinese late-life immigrants' level of social contact.

However, no literature was located testing the model's use with Chinese late-life immigrants' loneliness. According to De Jong-Gierveld (1987), loneliness is experienced when an *unpleasant or inadmissible lack of certain relationships* is identified (de Jong-Gierveld., 1987, P.120). In her model, no direct causal relation between the network of social relationships and loneliness is assumed. In accord, the subjective evaluation (cognitive appraisals) of people's social network is considered as a mediator between the quality of the social network and the feeling of loneliness (Stephens, Alpass, Towers, & Stevenson, 2011). More data are needed to establish whether or not there is an immediate causal relation between social network characteristics and loneliness among Chinese late-life immigrants.

De Jong-Gierveld's model was developed in 1987. Many potentially relevant background variables, such as marital status, education, income, and functional status were not included. Such variables should be considered since they are assumed to be related to late-life immigrants' social support (Hong, 1996). For instance, the Activities of Daily Living scale (ADLs) and Instrumental Activities of Daily Living scale (IADLs) are

typically used to identify the relationship between functional independence and loneliness. Low functional status may relate negatively to social isolation and loneliness (W. Chen et al., 2015; Shankar, McMunn, Demakakos, Hamer, & Steptoe, 2017). Hence, measurements of Chinese late-life immigrants' functional independence may be important variables for future research. Additionally, more potential factors corresponding to loneliness need be explored in the proposed study in terms of culturally specific characteristics. It is also important to further understand the association between loneliness and Chinese late-life immigrants' perspectives on quality of life (X. Lin, Bryant, Boldero, & Dow, 2016), as well as social support networks (Burholt & Dobbs, 2014; Burholt, Dobbs, & Victor, 2017).

### **2.3.3 The Model of Older People's Experience of Societal Alienation**

The experience of alienation was highlighted by Gotesky (1965) as an essential concept relating to loneliness. In Hong Kong, alienation was the concept used by A. Wong, Chau, Fang, and Woo (2017) to investigate loneliness and social connection of older Chinese. According to Wong's (2017) conclusion, a better understanding of older people's loneliness was achieved by considering three main experiences of social alienation: the person's perceived sources of societal alienation, their manifestations in response to societal alienation, and their feelings from societal alienation. Older adults in Hong Kong perceived inadequate care offering for them due to a growing feeling of isolated from the rest of society, and older people's *disintegrating identity* stemming from their *weakened presence, function, and voice*. Their *adapting toward a more passive lifestyle, attribution of marginalisation and inequality* (A. Wong et al., 2017, p. 13) to older age contributed the following manifestation in response. Consequently, societal alienation gave rise to feelings of unease towards ageing, of vulnerability and helplessness as older people, and of anger about their situation. Such feelings resonate with "ethical loneliness" (A. Wong et al., 2017, p. 13), which happens when older people feel they have been unjustly treated and dehumanised by human beings and political structures (Stauffer, 2015). However, no literature was located that applied this model to Chinese late-life immigrants. The perceived experiences of alienation for late-life immigrants could be more complicated than for older Hong Kong residents. In addition, the experience of loneliness for Chinese late-life immigrants could have more than one implication. Therefore, Model of Older People's Experience of Societal Alienation

should be applied with caution to understanding loneliness for older Chinese who have grown up in mainland China.

### ***Resilience to loneliness***

A conceptual framework of Chinese older adults' resilience to loneliness has been suggested by Lou and Ng (2012). Its structure allows researchers to examine variables under each factor in a specific social cultural context. Resilience refers to the idea that, regardless of the existence of risk factors in their life environment, individuals can develop resilience in maintenance of functioning and recovery from dysfunction (Lou & Ng, 2012; Staudinger, Marsiske, & Baltes, 1993). Accordingly, study suggests that to develop and maintain dynamic daily rhythms is helpful for family integration and managing relationships with others, which could reduce risks of loneliness for older Chinese (Lou & Ng, 2012). The resilience to loneliness framework provides some coping strategies to improve loneliness, but a systematic framework is needed to underpin future loneliness research.

## **2.4 Understandings in the research literature**

### **2.4.1 Introduction to empirical research literature**

Decisions for inclusion of the empirical research literature for review involved analysis for themes which were 1) predominant and appeared frequently, 2) presented by a range of literature and countries, 3) relevant to the experience of loneliness, older Chinese and late-life immigration. Generated themes were discussed with, and confirmed by, my supervisors. In the following sections, I will define the terms of loneliness and social isolation. Following this, I will present current prevalence of loneliness in Aotearoa/New Zealand; Chinese late-life immigrants in New Zealand; existing formal and informal interventions; and the impacts of being lonely and/or socially isolated. Lastly, I will identify the gaps in knowledge.

### **2.4.2 Empirical research literature**

### **2.4.3 Defining the terms of loneliness and social isolation**

There is a core difference between loneliness and social isolation (Weiss, 1973; Wright-St Clair et al., 2017). Hence, it is valuable to distinguish between loneliness and related concepts before investigating the phenomenon of loneliness. Loneliness and social



isolation are important health and social concerns among older adults (Nicholson, 2012); yet, are sometimes incorrectly interpreted as synonymous. A recent qualitative study in New Zealand asked older Māori, Pacific, Asian, and New Zealand European to define social isolation and loneliness in their own terms (Morgan et al., 2019). In this study, social isolation was often regarded as being connected to other people and the community. Male participants were more likely than the females to consider connections to their workplace. However, female participants tended to relate social isolation to their ability to maintain their domestic works and individual management. Being connected to the wider community was highly valued by Māori and Pacific participants, who considered lack of connection lead to their isolation directly. Furthermore, loneliness was commonly presented of as *an attitude, state of mind*, or inner feeling (Morgan et al., 2019, p4). Asian participants situated their experience of loneliness in relation to perceived filial piety received from their children. Accordingly, people described their loneliness and social isolation as *a personal attribute, situated in their wider structural contexts, such as gender and culture* (Morgan et al., 2019, p7). These findings suggest the participants from different ethnicities tended to merge their definitions of loneliness and social isolation whereas the formal definitions differ.

### **Loneliness**

To elaborate, loneliness has been defined as an unpleasant experience which happens when there is a deficiency in an expected number, or perceived quality, of social relationships (Fokkema, De Jong Gierveld, & Dykstra, 2012; Peplau & Perlman, 1982). Loneliness is normally demonstrated by intense feelings of *emptiness, abandonment*, and *forlornness* (X. Dong et al., 2012, p151). Loneliness can be defined as a multidimensional phenomenon, including emotional loneliness and social loneliness (Weiss, 1973). Emotional loneliness raises from the disappearance of close, intimate relationships; while social loneliness results from the inadequate accessible social network (Weiss, 1973). De Jong-Gierveld (1987) further elaborated three dimensions of the concept of loneliness. These were the feelings associated with the absence of an intimate attachment, an inadmissible lack of expected number of contacts and emotional aspects, such as personality characteristics. The author emphasised the cognitive processes that mediate between characteristics of the social network and the

experience of loneliness. In other words, the subjective perspectives of social networks will impact people's experiences of loneliness.

### **Social isolation**

Social isolation, a closely related term, is the objective lack of relationships, social support, and social networks for individuals (Cloutier-Fisher, Kobayashi, & Smith, 2011). Thus, social isolation could be regarded as a risk factor for loneliness, but loneliness may occur without being social isolated.

### **Loneliness defined in Chinese dictionary**

The liveliest creatures here, for the moment, must be the cicadas in the trees and the frogs in the pond. But the liveliness is theirs, I have nothing. (Zhu, 1927)

It is necessary to explore the definition or understanding of loneliness in Chinese, as the proposed study will recruit Chinese late-life immigrants. In most Chinese academic and clinical research, loneliness has been usually translated as “*gudu* 孤独” (Leung, de Jong Gierveld, & Lam, 2008). Similarly, “*gudu* 孤独” will be used in all Chinese version documents of this proposed study. In order to diminish any cultural misunderstanding, the initial work is to understand how the word of “*gudu* 孤独” is defined in Chinese. There are three major meanings found in the Modern Chinese Dictionary (Institute of Linguistics, 1978-2012), which is one of the official dictionaries of the country. These meanings are:

1. Young without father and/or older without a child (幼儿无父和老而无子);
2. Isolated and helpless (孤立无援, 孤单无助); and
3. Being alone and feeling emptiness, abandonment, depressive and anxious (只身独处; 孤单寂寞).

Thus, in the Chinese dictionary definition, social isolation and emotional isolation is identified as multidimensional. The Institute of Linguistics' (1978-2012) definitions of “*gudu* 孤独” will be applied in the proposed study with Chinese late-life immigrants. However, as yet, no unified definition of loneliness has been identified; hence, more exploration within different populations is warranted.

#### **2.4.4 Current prevalence of loneliness in Aotearoa/New Zealand**

The prevalence rates of loneliness among older adult cohorts in New Zealand vary. Data from the New Zealand General Social Survey (NZGSS) 2010 showed that one in three older adult New Zealanders (aged over 65 years) felt lonely to some degree in the last four weeks (Statistics New Zealand, 2011). In the same year, the 2010 New Zealand Quality of Life survey reported that 16 percent of adults felt lonely sometimes, one percent felt lonely most of the time, and less than one percent always felt lonely over the last 12 months (AC Nielson, 2011). Currently, according to the 2016 state of the nation's social report, around 10 percent of those aged 65 to 74 years and 13 percent of those aged 75 and older, self-identified as "feeling lonely 'all of the time', 'most of the time', or 'some of the time' in the last four weeks" (Ministry of Social Development, 2016, p. 238). The various rates of loneliness could be related to multiple reasons among older adults.

One of the key reasons for older adults to be more prone to loneliness is due to the increase of unstable factors in later life, such as loss of family members or friends or move to a rest home (Donaldson J. M. & Watson, 1996; Ryan, 1998). Secondly, older adults who report financial strain are more likely to be isolated from members of their social network (X. Dong & Chang, 2017; Krause, 2002). Furthermore, New Zealand is becoming progressively multi-ethnic as an increase in the number of immigrants is broadening the ethnic diversity in the community. Immigration in the later years of life has been identified as a risk factor for loneliness (Treas & Batlova, 2009).

In New Zealand, reported loneliness was highest for women, Māori, and Asians (Ministry of Social Development, 2016). According to the NZGSS 2014, only 32 percent and 50 percent of Asians, respectively, reported they "Had face-to-face contact with family at least once a week" and "Had non-face-to-face contact with family at least once a week"; whereas the national percentage was 52 percent and 64 percent, respectively. Thirteen percent of the Asian sample felt lonely some of the time in the last four weeks, which is higher than other ethnic groups. For those people who immigrated to New Zealand in the last five years, 32 percent and 13 percent, respectively, identified feeling lonely at a little or some of the time in the last four weeks compared with national average percentages of 22 percent and 10 percent

respectively (Statistics New Zealand, 2016c). To date, no data are reported comparing Chinese late-life immigrants' prevalence rates of loneliness to the national average rate in New Zealand.

It is difficult to directly compare the prevalence of loneliness between different studies because of differing methodologies. For example, the measurements of time or frequency people had felt lonely in research designs vary (Statistics New Zealand, 2009, 2011, 2016c) and the comparison of loneliness across time cannot be made. Furthermore, the word "isolated" in previous research (Statistics New Zealand, 2009, 2011) confuses social isolation with loneliness.

The NZGSS 2016 had the most updated national data of loneliness for older Chinese immigrants identified in the literature review. The Statistics New Zealand Census 2018 data were only partially released in the publicly available literature. In the hope to review the report for prevalence of loneliness for the cohort of interest, permission was granted by the AUT University to request access to the drilled-down data in Statistics New Zealand dataset. The access request included variables about *overall life satisfaction, sense of purpose, financial well-being, self-rated general health status, social contact and loneliness, contact with family and friends living in another household, and proportion of people who felt lonely in last four weeks*. The detailed dataset provided by Statistics New Zealand was disaggregated by ethnicity, immigrant status, and age. Disappointingly, it included only nine Chinese people aged 65 and above. Due to the small sample size, the sample error for the reported data is large. Therefore, no definitive prevalence data can be included in this literature review. In future, if the NZGSS recruits a representative sample of older Chinese for its survey, a secondary analysis of the data would be an untapped opportunity. It would enable a comparison of Chinese late-life immigrants' prevalence rates of loneliness with the national average to inform directions for future studies.

#### **2.4.5 Chinese late-life immigrants in Aotearoa/New Zealand**

##### **Demographic patterns**

According to Statistics New Zealand (1997), the number of Chinese late-life immigrants aged 50 years and over raise from 2, 641 in 1986 to 7, 089 in 1996. Took the 2006 as an example, Chinese people aged 65 years and over living in New Zealand were 9,231,

compared with 5,769 in 2001, there was an increase of 60 percent (Statistics New Zealand, 2002, 2007). Among the older Chinese population, immigrants contributed to 91 percent of the total older Chinese population in 2006, and 26 percent of the total New Zealand population. The number of Asian people aged 65 and over is projected to reach 56,000 in 2021, while the 2001 population was 11,000. Five times growth is expected in twenty years (Li & Chong, 2006). Chinese constitute the largest ethnic group within New Zealand's older Asian population (Li, 2011a).

New Zealand (Aotearoa) and many other developed countries are currently witnessing the ageing of the population. In 2016, approximately 13 percent of New Zealand's population was aged 65 years old or over (Statistics New Zealand, 2016a). An increase of ethnic and cultural diversity is observed in terms of changing immigration patterns (Wu & Penning, 2013). New Zealand's population statistics have shown a considerable transformation in its ethnic group age structure. In 2001, 3 percent of the older population was Asian, and the figure doubled to 5 percent by 2013. At the time of the 2013 Census, there were 9,978 Mandarin and Cantonese speaking Chinese aged 65 years and over living in New Zealand, a growth of 159 percent from 3,849 in 2001 (Statistics New Zealand, 2013b). Of these, 65 percent of the total older Chinese population lived in Auckland and 6 percent lived in Wellington. The proportions in Christchurch was about 7 percent and the percentages in Hamilton, and Dunedin were approximately 4 percent and 2 percent respectively. The remaining 17 percent lived elsewhere in the country (Statistics New Zealand, 2015). The population of Chinese late-life immigrants in New Zealand grew rapidly prior to the National Government's temporary closure of the parent category, family reunification visas citing the need for a review of costs to taxpayers. However, no Government research reports were located for this literature review. Subsequently, a new Parent Resident Visa, with increased financial eligibility requirements was introduced in mid-2020. As a consequence, social isolation and loneliness research with late-life immigrants' remains a relatively open field.

### **Describing the population of Chinese late-life immigrants**

The term 'late-life immigrants' is used to distinguish this group of Chinese from those who are native-born and those who immigrated when they were children or young adults. In this proposed study, the term "Chinese late-life immigrants" is used to refer

to people who were born and lived in mainland China, Hong Kong, Macau, and/or Taiwan before immigrating to New Zealand during their late phase of life and who identified as being of Chinese ethnicity. In recent years, older Chinese immigrants who resettled in New Zealand during their late phase of life, have accounted for the largest proportion of older immigrants aged 60 years or over in New Zealand. According to the 2013 census, nearly 2, 300 older immigrants aged 60 years or over self-reported as having been resettled in New Zealand for less than a year (Wright-St Clair & Nayar, 2016). Of these, about 70 percent identified as Chinese (1, 614). The largest age cohort (75 percent) that year was aged between 60 and 69 years, the second largest cohort (22 percent) was aged 70 to 84, and the remainder were aged 85 years or older (Statistics New Zealand, 2015). Unsurprisingly, late-life immigration usually involves dramatic changes and challenges in lifestyles, values and norms, behaviours, social, culture and language (Dinh & Nguyen, 2016; X. Dong, Zhang, & Simon, 2014; W. W Li, 2011; X. P. Lin et al., 2015).

First of all, residential relocation in later life is often associated with a series of event related to life course, such as retirement, disease or disability, and the loss of family member (Walters, 2002). What is more, immigration leads to significant ramifications for the physical and mental wellbeing and care needs of older people. In addition, greater economic dependency has been identified among those who immigrated after age 50 years or more, compared to those immigrating at a younger age (Ronald, Jacqueline, Lee, & Kyriakos, 1999). Immigration in old age are usually accompanied with inadequate financial resources and often with reduced government subsidies for supporting their retirement life (R. Wong, 2001). Additionally, Chinese late-life immigrants might also experience more challenges in terms of their values, traditional cultures, and language barriers. As discussed previously, older adults may be more sensitive to loneliness due to the increase of multiple losses, residential changes, and economic difficulty in later life (Ronald et al., 1999; Walters, 2002; R. Wong, 2001). These findings reinforce the need to further investigate older Chinese people's experiences of loneliness in New Zealand after immigrating in the late phase of life.

## **2.4.6 Loneliness in Chinese late-life immigrants**

### **Cultural influences in loneliness**

As evidenced in the research literature, culture plays an important role in Chinese late-life immigrants' experiences of loneliness. The value of having an extensive family is fundamental in building social networks for Chinese, especially for older generations. However, older Chinese immigrants normally have a relatively small societal network, which is mainly kin oriented and more susceptible to disruption as a result of relocation (X. Dong & Chang, 2017).

Most Chinese late-life immigrants are co-resident with their adult children and take care of grandchildren. Therefore, intergenerational relationships can play a dominant role in their perceived loneliness. For example, compared to other groups, older Chinese immigrants in Chicago's Chinatown were especially vulnerable to being lonely when they perceived a lack of satisfying intergenerational relationships with family (X. Dong et al., 2011). When compared to older Chinese in Chinese society, intergenerational relationships are more clearly defined, based on Confucian ethics of filial piety, with the political and social expectation that adult children will care for their ageing parents (Liu & Kendig, 2000). Adult children are expected to look after their parents, offer material and emotional support in their old age and fulfil older parents' needs within the cultural context of filial piety (Ishii-Kuntz, 1997). Past research has revealed that older Chinese would turn first to their adult children rather than other sources of support (S. T. Wong, G. Yoo, & A. Stewart, 2005).

In the immigration context, filial piety can limit dependent parents' development of new social networks in the host country and limit their access to social services/resources for support. However, adult children are often unavailable to provide the support their parents require because of work pressures (X. Dong et al., 2011; D. Ip, Lui, & Chui, 2007). Many older Chinese immigrants report feeling emotionally isolated from their children and desire closer family relationships (Mackinnon, Gien, & Durst, 1996). Yet, their dependencies on adult children increase intergenerational tension and conflict. Thus, most choose to keep quiet rather than talk openly about their feelings to avoid direct confrontation with their children (D. Ip, Lui, et al., 2007). Hence, the underlying cultural effects are important considerations

for research in the field. Compared with other ethnic groups, such aspects of Chinese culture may increase older people's susceptibility to loneliness.

### **Late-life immigration and loneliness**

Whether by choice, or due to economic or political reasons, the impact of late-life immigration remains as an underreported topic due to limited data and cultural differences (Blakemore, 2000). Such groups of people go mostly underreported in research. Previous research suggested that immigration in the later years of life served as a risk factor for loneliness (Treas & Batlova, 2009). Evidently, loneliness in the context of late-life immigration might be caused by altered aspects of older adults' life experience, such as family patterns, intergenerational relationships, and living arrangements. For example, among older adults in Britain, Chinese late-life immigrants have significantly higher rates of loneliness (24 percent), when compared to normative standards (8-10 percent) (Victor, Burholt, & Martin, 2012). Various prevalence rates of loneliness among late-life Chinese immigrants have been reported, with the highest being over 50 percent of the population in several studies conducted in western countries (Chow, 2010; X. Dong et al., 2012; Victor et al., 2012).

Furthermore, the duration of time since of immigration has been shown to be negatively associated with loneliness. For example, those who had fewer years of residence in Canada experienced greater loneliness than those who immigrated earlier (Wu & Penning, 2013). It was reported that the first three to five years was the hardest period for people to get used to the new environment.

On one hand, immigration-related family structure change and intergenerational conflicts could be a factor leading to loneliness (X. P. Lin et al., 2015). In particular, over recent decades, family forms and functions have been shown to depart significantly from traditional practices after immigrating to western countries. Recent evidence suggests the number of Chinese traditional extended-family households have declined in some countries (Hugman, 2000; Lee, 2004). In such contexts, adult children may prefer to live independently from their parents.

Concurrently, many caring attitudes (J. S. Kim & Lee, 2003) and relationships within multigenerational households have changed from filial piety to gaining more support



from social or healthcare services (Lo & Russell, 2007). Some younger generations have tended to abandon the traditional obligation to provide all the care for frail older parents, and have adopted some or all of the western patterns of care, including a reliance on government support and social services to help with domestic works and personal care (Lo & Russell, 2007). Typically, intergenerational activities are birthday celebrations, family gatherings for important Chinese festivals, and eating out. However, these activities were identified as lacking familial intimate communication by older Chinese parents in Queensland, Australia (D. Ip, Lui, et al., 2007).

For the older parents, switching their expectations of receiving support from their adult children to receiving public services has become an unfamiliar reality, and some services tend not to be used by immigrant seniors due to cultural barriers (Stewart et al., 2011). 'Saving face', an important Confucian concept that has shaped Chinese culture, is a likely reason for Chinese older adults' reluctance to share their negative emotions and life difficulties with others in order to avoid embarrassment (Kwong & Kwan, 2004). Of concern, such traditional cultural ideals might be further modified when resettling on foreign soil; hence, late-life immigration may fuel the feeling of loneliness (X. Dong et al., 2012).

On the other hand, living arrangements, normally associated with personal characteristics, such as age and gender; and socioeconomic variables, such as educational background, financial status and immigration status; and length of residing in the receiving country (Burr & Mutchler, 2012) are associated differently after late-life immigration than for immigration in adulthood. A Canadian qualitative investigation of Chinese late-life immigrants' challenges and barriers to services indicated they often babysit their grandchildren. This meant they had no time to access potentially beneficial social programmes until their daughters returned home to take care of the children (Stewart et al., 2011). In Stewart et al.'s (2011) study, some adults who immigrated in later stages of life identified that their willingness for independent living was restricted by lack of financial autonomy. For them, paid work opportunities are often limited due to poor health and government policies. Therefore, living independently from their adult children was virtually impossible.

Following traditional Chinese culture, parents often expend most of their savings on children's higher education, housing, and caring of grandchildren. Changing social norms means that in later life Chinese parents may suffer from financial difficulty if the filial piety culture is changed and adult children decline or are unable to provide them financial support. Although some older parents receive financial support from their adult children, this is typically supplementary and is usually considered "compensation for the inadequacy of care offered by their children" or "an expression of love between the parent and the child" (W. W Li, 2011, p. 12). Older Chinese adults in the US, with lower incomes, reported having smaller social networks (X. Dong & Chang, 2017) and a relatively higher rate of loneliness (Piro, Noss, & Claussen, 2006). Post-immigration family conflicts and negligence have also been identified as contributing to experiences of isolation among older adults (Stewart et al., 2011). Therefore, late-life immigration may change family dynamics, disintegrate family ties, and deplete social networks, which may further impact Chinese late-life immigrants' loneliness and social isolation.

### **Social support, networks, and loneliness**

The generation of social networks involves people, time and the shared activities and interests. One definition of social support refers to the accessible social resources for individuals. The social support contains both formal support from services/organisation and informal help from peers (Cohen, Gottlieb, & Underwood, 2000).

Social networks and social support contributed to older participants' resilience to loneliness in Hong Kong. Participants who lived alone, in particular, searched for and maintained social engagement with people from diverse backgrounds to replace full family-oriented life (Lou & Ng, 2012). Similarly, older adults in the US who had supportive social networks tended to show better physical and mental health than those without (Krause, 2002). Therefore, the literature indicates the importance of understanding the relationships between Chinese late-life immigrants' social support, social networks, and loneliness.

Furthermore, there is evidence to suggest that older Chinese immigrants are less likely to use their social support networks, with only 29 percent in the US reported to have used a senior centre within the past year (D. W. L. Lai & Chau, 2007). Various

challenges exist that may prevent older immigrants from using social resources. For example, Chinese late-life immigrants reported several barriers to participate activities in Canadian urban settings (Hsu, 2013). Such barriers may limit the chances for them to meet other people or access services. Moreover, inadequate accessibility to social and healthcare services or resources, and a lack of identity in society could be considered as sources of alienation for older Chinese immigrants (Lou & Ng, 2012). Their perceptions may provoke various feelings of loneliness, such as emotional, social, or ethical loneliness.

*Immigration, acculturation, economic distress, as well as cultural and linguistic issues* can negatively influence family support and caregiving behaviours (X. Dong et al., 2012, p157). For instance, immigrants in Norway reported experiencing disrupted language abilities and social networks and felt like 'prisoners of space' (Piro et al., 2006). Similarly, a New Zealand study found older Chinese immigrants experienced a disruption of daily activities and social networks, regardless of education levels (W. W. Li et al., 2010). In Auckland, over a third of older Chinese were found to have difficulties in acculturation (Abbott et al., 2003). Yet, results of a recent Australian study suggest that loneliness is even prevalent among older Chinese immigrants who are actively participate in social activities (X. Lin et al., 2016).

The same as Australia, New Zealand has a relatively large number of overseas-born people from China who would have cultural familiarity with a filial culture. For instance, older Chinese adults of New Zealand based Mandarin and Cantonese-speaking communities are mainly came from mainland China and Hong Kong (Statistics New Zealand, 2013b). People from the two regions have different regional identities, experiences of immigration, social or health needs, and ways of seeking support (Yee Hong Centre for Geriatric Care, 2013); while identifying themselves as Chinese.

Though the ethnic diversity of New Zealand has increased, there are large knowledge gaps with respect to the loneliness and/or social isolation and health needs of recent Chinese late-life immigrant groups. Health and social service sectors need to better understand the state of knowledge in this area in order to design strategies that alleviate Chinese older adults' loneliness and/or social isolation in their neighbourhoods and communities.

## Quality of life

The World Health Organization (WHO, n.d.) defined quality of life as how an individual perceived their status of life based on their culturally specific values, needs, beliefs and responsibilities. A recent quality of life definition includes dimensions of “*life satisfaction, physical and mental well-being, family relationships, economic independence, and social support or community relationships*” (WHO, n.d.).

Immigration was observed as having a negative influence on the quality of life of Chinese late-life migrants (Da & Garcia, 2015). In that study, the data indicated that immigration invoked older adults’ unfamiliarity with, and the disruption of, assumed social supports, community ties, cultural values, daily practices and life meanings (Hodgetts et al., 2010). It also weakens older Chinese immigrants’ quality of life—directly or indirectly (Hodgetts et al., 2010). For example, financial status was usually decreased after they immigrated into a country with language barriers, which further impacted social activities participation.

The reasons for immigrants’ lower quality of life vary. Research undertaken in the US revealed that language related acculturation stress was associated with poorer health outcomes for Chinese older adults compared to the US norms (Mui, Kang, Kang, & Domanski, 2007). Acculturation stress refers to the physical, emotional, and psychological stresses caused by immigration, resettlement, and adjustment to a new country or a new life (Cagney, 2006). Such acculturation stress may be causal of high rates of depression, anxiety, and post-traumatic stress (Cagney, 2006). Apart from language barriers, the loss of social status is another issue that participants frequently raised in Li’s study (2010). The older participants’ socioeconomic status in China was more likely to be disrupted after immigrating to New Zealand, which might impact on their health and well-being (W. W. Li et al., 2010). In addition, Chinese older immigrants in London reported that quality of life was associated with the external environment, physical and mental health, nutrition exercises and service availability (Da & Garcia, 2015). For example, only 10 percent of the study’s participants reported taking some kind of exercise such as tai-chi or walking to meet others in the city. Another 20 percent reported they had no place to exercise and expected programmes in the Chinese language. A further 10 percent reported traffic restrictions to accessing available places and making friends (Da & Garcia, 2015). Therefore, a deficiency of

social network connection has consistently been evidenced as a risk factor to isolation and feelings of loneliness.

Furthermore, studies have evidenced the relationship between loneliness and low quality of life. In Britain, loneliness was reported, together with poor quality of life, among older Chinese (Victor et al., 2012). Similarly, Australian-dwelling Chinese late-life immigrants indicated poorer quality of life and higher levels of loneliness compared to a local control group (X. Lin et al., 2016). Such evidence suggests that improving Chinese late-life immigrants' quality of life in New Zealand through systematically understanding their loneliness and developing an evidence-based intervention to address loneliness, could be beneficial.

In addition, life satisfaction is one of the determinants of quality of life. In other words, a higher level of life satisfaction might strengthen quality of life. However, it is interesting to see that older mainland China immigrants have different life satisfaction levels from older Hong Kong immigrants. A 2011 study found that respondents who emigrated from mainland China demonstrated comparatively higher levels of life satisfaction than older immigrants from Hong Kong (Chow, 2012). Hong Kong was a colonised city with developed economics and healthcare services. Chow (2012) contended that Canada offered better health care programs and old age pension benefits than mainland China; but Hong Kong might have better or equal level of benefits to Canada due to its British colonial history. Thus, for future life satisfaction research on older Chinese immigrants, whether or not including participants with Hong Kong background might influence the study results. Overall, investigating how older immigrants' various backgrounds influence quality of life and feelings of loneliness, and gaining insights into health strategies in the future are warranted.

### **Functional ability and loneliness**

Several studies report positive correlations among the ADLs Index, IADLs Index, and feeling of loneliness (W. Chen et al., 2015; Hazer & Boylu, 2010; Nagarkar & Kashikar, 2017). With advancing age, older adults may experience functional deficits, including limitations in carrying out daily activities and restrictions in his/her social participation (WHO, 2001). Changes in ADLs and IADLs are used to examine functional ability globally.

Functional disability in ADLs is a growing concern for ageing populations all over the world; yet, little research was located focusing on the later-life ADLs of Chinese immigrants. Research reported that loneliness is associated with an increase in difficulties with ADLs (Shankar et al., 2017). In an American study, older Asian Americans (Vietnamese, Korean, Japanese, Filipino, Asian Indian, and Chinese) reported higher rates of functional limitations in ADLs than non-Hispanic White seniors (Fuller-Thomson, Brennenstuhl, & Hurd, 2011). In Chicago, ADLs and IADLs were applied among older Chinese adults to measure their physical functions. Findings revealed 8 percent of them reported impaired ADLs, and 50 percent indicated impaired IADLs (X. Dong, Chen, Wong, & Simon, 2014). Moreover, many of the Chinese subjects in New York had chewing or swallowing problems, hypertension, anaemia, and stroke (Huang et al., 2003). According to a representative sample survey of 14, 292 older adults in China, 4 percent had at least one disability. The most commonly reported disability was Bathing. Disabilities showed associations with experiences of loneliness, women, older age, marriage status, living environment and lower level of education, income, physical health and life satisfaction (W. Chen et al., 2015). However, relevant research is very limited among Chinese immigrant population. This gap in the literature is important to address through exploration of Chinese late-life immigrants' functional status in families and communities and their relationships with loneliness.

### **Gender-specific roles**

Gender is another factor associated with loneliness. In a US-based study, women (23 percent) were more likely to self-identify various degrees of a lack of companionship than men (17 percent) (X. Dong & Chen, 2017). However, more data are needed to examine the association between gender and loneliness for Chinese late-life immigrants.

Chinese traditional culture might play a negative role in female's experience of loneliness. For example, the position of older females in a traditional Chinese family is necessary to consider since the husband might still follow the Chinese Confucianism culture of the three cardinal guides. The three cardinal guides, including *ruler guides subject, father guides son and husband guides wife* (Liu, 2013, p12), might still restrict the movement of older women and make it difficult for them to access services (D. W. L. Lai & Chau, 2007). The guides inform the understanding that it is shameful for a

married woman to disclose her concerns to others. Older Chinese women were significantly restricted by the experiences of loneliness, social isolation and activity routines (Federation of Ethnic Communities' Councils of Australia, 2015).

Results vary among gender differences because of various study designs and research samples. However, experiences, needs and coping skills may differ in relation to gender, given the culture specific context for female Chinese late-life immigrants. Thus, more research is required for service providers to work effectively with older Chinese immigrants.

#### **2.4.7 Existing formal & information interventions review**

Evidence suggests that the satisfaction with social support could significantly prevent the Asian American older adults from the experiences of loneliness (O. Kim, 1999).

Therefore, stronger social supports could modify loneliness as a risk factor for older Chinese immigrants (X. Dong, Simon, Gorbien, Percak, & Golden, 2007). Several years ago, social interactions within Chinese late-life immigrants were described as meeting for tea, and activities organised by community agencies, such as information on applying for citizenship, English classes, and meals (S. T. Wong, G. J. Yoo, & A. Stewart, 2005). Those who belonged to a church mentioned dealing with loneliness through praying or talking to other people in the congregation (S.T. Wong et al., 2005).

However, a randomised, controlled trial was undertaken in Finland where a psychosocial group intervention was implemented aimed at reducing loneliness, empowering older adults 'peer support and social integration. The study reported a significant reduction in health care costs, along with lower mortality and subjective health (Pitkala, Routasalo, Kautiainen, & Tilvis, 2009). Overall, the limited number of studies of interventions to ameliorate loneliness were mostly designed for older Asian immigrants or older Chinese immigrants. There is limited research which addresses loneliness specifically for Chinese late-life immigrants.

In summary, the reported rates of older New Zealanders' loneliness rates vary between approximately 10 to 50 percent (Wright-St Clair et al., 2017). However, no published articles report rates for older or late-life immigrants. A number of community services in New Zealand have established a variety of formal and informal programmes aimed at reducing older immigrants' social isolation and loneliness. For

example, some nursing homes and senior centres provide programmes and services, and homemaker services provide ethnic specific services (Chow, 2012). However, a recent New Zealand integrative review identified only one randomised controlled trial, conducted in residential aged care, that tested the effectiveness of an intervention aimed at ameliorating older adults' loneliness (Wright-St Clair et al., 2017). Most research identified the element of loneliness in the results rather than initial research aim. This suggests there is a potential risk of loneliness among this population, with a corresponding gap to be addressed. Hence, implementation studies are needed to test the effectiveness of interventions aimed at ameliorating loneliness for Chinese late-life immigrants.

#### **2.4.8 Impact of being lonely and/or socially isolated**

Studies have showed that loneliness is strongly associated with depressive symptoms (Cacioppo, Hughes, & Waite, 2006), mental health decline (Wilson et al., 2007), poor physical health (Luanaigh & Lawlor, 2008), and self-harm or suicidal ideation (Cheung et al., 2017). A study in Australia suggested loneliness and isolation as one of the reasons for self-harm among people aged 80 years or older with a culturally diverse background (Anne, Wand, Peisah, Draper, & Brodaty, 2018). In particular, compared to the general population, Chinese late-life immigrants are reported as more prone to the experience of loneliness and suffering with negative health impact in terms of language and cultural differences (X. Dong et al., 2012).

Health providers have expressed concern regarding the effects of loneliness, which might trigger poor health behaviours and healthcare utilisation (X. Dong et al., 2012). For example, a community-based participatory research measured Chinese older adults' perceptions and negative effects of loneliness in Chicago (X. Dong et al., 2012). Participants with loneliness symptoms were likely to perceive it associated with elder abuse, health behaviour changes, and poorer quality of life (X. Dong et al., 2012).

Of concern, older Chinese adults over the age of 65 were identified to have the highest suicide rates than other non-Chinese groups in the US. Compared with the general population in the US, older Chinese women reported a higher rate of death due to the suicide (Centers for Disease Control and Prevention, 2010). An earlier US study demonstrated that the suicide rate among older Chinese women was 3-fold higher



among the 65–74 years old group; 7-fold higher among the 75–84 years old group; and 10-fold higher among people over age 85, in a comparison with Caucasian women of the same age groups (X. Q. Dong, Chang, Zeng, & Simon, 2015). Older Chinese immigrants in Chicago with suicidal ideation are more likely to live alone or feel lonely (X. Dong, Chen, et al., 2014); hence, culturally sensitive prevention and intervention strategies are indicated to address their status of loneliness. While understanding the relationship between loneliness and suicide is important, there is no single definition of what loneliness is or how it is measured.

## **2.5 The gap in knowledge**

In summary, the prevalence rate of Chinese late-life immigrants' loneliness in New Zealand was underreported. The Asian population was identified as having the highest rate of loneliness (Ministry of Social Development, 2016). Chinese are a fast-growing population and constitute the biggest group among Asians in New Zealand. However, the existing data about older Chinese immigrants are limited. An examination of the rates of Chinese immigrants' social isolation and loneliness in New Zealand is needed by researchers, services providers, and policy maker.

This literature review found some international studies addressing older Chinese immigrants' loneliness and social isolation. Yet, evidence of how Chinese late-life immigrants define and understand loneliness and social isolation is absent. People describe and cope with their experience of social isolation and loneliness based on complex and culturally nuanced understandings and knowledge. The experience of late-life immigration made it more complicated than older Chinese immigrants who immigrated in younger age. There is a gap in understanding regarding how Chinese late-life immigrants in New Zealand generate their own knowledge of loneliness and social isolation. Having this understanding will improve researchers' or services providers' practice by better knowing the implications of their loneliness and their support needs.

The question of how loneliness is manifested in Chinese late-life immigrants is a largely understudied area of research. There have been no mixed-method design studies investigating Chinese late-life immigrants' experience of loneliness in New Zealand.

Although there some intervention studies were performed in western countries among the European population, there were no interventions undertaken amongst this group, and no evaluation approaches have been developed to measure its strengths and weakness. There are a number of limitations for this proposed study to consider. Therefore, I begin this study with an aim to investigate the resources or interventions necessary to alleviate Chinese late-life immigrants' loneliness. The question this study asks is how loneliness is manifested among Chinese late-life immigrants in New Zealand.

## **2.6 Chapter summary**

This chapter has reviewed the literature on loneliness and social isolation models and theories, followed by a review of empirical research literature. In the process of conducting the literature review, gaps in knowledge and limitations in existing loneliness research were revealed. Few research studies have investigated how loneliness was defined, understood, and manifested by Chinese late-life immigrants. No community-based resource, services, or interventions were reviewed for ameliorating their loneliness. The factors raised in this chapter have assisted in determining the most suitable methodology and methods for this thesis. The next chapter considers the research worldview, theoretical frameworks, and methodology underpinning this study.

## **Chapter 3 The theoretical framework**

### **3.1 Chapter introduction**

This chapter presents and justifies the theoretical framework critically constructed to guide the study. The interconnectedness of three parts of the framework and how they collectively guide the theoretical development of the research and thesis are presented.

### **3.2 Theoretical framework**

An overarching theoretical framework was constructed for this study to guide how the complexities of conducting research with older Chinese from mainland China following their late-life immigration to New Zealand. The framework's component parts include a conceptual model called Exclusion from Social Relations for Older People, a philosophy of Confucianism, and Arthur Kleinman's social suffering theory. Collectively, the three components create a structure and context for this study from which to inform my research design and data analysis. The ontological understanding of the Conceptual Model of Exclusion from Social Relations for Older People brings is that cultural norms and values impact older people's, and by implication, late-life immigrants', social relations and loneliness. However, no evidence was found for the conceptual model's suitability for application to Chinese late-life immigrants in Western societies. Hence, Confucianism and Arthur Kleinman's social suffering theory were chosen to construct the framework to take account of schemas and impact of Chinese specific culture on social relations and loneliness of older Chinese immigrants in New Zealand.

#### **3.2.1 The Conceptual Model of Exclusion from Social Relations for Older People**

The perspective of critical human ecology contends that the human experience is impacted by individual characteristics, interpersonal relationships, and the sociocultural, social-structural, policy and physical environments. Essential to this perspective is that people's physical and sociocultural environments are further shaped, modified, and adapted simultaneously by individuals (Bronfenbrenner, 1986).

Additionally, Holroyd (1998) indicated that human agency and action lead to the emergence of cultural forms and cultural propositions. The cultural forms and propositions are basic cultural filters further modified by life stage and circumstance. Individuals use them to make sense of, and derive action in, their surrounding environment and society.

It follows, then, that Chinese late-life immigrants' experience of loneliness in New Zealand is also influenced by their distinct characteristics, interactions with others, as well as interactions with the outside environments. Therefore, to understand the complex schemas that underpin an older Chinese person's migration experience, adaptations, and sense of belonging or loneliness within the context of New Zealand society, the interactions and dynamics underlying the human experience, culture, and the milieu in which they are situated are essential elements to be considered.

In light of the above discussion, a Conceptual Model of Exclusion from Social Relations for Older People (Burholt et al., 2019)—outlined in Figure 2 below—was employed. The conceptual model, combined with a human ecological framework (Bronfenbrenner, 1986) and cultural schemas, are used in the current study to explore loneliness and social inclusion for Chinese late-life immigrants.

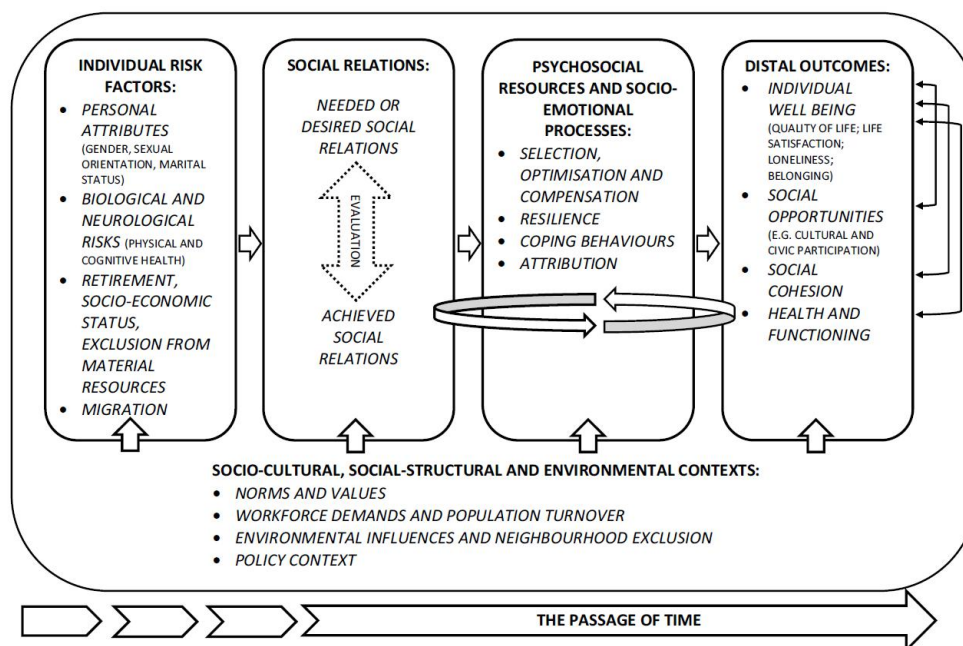


Figure 2. Conceptual Model of Exclusion from Social Relations for Older People

Reprinted from Burholt, V., Winter, B., Aartsen, M., Constantinou, C., Dahlberg, L., Feliciano, V., . . . Waldegrave, C. (2019). A critical review and development of a conceptual model of

exclusion from social relations for older people. *European Journal of Ageing (Open Access)*, p. 4. Copyright (2019) by the Creative Commons CC BY license. Reprinted with permission

The Conceptual Model of Exclusion from Social Relations for Older People was developed by an expert review group through critical review and data interpretation (Burholt et al., 2019). In this model, social relations represent social resources, social connections, and the social network. Research evidence from separate research areas was collected and combined into a conceptual model to understand the risks for, and the implications of, old-age exclusion from social relations (Barnes, Blom, Cox, Lessof, & Walker, 2006; Burholt et al., 2017; J. De Jong Gierveld, 2015; Schwartz, Unger, Zamboanga, & Szapocznik, 2010; Walsh, Scharf, & Keating, 2017; S. T. Wong et al., 2005). Individual risk factors, the social relations to *psychosocial resources and socioemotional processes, sociocultural, social-structural, environmental and policy contextual influences* were identified as contributing to the social exclusion for older people (Burholt et al., 2019, p5). For further review, the individual risk factors for exclusion from social relations covers older people's *personal attributes, their biological and neurological risks, retirement, socio-economic status, exclusion from material resources and migration* (Burholt et al., 2019, p5). In addition, the model includes the long-term influences of exclusion from social relations, which are *individual well-being (quality of life, life satisfaction, loneliness, and belonging), health and functioning, social opportunities and social cohesion* (Burholt et al., 2019, p5). The dynamic relationships between elements are also demonstrated in the model.

### **Migration**

Migration was indicated as a risk factor that impacts upon or disrupts people's network of social relationship (Burholt et al., 2017; J. De Jong Gierveld, 2015). Participants in the current study emigrated from China to New Zealand during their later-life causing a shift in their circumstances. For instance, their residential arrangements, financial status, independence, social identities or health status could all be changed by immigration. A new social network needs to be created and maintained in the new host society. For those who have difficulties in social network reconstruction, migration could cause them to feel loneliness during this time (De Jong-Gierveld, 1987). Evidence suggests that *good and extensive* social relations with a range of people and community groups are helpful for social inclusion (Barnes et al.,

2006). In contrast, exclusion from social relations (social isolation) has been reported as being associated with various levels of loneliness in the older population (J. De Jong Gierveld, Van Tilburg, & Dykstra, 2018).

The model further indicates the presence of absence of older people's loneliness is associated with how much the quality and quantity of their relationships meet personal needs or expectations (J. De Jong Gierveld, 1998). In other words, one could experience exclusion from social relations, but this only negatively impacts on feelings of loneliness if the experience deviates from personal expectations. In general, Chinese late-life immigrants' purpose for migration is family reunion. Whether or not the quality and quantity of relationships with their family, especially adult children and grandchildren, can satisfy their needs, would determine their feelings of loneliness. Thus, improving loneliness of Chinese late-life immigrants may entail balancing both sides, by adjusting between expectations and realities regarding the quantity and frequency of social relations.

### **Cultural effects**

The cultural effects, such as Chinese historical, geographical, and familial factors on exclusion from social relations need to be considered for Chinese late-life immigrants in the present study, since it maybe contribute to each person's desired and achieved levels of social relations. For example, the extent of social relations' effects could be influenced by older Chinese people's expectations on sources of support and family structure (Burholt et al., 2019). Even the cultural values about social relations might have the potential to create *stigma* and disrupt the '*moral status*' of an individual (D. Liu, Hinton, Tran, Hinton, & Barker, 2008). For instance, Chinese late-life immigrants' level of social contact could be limited by their experience of cultural conflicts, such as 'saving face' and filial piety, and language barriers after immigration.

The model has not been utilised with Chinese late-life immigrants specifically to explore their experience of loneliness; and its western way of interpretation of exclusion from social relations might not be applicable for other cultures (Burholt et al., 2019). Therefore, the Conceptual Model of Exclusion from Social Relations for Older People has its limitations when applied among older Chinese immigrants who have specific cultural effects. However, the model is considered novel and robust enough to

include the dynamic interrelatedness and *relationship between exclusion from social relations, risks and outcomes* (Burholt et al., 2019, p4). It also includes loneliness, quality of life, and social opportunity in various levels and elements based on the human ecology framework. Another reason for selecting this model to underpin the study is that it offers a starting point for more studies to test the model, investigate the potential relationships between levels and elements, and enhance further conceptual development (Burholt et al., 2019). The model will offer a general understanding of older people's loneliness, risk factors and dynamic schemas between them. However, it was determined that culturally specific theories or an expanded framework was needed to conduct a study of how Chinese late-life immigrants understand, experience and cope with loneliness, given their deeply rooted Chinese culture, history, values and beliefs. Accordingly, to address this limitation, the philosophy of Confucianism and the Social Suffering Theory of Arthur Kleinman were brought into the framework, as reviewed in the next sections.

### **3.2.2 Confucianism**

The philosophy of Confucianism was chosen for the purpose of including Chinese specific understandings into the study's theoretical framework. In this section, I will consider Confucianism in-depth and justify how its philosophy underpins the theoretical framework of this study.

Confucianism is a Chinese derived philosophy from the 5<sup>th</sup> century [BC] and involves in extensive areas, ranging from moral, social, philosophical and religious ideas, values to practices. The ontological understanding of Confucianism is that moral principles had mainly influenced the shaping of older Chinese society, people's views, values, behaviour and interactions with others regarding the order of gender, family, class, and hierarchies.

Accordingly, as Chinese traditional culture, Confucianism constructs the background and culture specific lens of the present study. It will be used to guide the research design, data gathering, and data analysis by understanding the hierarchical structure within the Chinese family, the five cardinal relationships (*wu lun*, 五伦), and the cultural expectation of filial piety (*xiao*, 孝).

The five cardinal relationships refer to the five dyadic relationships between rulers and minister, father and son, husband and wife, older and younger brother, and friends. In the current study, the core value in dyads of Chinese family members described by Mencius (Legge, 1960) are: “between father and son, there should be affection; between husband and wife, attention to their separate functions; between elder brother and younger, a proper order” (Yeh & Bedford, 2004, p. 12). Relationships which are contrary to, or outside of, the parameters of *wu lun* are considered as not acceptable to the society (Yeh & Bedford, 2004). Within a Confucian culture, the expected normal situation between wives and husbands are rites (*Li*, 礼). Rites refer to ‘the ways of three obedience’ of the wife to her husband (i.e., first to the father, then to the husband, then to the son) and ‘division of labour’ between them (Gao, 2003). As stated in the Chapter One, until recently, the phrase ‘a good wife and wise mother’ (*xian qi liang mu* 贤妻良母) established itself as the standard for womanhood, emphasising women’s remarkable influence over their husband, sons, daughter-in-law, and society.

In the parent-child relationships, Confucianism emphasises the importance of filial piety towards parents as a universally accepted virtue of a benevolent person (Sun, 2008). While adult children well-satisfying their parents’ needs and maintaining their happiness by following the virtue of filial piety, older parents are also honoured in the community for having filial children (Fan, 2009). However, along with the Chinese government’s policy of ‘reform and opening’, as China becomes more industrialised and westernised, parent-child relationships tend to be upheld more by reciprocity than filial piety (Yeh & Bedford, 2004).

Furthermore, the experience of immigration could be another risk factor that disrupts the ties of filial piety. Confucius’ *Analects* 论语 suggest that ‘one should not go abroad or travel to distant places while one’s parents are alive. If it is necessary to travel, there should be a definite direction’ (父母在，不远游，游必有方) (Confucius, 1971). The traditional values of dependence and co-residential households encourage older parents’ immigration in late life to reunite with adult children. Being left alone in China might cause adult children gaining a negative reputation of being unfilial to parents. However, the conflicts between the collective values of Confucianism and the



independence, self-reliant context of New Zealand, could raise more challenges for Chinese late-life immigrants. Such concerns will be explored in the current study.

However, Chinese culture, values, and perspectives have undergone a tremendous shift over the last 2500 years. Consequently, the position of Confucianism, as the leading philosophy in China, has diminished. For example, Chinese people's values, behaviours and how they maintain relationships with others is experiencing changes in a modernised and westernised environment. Thus, Confucianism has its limitations with regards to reflecting the current study's complicated schemas—although some older people are still versed in the Confucian Canon of Four Books (*Si Shu*, 四书) and Five Classics (*Wu Jing* 五经). While Confucianism was considered as the essential Chinese traditional culture background to underpin the study, it does have limitations. Moreover, Chinese late-life immigrants in New Zealand may situate their experiences of loneliness in a more complicated context than in China, as Chinese traditional and western ideas are combined. I needed a modern and empirical research evidence-based theory to complement the limitations of Confucianism. Thus, Arthur Kleinman's social suffering theory was included in the conceptual framework for this study.

### **3.2.3 Arthur Kleinman's social suffering theory**

Arthur Kleinman's work on mental illness in Chinese culture is well recognised in the field. Kleinman has contributed to Chinese culture-bound syndromes with his anthropological and medical understanding. Kleinman and his colleagues highlighted the importance of interpersonal processes which connect the individual with public meanings and social networks within Chinese society (Kleinman & Kleinman, 1997; Roberto & Arthur, 1994).

The ontological understanding of Kleinman's (2010) theory of social suffering is that socioeconomic and sociopolitical forces can influence people's health, and social suffering usually extends from the individual sufferer to the family and social network. These assumptions are congruent with the pragmatist worldview chosen for this study and its focus on a changing universe rather than an unchanging one (Gerald, 2014). The stance is reinforced by Kleinman (2011) in his Chinese research. He stated that Chinese individuals, families, and communities continuously reproduce meanings in distinctive ways, shaping their experience and worlds in particular modes (Kleinman et

al., 2011). Hence, Kleinman's theory provides a lens with which to investigate Chinese late-life immigrants' loneliness experiences, based on the shared meanings they create together. By adopting this theory, the complicated dynamics underlying Chinese late-life immigrants' loneliness experiences, and the interactions within the context of New Zealand, can be explored through a culturally specific lens. Kleinman and Kleinman (1993) emphasised that within Chinese groups, the ability to preserve and extend one's parentage such as work, marriage, and bearing children, is viewed as key to claiming identity and belonging to a moral community.

In the Chinese community, some cultural characteristics, such as face (*mian zi*, 面子) and *guan xi* 关系 (relationship) (L. H. Yang & Kleinman, 2008) are also regarded as potential protective effects on emotional health disorder. It was indicated that the upholding and use of face as core values for individuals in China is to achieve opportunities of marriage, reproduction, and secure the family structure (L. H. Yang & Kleinman, 2008). Upholding face thus demonstrated a 'moral mode' of experience to define what was most important for ordinary people in a local world, such as status, wealth, self-development, health, or relationships (Kleinman, 1998). Furthermore, the 'social support' or one's *guanxi* (relationship), regarded as one's ability to draw upon resources through connections, is essential to achieve their objective and subjective welfare (Kawachi, Kim, Coutts, & Subramanian, 2004).

On the contrary, loneliness or social isolation might be socially stigmatised as low capability in psychological adjustment, achievement, construction of one's *guanxi* (relationship), or integration into the community (Lau & Gruen, 1992). Hence, older Chinese immigrants may experience stigma for going to the doctor or health professionals to talk about their loneliness (L. H. Yang et al., 2007).

Stigma is a significant moral issue in which stigmatised situations negatively impact what is at stake for sufferers (L. H. Yang et al., 2007). As argued by Kleinman (1996; Kleinman & Kleinman, 1991), face and stigma are closely aligned and work through the same interplays of *physical-emotional-sociocultural* domains among Chinese. Therefore, loneliness related to losing face or stigma would negatively impact Chinese people's moral status in the local community (L. H. Yang et al., 2007). It has a potential

risk that Chinese late-life immigrants might hide their stories or avoid gaining external assistance and support.

The conceptual model and cultural theories were found complementary to each other in the context of my research to build my theoretical framework and usefulness in guiding the data gathering and analysis to be described in the methods chapter via a Chinese culturally specific lens. In this chapter, I have explored the theoretical frameworks, including a Conceptual Model of Exclusion from Social Relations for Older People and culturally specific lens of Confucianism and Arthur Kleinman's social suffering theory to underpin the method design and data analysis. The models I have borrowed help to explore Chinese late-life immigrants' loneliness through their original values, cultures, moral code, and the context of New Zealand under the premise of immigration. These theories constituted my theoretical framework for this study and sustained the lens of my research in culturally specific and dynamic ways. The theoretical framework reflects my knowledge about theory and has capability to reflect participants' realities and experience.

The De Jong-Gierveld Model of Loneliness and the model of Older People's Experience of Societal Alienation were not chosen as an overarching framework for this study due to their limitations. Chinese late-life immigrants' experiences in New Zealand could be far more complicated than factors demonstrated by these two models. However, variables of the De Jong-Gierveld Model of Loneliness informed the measurements used in this study. The impact of types of alienation on loneliness will be considered during my study data analysis. In addition, it is worth identifying different types of loneliness in the current study in terms of Chinese late-life immigrants' specific situations.

## **Chapter 4 Research methodology**

### **4.1 Chapter introduction**

This chapter explains and justifies the overarching philosophy for, and the mixed-method methodology chosen to meet the aims and objectives of this study. The first section presents the research questions generated from the literature review.

Following that, the section discusses the pragmatist worldview or paradigm guiding this study, including the rationale for the use of a pragmatist view to underpin the proposed mixed-method methodology. Lastly, the mixed-method methodology is demonstrated and shows how it informs the current study.

### **4.2 The research questions**

The overarching research question examined in this study is “what are Chinese late-life immigrants’ experiences of loneliness and social isolation in New Zealand”. In order to answer this research question, the study’s aims are to:

1. Examine how loneliness is understood and experienced by Chinese late-life immigrants in New Zealand;
2. Identify the implications of loneliness;
3. Identify the impact of loneliness on Chinese late-life immigrants’ health status and well-being;
4. Explore participants’ experiences of usability and acceptability of the standardised surveys;
5. Examine the concordance and discordance between standardised measurements and interviews; and to
6. Co-design evidence-based resources to address Chinese late-life immigrants’ loneliness.

### **4.3 Research worldview or paradigm**

The use of a single quantitative or qualitative methodology was considered insufficient to answer the research question and achieve the study’s aims, as outlined in the above section. Knowledge gained from the literature review revealed that loneliness is commonly examined through quantitative methods using status or scores. Other

studies have explored older people's loneliness using qualitative methods. In relation to this study, a mixed-method methodology was determined to be most congruent with answering the research question and aims. Pragmatism was selected as the paradigm and worldview for this study. It is argued to be the most congruent philosophy for a mix methods methodology study (Tashakkori & Teddlie, 2003). The term 'worldview' is defined as a common set of beliefs or assumptions that guide the researcher's study (Guba & Lincoln, 2005). Paradigm is a term often used synonymously with worldview. Paradigm is a set of general beliefs and agreements shared between researchers about how they think about and interpret the problems (Kuhn, 1970).

Creswell (2014) identified four main types of paradigms: positivism/post-positivism, constructivism, pragmatism, and transformative. Chilisa and Kawulich (2012) explained that the principle methodologies employed in social science research are upheld by one of these paradigms. Each paradigm has a different set of beliefs or philosophical assumptions about knowledge and how knowledge is developed. Therefore, researchers have their own worldview which is constructed by their belief about the nature of reality and knowledge; and their ethics, culture, and values systems (Chilisa & Kawulich, 2012). Four fundamental concepts have been described as constituting a philosophy of knowledge: ontology, epistemology, axiology, and methodology (Denzin & Lincoln, 1994; Mertens, 2007). Denzin and Lincoln (2017) contended that a researcher's beliefs about ontology, epistemology, and methodology instruct the paradigm.

Ontology is the theory of reality, by which the researcher's perspectives of what reality is, or the science or study of being, are influenced (Crotty, 1998). Epistemology is the study of the nature of knowledge, justification, and the rationality of belief, which influences the research approach, design, and method (Crotty, 1998). Methodology refers to the theoretical and philosophical assumptions that influence the approach or methods that a researcher adopts in the study (Teddlie & Tashakkori, 2009).

In the following section, a pragmatist worldview is introduced. The rationale for choosing pragmatism will be discussed through five aspects: epistemology, ontology, axiology, theoretical framework, and methodology. Each aspect illustrates how

pragmatism is “the net that contains the researcher’s epistemological, ontological and methodological premises” (Denzin & Lincoln, 2017, p. 22) for this study.

#### **4.3.1 Introduction to a pragmatist worldview**

Pragmatist philosophy originates from the work of Charles Sanders Peirce (1839-1914), William James (1842-1910), and John Dewey (1859-1952). Pragmatists contend that thought should be utilised as an instrument or tool to predict, act, and solve problems; rather than to describe, represent, or reflect reality (James, 1909). Pragmatism is a sound worldview which focuses on the consequence of research as the primary importance of the question asked (Creswell & Clark, 2007). I chose John Dewey’s pragmatist philosophy to inform the current study because it is considered “the most detailed and developed” (Biesta, 2010, p. 97) form of pragmatism, where answers are sought in terms of “knowledge, reality and the conduct of inquiry” (Biesta, 2010, p. 97). Dewey’s pragmatism predicts research inquiries to be flexible, context specific, and dedicated to well-being of individual and community (Jones, 2014). In order to further understand John Dewey’s pragmatism, the five fundamental concepts: ontology, epistemology, axiology, theoretical framework, and methodology will be critiqued in the next section.

#### **4.3.2 Ontology**

Ontology can take either an objective or subjective position. An objective ontology considers a social reality exists independently of a person’s body and mind, which is relatively stable and congruent with a quantitative methodology to objectively measure social variables (Creswell, 2014; Guba & Lincoln, 1982). Conversely, subjectivists declare that there is no external reality and the subjective knower is the only source of reality (Guba & Lincoln, 1982). Dewey’s pragmatism assumes that the world is always changing and never fully finalised, so people can never achieve one determinate view of reality (Dalsgaard, 2014; Dewey, 1922).

Dewey (1929a) further explained that people can never achieve one stable or static understanding of things since very few situations remain determinate over time (Dewey, 1929a). Thus, the world is difficult to measure by quantitative methodology alone due to its unstable nature. In addition, the subjective knower’s response to the

world needs qualitative methods to explore the details. Correspondingly, I assume that loneliness cannot be uniformly experienced because, from a pragmatist perspective, it is not a static entity. I accept that people experience loneliness differently depending on their individual characteristics, cultural and social contexts. This point of view is important for the field of mixed-methods research as it generates different outcomes through different approaches.

### **4.3.3 Epistemology**

John Dewey's theory of knowledge (Dewey, 1911) and framework of transactions (Dewey, 1929b) views learning and knowing as a dynamic and interactive experience. A fundamental assumption is that people acquire knowledge from their previous knowing, perceived discrepancy, external stimulants, and interactions with their environment (Anderson, 2014). The purpose of knowledge is to help people plan intelligently and direct their actions to transform uncertain situations into those more controlled and certain (Biesta, 2007; Dewey, 1930). In the context of this thesis, the study intends to generate knowledge to understand Chinese late-life immigrants' experiences of loneliness, the implications and impacts of their loneliness, the ways in which they react to loneliness, and how to co-design community resources or services to address their feeling of loneliness. Therefore, this research adopts a problem-solving approach to loneliness from both internal and external contexts, which follows the philosophy of pragmatism's epistemology.

### **4.3.4 Axiology**

Scholars have argued that existing knowledge of mixed-method research have placed a large focus on ontology, epistemology, and methodology; however, axiology, the attributes of ethics and things people are value, was often overlooked (Biddle & Schafft, 2014; Denzin & Lincoln, 1994). Axiology refers to the role of values. Researchers' personal experiences, values, political beliefs, and social position might influence their study. Biddle and Schafft (2014) suggested that axiology is essential for research question selection and formation and for addressing "inequality and injustice in society using culturally competent mixed-method strategies" (Mertens, 2007, p. 212). In this thesis, axiology merits some exploration of value commitment within my study of Chinese late-life immigrants who are usually "being made to feel and be

invisible (marginalized) (Mertens, Bledsoe, Sullivan, & Wilson, 2010, p. 195) as a minority within the context of New Zealand. Therefore, my beliefs of values, cultural perspectives on ageing and what it means to belong to a minority and understanding of New Zealand context might shape the research question selection, study design, and data interpretation.

Crotty's framework (1998) proposed that epistemology, theoretical perspective, methodology, and methods are four elements connected with each other. The designed structure and order of epistemology, theoretical perspective, methodology and method inform decision making regarding methodological approach (Creswell, 2014). Therefore, following the pragmatist worldview, the theoretical framework is described prior to methodology for its relevance in understanding the current generation of older Chinese in the context of late-life immigration.

#### **4.4 Pragmatism and mixed-method methodology**

Pragmatism gives scope for investigating study questions through the application of multiple methods of data collection and analysis (Creswell & Clark, 2007). Pragmatism is often identified in textbooks and articles, and is one of the most commonly used philosophical underpinnings for mixed-method research (Creswell & Plano Clark, 2011; Tashakkori & Teddlie, 2003; Teddlie & Tashakkori, 2011). Although multiple methodologies, such as critical realism (Maxwell & Mittapali, 2010; Zachariadis, Scott, & Barrett, 2013) or dialectical approaches (Greene & Hall, 2010; Onwuegbuzie, Collins, & Frels, 2013) have been proposed as possible rationales for mixed-method, the proposition of which theoretical perspective best underpins mixed-method research is still under debate (Creswell & Plano Clark, 2011; Teddlie & Tashakkori, 2011).

Traced back to the origins of mixed-method, the formative period began in 1950s and continued up until the 1980s. During the 1970s and 1980s, the paradigm debate period developed when some researchers argued that quantitative and qualitative data could not be combined because of differences in philosophical assumptions (Guba & Lincoln, 1988; Smith, 1983). It was suggested that mixed-method research was "incommensurable" due to opposing ontological paradigms that could not be combined (Creswell & Plano Clark, 2011, p. 25). More recently, the associations between the data collection method and the underpinning philosophical perspectives



are not as “tightly drawn” as during the paradigm debate period (Creswell & Plano Clark, 2011, p. 26). Although the issue is still apparent (Giddings, 2006; Holmes, 2006), Tashakkori and Teddlie (2003) asserted that pragmatism is considered as the best philosophical foundation for mixed-method research and paradigmatic dualism is acceptable (R. B. Johnson, onwuegbuzie, & Turner, 2007). It means different paradigms can co-exist distinctively within a mixed-method research (Greene & J., 1997; Tashakkori & Teddlie, 2003).

## **4.5 Research methodology**

The overarching methodology for this study is mixed-method methodology. In this section, mixed-method methodology will be defined, the rationales of adopting mixed-method methodology are considered, and how mixed-method methodology informs the present study will be illustrated. More specifically, this thesis used a convergent parallel mixed-method design, which will be discussed further. In addition, community-based participatory research method is a practical way of linking research data and existing social practice to co-design appropriate resources or approaches for improving loneliness in the community. Therefore, the reasons for choosing community-based participatory research as part of the qualitative strand of the mixed-method methodology will also be critiqued in this section.

### **4.5.1 Mixed-method methodology**

Several definitions for mixed-method methodology, involving various elements of methods, research processes, philosophy, and research design have emerged over the years (Creswell & Clark, 2007; Greene, Caracelli, & Graham, 1989; R. B. Johnson et al., 2007; Tashakkori & Teddlie, 2003; Teddlie & Tashakkori, 2011). Tashakkori and Teddlie (1998) defined mixed-method methodology as the combination of “qualitative and quantitative approaches in the methodology of a study” (p. ix). They emphasised that mixed-method research has “a separate methodological orientation with its own worldview, vocabulary and techniques” (Tashakkori & Teddlie, 2003, p. x). Mixed-method methodology allows researchers to use different research methods, techniques, and procedures to collect data for the purpose of solving the research problem (Creswell & Clark, 2007).

The benefits of using mixed-method methodology involves the combination of qualitative and quantitative components in a complementary way for the purpose of more complete understanding and evidence of the research problem, than either one approach by itself (Creswell & Plano Clark, 2011; R. B. Johnson et al., 2007). The choice of a mixed research method or procedures is also suggested by R. B. Johnson and Onwuegbuzie (2004) as it “helps researchers more capable to answer many of their research questions” (p. 17). To answer research questions of this study, qualitative methods were deemed appropriate to investigate participants’ experiences of loneliness, experiences of usability and acceptability related to answering standardised surveys, and to engage them in a co-design process. In comparison, quantitative methods were deemed appropriate to examine the rates of loneliness and its relationships with health status, functional abilities, and quality of life. Additionally, the comparison between qualitative data and quantities data would provide an opportunity to examine the concordance and discordance between standardised measurements and interviews. Therefore, the complicated nature of loneliness utilises the advantage of mix-method methodology to answer questions through both quantitative and qualitative perspectives.

Another reason for choosing a mixed-method methodology was that mixed-method research is growing in its application in social science. Due to the complex nature of the social phenomena, various facets and multiple perspectives are necessary to explore them and develop related knowledge (Ivankova & Kawamura, 2010). For instance, López, Lapena, Sánchez, Continente, and Fernández (2019) justified their utilisation of mixed-method research when researching an intervention to reduce social isolation in older adults in Spain. However, there are limited examples of mixed-method methodology research in identifying and reducing loneliness and/or social isolation among Chinese late-life immigrants (D. Ip, Lui, et al., 2007; X. Lin et al., 2016). How mixed-method methodology informs the present study will be explored in the following section.

#### **4.5.2 How mixed-method methodology informs the present study**

In an empirical review study of 57 mixed-method studies, Greene et al. (1989) identified five distinct purposes for mixed-method methodology. One purpose is

development, which means to use the results from one method to help develop or inform the other method. Shank (2013) indicated that mixed-method research should be defined by its function rather than its form. He suggested that the research approaches should be combined in any way to increase understanding and move scientific inquiry forward (Shank, 2013). Thus, for mixed-method methodology, using plural methods to achieve a more comprehensive and complete understanding of whole situations is considered essential.

In order to understand and address the complex experience of loneliness in Chinese late-life immigrants in New Zealand, a community-based participatory method methodology informed the research design of this study. The community-based participatory method methodology will underpin the co-design workshops in Phase Two of the study. The co-design method belongs to the qualitative branch of mixed-method methodology. Alongside the community-based participatory method, the flexibility and function-oriented character of mixed-method methodology underpins the study design. The role of community-based participatory method methodology in this study was that co-researchers worked collaboratively utilising study result data and knowledge of Phase One to co-design culturally appropriate, applied, community-based resources to address Chinese late-life immigrants' loneliness. The mixed-method design was an appropriate research approach to address gaps in knowledge and resources in the present study.

### **Community-Based Participatory Method Methodology**

The community-based participatory method methodology is normally described as having two traditions, a continuum from Northern (the work of Kurt Lewin) to Southern (the work of Paulo Freire) (Wallerstein & Duran, 2008). Kurt Lewin sought the input of research participants, rather than purely observing them (Adelman, 1993); while Paulo Freire's (2000) work emphasises that participants' own situations and reflections lead to actions. As a result, community-based participatory method methodology focuses on a partnered enquiry between the research participants (co-researchers) and researchers (Wallerstein, 2010).

Participants as co-researchers refers to their roles of joint *contributors* and *investigators* situated in a participatory method of research to attain the desired

outcomes (Given, 2008b). It is also a way to create a co-learning process that balances theory and co-designed resources, services, and reflection as an outcome of engaging community members to resolve concerns or problems within the community (Minkler, 2000; Reason & Bradbury, 2008). McNiff and Whitehead (2011) contended the social purposes of participatory research are that knowledge of social practices and the way societies operate can be improved if all individuals hold accountability in their thinking and involvement.

Community-based participatory method methodology was selected as part of research methods in this study mainly because that participants are able to investigate their own practice (McNiff & Whitehead, 2011). It means that participants have the ability to design community resources to cope with their struggle and survival (Travers, 1997). Participants' knowledge, experience, and wisdom are valued by participatory research (Ife, 1997).

The New Zealand Chinese late-life immigrant population experienced rapid growth in the years between 1980s and 2000s. The shift in numbers of Chinese late-life immigrants was mainly due to immigration policy change. New Zealand government has encouraged skilled immigrants since the late 1980s, but the Parent Category family reunion policy was stopped suddenly in 2016. There was no co-design research published to address loneliness in Chinese late-life immigrants. No relevant evaluation method was co-designed and reported to evaluate the effectiveness of loneliness interventions. Therefore, more research is needed to customise community-based resources or services for this group.

In the current study, co-researchers are Chinese late-life immigrants in the community who might be affected by social isolation and/or loneliness; and I shared the purpose of addressing isolation and loneliness for Chinese late-life immigrants. Community-based participatory method methodology provided the framework to explore how to increase the capabilities of Chinese late-life immigrants to address loneliness in the ways they were encouraged to contribute. Furthermore, compared with other community research methodologies, participatory method methodology has taken gender, ethnicity, and social class into account (Kemmis, McTaggart, & Nixon, 2014). Moreover, community-based participatory method methodology is frequently used to

work with marginalised communities and to address health inequities (Wallerstein, 2006). Therefore, the nature of community-based participatory method methodology is convenient and flexible for applying with culture specific groups such as Chinese late-life immigrants. Some mutual experiences were described by older Chinese co-researchers in the US as an unexpected self-esteem growth and a feeling of being respected and valued with the opportunity to be part of the researchers in the project (Wang & Kim, 2010; Yung, 2018). Consequently, Chinese culture was seen as central in the implications of loneliness for Chinese late-life immigrants and their way of dealing with loneliness. Hence, community-based participatory method methodology was chosen to guide the final implementation phase of this study.

### **Pragmatism and community-based participatory research method**

In New Zealand, the issue of loneliness and/or social isolation for Chinese late-life immigrants and their service providers requires a problem-solving scheme. Improving practice is considered necessary for participatory research and the objective of this study. Participatory research is a practical way of thinking that can be aligned with pragmatism, the worldview/paradigm underpinning this study. The theory of knowledge or epistemology on which this study phase stands is *practical* (Dewey, 1922). Dewey's pragmatic ontology saw reality or truth as what leads to practical, useful, and effective resolutions (Dewey, 1910). His epistemology considers all forms of knowledge are pragmatic solution to problems (Heron, 1996) and the purpose of research is to develop and agree resources/services by working with other co-researchers in the group (Coleman, 2015). The Phase Two study will be undertaken through the productive participation of participants and their proactive involvement and adaptations of the environment. I will avoid passively observing data and making conclusions about reality.

### **4.5.3 A convergent parallel mixed-method design**

There are three types of basic mixed methods designs (Creswell, 2014); convergent parallel design, explanatory sequential design, and exploratory sequential design. In the explanatory sequential design, the data are collected over a period of time in two consecutive phases: quantitative followed by qualitative. The qualitative data are collected and analysed after quantitative results to further explain the research results.

In an exploratory sequential design, qualitative data are first collected and analysed, followed by gathering quantitative data to further explore the phenomenon. In a convergent parallel design, the quantitative and qualitative strands are kept independent or interact with each other, the priority and timing of two strands, as well as where and how to mix the two strands in the study were considered as key decisions in mixed-method research (Creswell & Plano Clark, 2011).

The current study adopted the format of convergent parallel design. Considering the preference and availability of Chinese late-life immigrants, phase One data were collected by implementing the quantitative and qualitative strands concurrently during the same interview visit. The quantitative and qualitative strands of the current study have separate research questions, data collection, and data analysis processes. However, the results of the quantitative strand were considered as complement to the qualitative strand in this study for answering complicated research questions. Two independent strands of data will be collected and analysed in a single phase by implementing the procedures of convergent design. Then, the results of the two independent strands of qualitative and quantitative data will be compared to examine if standardised measurements covered the domains indicated in the qualitative data as being important. The concordance and discordance between standardised measurements and interviews will be examined. Lastly, all results of Phase One will be merged for the purpose of informing phase Two co-design research.

### **Qualitative descriptive component of mixed-method**

In addition, the descriptive component of mixed-method was employed in the qualitative strand of this thesis as it is regarded as an appropriate qualitative methodology for mixed-method design because it based upon the general principles of naturalistic inquiry (Colorafi & Evans, 2016) rather than including a large amount of interpretation (Bran & Clarke, 2006). The objective is description rather than presenting researchers' perspectives (Sandelowski, 1995). A descriptive approach helps to avoid study data being influenced or transformed.

## **4.6 Chapter Summary**

In this chapter, the definition of worldview and paradigms was initially presented. I then justified why the pragmatist paradigm/worldview has been chosen to guide the mixed-method methodology for the purpose of answering the research questions of the thesis. Additionally, methodology, ontology, epistemology, and axiology have been critiqued. The mixed-method methodology and community-based participatory method methodology have been explained and situated within a pragmatist epistemology. Additionally, the specific design of this mixed-method methodology study was outlined. In the next chapter, the ethical approvals, mixed-method study design, data collection, and management for the research data are described.

## **Chapter 5 Research methods**

### **5.1 Chapter introduction**

The previous chapter presented the philosophical, theoretical, and methodological approaches that guided the current study design. This chapter begins with an overview of how the mixed-method research design was applied in this study to answer the research questions. The chapter then describes the ethical considerations and approval processes for Phase One and Phase Two of the study. In the following section, the data collection, data analysis, and data management methods are outlined. Finally, I summarise the chapter by providing evidence of rigour for the multiple research methods used.

### **5.2 Overview of research methods**

The mixed-method research design was selected for this thesis because the knowledge about loneliness of Chinese late-life immigrants in New Zealand was very limited (Creswell & Plano Clark, 2011). Both qualitative and quantitative data were necessary to understand how loneliness manifested in this population. The current study was a two-phase design, and was undertaken in Auckland, New Zealand (Figure 3). Both qualitative and quantitative data were considered as complementary to each other for addressing the study's research questions.

In section one of Phase One, a qualitative descriptive exploration of Chinese late-life immigrants' experiences of loneliness was undertaken. This section focused on identifying key themes relevant to loneliness experience of Chinese late-life immigrants in New Zealand. It was then followed by a convergent parallel quantitative component using a series of standardised measurements for Chinese late-life immigrants to self-report their status. The measurements included participants' experiences of social isolation and loneliness, functional status, and quality of life. Participants' experiences of answering these standardised surveys were used to test their usability and acceptability of existing standardised surveys among the group. Moreover, it was a good opportunity to examine concordance and discordance between standardised measurements and qualitative interviews by using mixed method.



Phase Two of this study was a practical and translational phase. In this phase, co-design workshops were applied to co-develop community-based resources and services aimed to address Chinese late-life immigrants' experiences of loneliness. The culture specific theoretical framework was applied with participants to understand how complex schemas cause them to react to late-life immigration in certain ways and perceive loneliness in the New Zealand context. Each phase is explained in detail in the following sections.

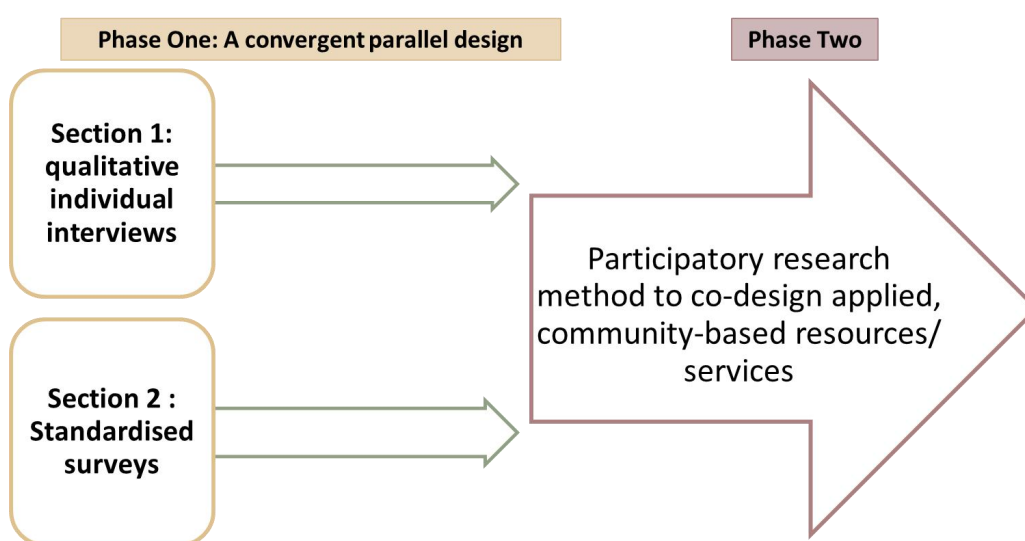


Figure 3. Overview of research methods

### 5.3 Ethical Approval

Ethical approval protects the interests of the participant (Auckland University of Technology Ethics Committee [AUTEC], 2020). Owing to the co-design workshops of Phase Two being primarily dependent upon the results of Phase One, the ethical considerations were approached sequentially for Phases One and Two. That is, an ethics application was submitted firstly for Phase One, and the second application was submitted after the results of Phase One were obtained. In this section, I will address the details of the ethical approval process, potential risks to participants, informed consent procedures, confidentiality, and the consideration of culture.

#### 5.3.1 Ethical considerations for Phase One and Phase Two studies

AUTEC granted ethical approval for Phase One of the research on 20 June 2017 under reference 17/55 (Appendix A). After the initial ethics approval was granted, a decision was made to add Chinese late-life immigrants from Hong Kong, Macau, and Taiwan

into the inclusion criteria, in addition to mainland China. This decision was informed by an understanding that Chinese late-life immigrants from Hong Kong, Macau, Taiwan, and mainland China would share some common and yet disparate backgrounds. It was considered worthwhile to gather more data to form a broader picture and comparison among these groups. Moreover, the initial Phase One plan to conduct an interview-based cross-sectional survey with 65-80 human participants was replaced with an analysis of the anonymised, aggregated data from Statistics New Zealand when I was given access to non-public data on older Chinese immigrants' loneliness data from the NZGSS 2016. Hence, no human subjects were recruited for Phase One. Minor amendments to the inclusion criteria and data collection protocol were submitted to AUTECH, and the approval of amendments was granted on 12 March 2018, under reference 17/55 (Appendix B). AUTECH approval of Phase Two was granted on 6 November 2018 under reference 18/364 (Appendix C).

### **5.3.2 Potential risks to participants**

The research participants' privacy, safety, health, social sensitivities, and welfare were adequately protected according to AUTECH's requirements for studies in which human participants serve as research subjects. There were no serious risks anticipated for this research. The surveys and interviews were not designed to place participants in an uncomfortable position. Participants were provided with details of the AUTECH consent and contact details for the study, and made aware that they could contact myself, the research supervisor or Executive Secretary of AUTECH if they had any concerns.

### **5.3.3 Informed consent**

Ethically, participation of a human subject in any research project must be voluntary and based on the understanding of adequate or appropriate information about the study in which they will be involved. Therefore, before enrolment into this study, all participants gave written informed consent.

In Phase One of the study, I explained to potential participants the aims, methods, reasonably anticipated benefits, and potential hazards of the study, and any discomfort participation in the study might entail. Participants were informed that their participation was voluntary and that they might withdraw consent to participate

at any time. Each participant was given sufficient time to read the 'informed consent form' and had the opportunity to ask questions prior to giving written consent. The signed consent forms were collected by me prior to entry into the study. A copy of the signed consent form was given to the participant. In Phase Two of the study, the purposively selected, potential participants received a copy of the participant information sheet and consent form in Chinese in the preferred format (e-copy by WeChat or print copy by post). Participants gave signed consent prior to engaging in the co-design method. WeChat was preferred by older Chinese participants in this study to transfer information due to its universal usage in Chinese. Further, all participants were not used to getting access to the email.

All consent forms were stored in a locked filing cabinet at AUT University. All electronic documents were downloaded onto a USB and kept in the locked filing cabinet. Only my supervisors and I have access to the consent forms. All consent forms will be shredded via AUT's secure document destruction service, electronic copies will be permanently deleted, and USB stick will be destroyed by my primary supervisor after 6 years.

#### **5.3.4 Confidentiality**

Maintaining participant confidentiality was of utmost importance in this study. Confidentiality was maintained through replacing all names of individuals with pseudonyms and changing any potentially identifiable details in the transcripts, as well as the thesis and any reports, presentations, or publications arising from the research. During the second phase of the study, Phase One participants' confidentiality was preserved by sharing collated results removing all personal identifiable information. Participants in Phase Two co-design workshops consented to keeping confidence of information discussed in the groups. All material pertaining to the study, including interview transcripts, were stored in a locked filing cabinet. All electronic documents were downloaded onto a USB and kept in the locked filing cabinet. Only my supervisors and I have access to the cabinet. As with Phase One, all documentation—paper and electronic—will be destroyed by my primary supervisor after 6 years.

#### **5.3.5 Cultural and social considerations**

An important consideration throughout the research is that the participants are from a different ethnic and cultural background than the New Zealand mainstream population.

Thus, my experience and knowledge of Chinese culture were critical to ensure conduct of the research was culturally appropriate. I was born and grew up in mainland China and educated in both China and the US. I have good understandings of both Chinese and Western cultures. I am bi-lingual and had the support of local organisations working with older Chinese immigrants for this project, such as Chinese Positive Age Charitable and Age Concern. My primary supervisor, Professor Wright-St Clair, has knowledge of what it means to be an elder and participating in society from her cross-cultural research with Thai and American communities, and recent study of how older Chinese, Indian, and Korean immigrants in Auckland contribute to community. In the following sections, how the study was implemented in a culturally safe manner will be detailed.

### **5.3.6 Managing ethical considerations during the study**

Only a small number of participants experienced minor emotional distress when discussing what loneliness meant to them as an older Chinese immigrant, any difficulties encountered in daily life, their social and group participation, their health, and recalling familiar activities which they were unable to do in New Zealand and missed doing. I looked for signs of discomfort during each of my interviews and stopped the interview or took a break if needed.

## **5.4 Implementing the Phase One Study**

Phase One was designed in two convergent parallel sections: 1) data gathered by way of qualitative interviews with purposively-recruited Chinese late-life immigrants in Auckland; and 2) followed by the usability and acceptability measuring loneliness and other indicative outcomes using standardised measurements. The results were used for co-designing community-based resources or services in Phase Two of the study.

### **5.4.1 Phase One objectives**

- To explore the experiences, of Chinese late-life immigrants' social isolation and loneliness in New Zealand;
- To explore the implications of loneliness;
- To explore the subjective impact of loneliness on health status, function, and quality of life;

- To explore participants' experiences of answering the standardised surveys, such as usability and acceptability; and
- To examine the concordance and discordance between standardised measurements and interviews.

#### **5.4.2 Qualitative interview data**

Qualitative individual interviews were used to glean a comprehensive description of Chinese late-life immigrants' experiences of loneliness in a way that utilises their own language to express their understandings, feelings, perspectives, and expectations (M. Sandelowski, 2000).

#### **Inclusion & Exclusion Criteria**

The participant inclusion criteria were:

- Men and women from mainland China, Hong Kong, Macau, and Taiwan;
- Able to communicate in Mandarin or Cantonese;
- Aged 65 years or older on arrival in New Zealand;
- Immigrated to New Zealand at least 1 year ago;
- Able to understand the study purpose and procedures; and
- Able to recall and discuss their loneliness experiences, difficulties, and health status.

Exclusion criterion was:

- Direct family or professional relationship with the primary researcher or supervisors

#### **Recruitment**

Purposive recruitment methods were utilised. Copies of Chinese-language advertisements (Appendix D) about the study were posted in identified Chinese community activity centres, libraries, and Chinese churches. I conducted information sessions (Appendix E) about the study at Takapuna Positive Aging Centre, Three Kings Centre of Chinese Positive Ageing Charitable Trust, three Chinese Associations in North Shore, churches at Northcote, Epsom and Ellerslie, and the Massey Library. The sessions covered Northern, Western, Central, and Eastern parts of Auckland. All of the information sessions were presented in Mandarin. Owing to potential participants'

first language being Mandarin, I gained the audiences' permission to use Mandarin before each session. I left copies of the participant information sheet and consent form for potential participants to collect after each information session. Attendees were invited to pass the invitation on to people they knew in the community who met the inclusion criteria. This snowball recruitment method aimed to invite potential 'hard to reach' participants.

Potential participants' eligibility to volunteer for the study was screened using inclusion and exclusion criteria when they made first contact with me. If eligible, I collected contact details of those who were interested in receiving more information about the study and sent (by email or post) them a copy of the Chinese language participant information sheet and consent form. All potential participants had an opportunity to ask questions about the study in Chinese language. Two weeks were given for potential participants to consider the invitation. Potential participants responded to me directly by email or phone. I collected signed consent forms prior to data gathering and gave each participant a copy. Some people were interested in the study but did not meet the inclusion age. With my supervisors, I critically considered whether to reduce the eligibility age criterion. I gained those people's permission to be re-contacted in case AUTECH approved a criterion change and documented it in the recruitment tracking sheet. I decided, with my supervisors' agreement, not to change the eligibility age criterion when the recruitment target was achieved successfully.

Saturation is used in qualitative research as a criterion for discontinuing data collection and/or analysis (Saunders et al., 2018). During the study recruitment, saturation was considered alongside study questions, theoretical and analytical approach, and the study timeline. Finally, a variety of participants with a range of loneliness scores and demographic background were recruited. I recorded everybody's contact, even those who were not eligible. There was interest to be involved in this study from several older immigrants who were born in Hong Kong and Taiwan. However, they failed to meet the inclusion criteria: 'aged 65 years or older on arrival in New Zealand'. The reasons for exclusion were documented in the recruitment spreadsheet.

### **Participants' profiles**

The study's 23 participants had emigrated from mainland China, were aged 65 to 80 years on arrival, and had resided in New Zealand between 2.5 and 16 years. Twenty-six percent had visited China in the last year. Most of them had secondary or above education in China, but 26 percent reported their ability to speak English as "fairly well". All of them had married; of which, 57 percent were living as married. Nearly one-half of the respondents disclosed that they were living with their adult children and identified having one or more children. All of them had retired and a majority of them received New Zealand Superannuation or other New Zealand social welfare allowance. More details are available in Table 1 below.

Table 1. Socio-demographic characteristic of the Chinese late-life immigrated participants in the Phase One study

	No. (%)	Attribute and category	No. (%)
<b>Age</b>		<b>Religion</b>	
65-69 years	2 (9)	Yes	6 (26)
70-79 years	9 (39)	No	17 (74)
80+ years	12 (52)		
<b>Gender</b>		<b>Times returned to China in last year</b>	
Male	7 (30)	0	17 (74)
Female	16 (60)	1	6 (26)
<b>Age on arrival in NZ</b>		<b>Living with children</b>	
65-69 years	17 (74)	Yes	11 (48)
70-79 years	5 (22)	No	12 (52)
80+ years	1(4)		
<b>Years in NZ</b>		<b>Numbers of children</b>	
1-15 years	15 (65)	1	8 (35)
16 years	8 (35)	2+	15 (65)
<b>Marital status</b>		<b>Employment</b>	
Married divorced	1 (4)	Retired	23 (100)
Living as married	13 (57)		
Widowed	9 (39)		
<b>Education</b>		<b>Sources of income</b>	
Primary school	4 (17)	Superannuation/other NZ allowance	19 (83)
Secondary school	7 (30)	Retirement allowance from China	4 (17)
Tertiary	12 (52)		
<b>English ability</b>			
Fairly well	6 (26)		
Poorly/not at all	17 (74)		

### Data Gathering

I collected consenting participants' demographic information for pre-screening and then invited them to an individual, face-to-face, qualitative interview to explore their experiences of loneliness. Respecting the inherent Chinese 'saving face' culture, individual interviews were identified more acceptable for Chinese late-life immigrants to avoid speaking of their own or family situations in front of a group. For instance, focus group discussions undertaken in a previous study in the US were found



challenging for older Chinese adults to talk about their own experience of loneliness openly and the researcher suggested using individual interviews for future studies (X. Dong et al., 2012).

I sincerely acknowledge my previous landlord's participation and efforts to contribute to this study. Before I started my data gathering interviews, I conducted a pilot interview with my landlord, a 78-year-old Chinese woman. She had arrived in New Zealand when she was aged 67-years to reunite with her daughter. She was very interested in the study and keen to advocate for older Chinese in New Zealand. She had attended my formal pre-approval research proposal presentation at the University even she could not understand English. I learned from the pilot interview that I should keep focused on my research question and make sure the nature of my questions and probing questions were invitations to talk. These reflections informed my data gathering interviews. After the first interview, I translated and sent part of the English transcript to my supervisors, accompanied with my critical reflections on my interview methods. I learned from this reflective process with my supervisors that I should think of open questions during the subsequent interviews that are close to my topic.

In the following interviews, I met each participant individually at his or her home or in a private room of their activity centre or church. All of the interviews were conducted in Mandarin according to participants' language preference. After I had outlined my research, I allowed them time to ask any questions before I initiated the interview. I began the interview once the participant indicated he or she was comfortable to do so. In accordance with permission in the informed consent form, all interviews were audio recorded. I asked open-ended, semi-structured questions (Table 2) to encourage participants to speak in their own words. The topics explored included what loneliness meant to them as a Chinese late-life immigrant, any difficulties encountered in daily life, their social and group participation, their health (Tsai & Lopez, 1998), their support network typology (Burholt & Dobbs, 2014; Burholt et al., 2017); as well as their thoughts on ways of preventing or reducing loneliness.

Table 2. Interview questions

Open-ended questions
<ol style="list-style-type: none"> <li>1) Tell me about how you immigrated to New Zealand and how do you feel about being Chinese and living in New Zealand?</li> <li>2) How would you describe your quality of life now? <ol style="list-style-type: none"> <li>a. What about your social connections?</li> <li>b. How included do you feel in the Chinese, and/or wider communities?</li> <li>c. What about your health &amp; wellbeing?</li> <li>d. Do you have any problem with your physical function? If yes, how does your physical function influence your daily life and social activities?</li> </ol> </li> <li>3) Are you involved with any social services? <ol style="list-style-type: none"> <li>a. If yes, please describe the social services are you using.</li> <li>b. If not, what do you think the obstacles are for you?</li> </ol> </li> <li>4) Some older people in New Zealand have reported feeling lonely. What does being lonely mean to you as a Chinese late-life immigrant? <ol style="list-style-type: none"> <li>a. Are there times when you have experienced being lonely?</li> <li>b. If yes, tell me about when you have felt lonely.</li> <li>c. How often do you contact with your family, friends and neighbours? Who are the important people in your life?</li> </ol> </li> <li>5) Tell me more about your involvement in any social groups?</li> <li>6) What kind of difficulties have you encountered as a Chinese immigrant in your daily life? <ol style="list-style-type: none"> <li>a. Please describe what happened when...</li> <li>b. How did do you respond?</li> <li>c. What about your support network? Who is here for help?</li> </ol> </li> <li>7) What do you think would help reduce your own or other Chinese late-life immigrants' loneliness?</li> <li>8) Is there anything else you want to add?</li> </ol>

The interview was a key tool for me to collect person-specific information. In this way, I used the qualitative individual interviews to explore the uniqueness and commonalities of these Chinese late-life immigrants' experiences and understandings of loneliness, how they coped with these feelings, and how loneliness might be prevented. They were encouraged to tell their stories in a safe and private

environment. It was evident that the older Chinese participants were comfortable with talking in a one-to-one interview because I observed that they trusted me when exploring the topics in relation to conflicts in their family.

### **Data Analysis**

Before I started my qualitative data analysis, I was fortunate that my primary supervisor introduced me to Dr Gareth Terry, the author of a book chapter on thematic analysis (Terry, Hayfield, Clarke, & Braun, 2017). I attended Dr Terry's thematic analysis workshop at AUT in May 2019. The two-day training workshop helped me to review my data analysis process, solve issues encountered in coding, and guided me on generating themes.

All interview recordings were transcribed verbatim in Mandarin by me. The transcripts were initially analysed in Chinese, owing to the importance of preserving the subtle nuances within the Chinese language and words used by participants. In addition, the post-analysis translation method benefits retaining "explicit and implicit meanings embedded in the Asian language, as well as culturally specific expressions and concepts" (Suh, Kagan, & Strumpf, 2009, p. 198).

I used the thematic analysis approach as recommended by Sandelowski (2000) for qualitative descriptive studies. Her approach is endorsed by Stanley (2015) as the analysis strategy of choice for qualitative descriptive studies. Braun and Clarke's (2006, 2012) data analytic framework was used in this study.

Firstly, I read through and/or re-listened to the interview data. I took familiarisation notes for each transcript to get an overall picture. I then coded the transcribed data line by line, keeping the general research questions in mind (Braun & Clarke, 2006, 2012; Terry et al., 2017). I used Microsoft Word's comment function for coding. It was identified as the best method for me. As suggested by Terry (2017), "coding is a process not a technology" (p. 26). We can definitely use different tools to achieve the same quality. I identified open and inclusive codes, labelled to all segments of interest and relevance with the dataset (Stanley, 2015; Terry et al., 2017). After open codes were identified within each transcript, similar codes were brought together and grouped into categories. In the third and final stage of analysis, I compared categories

and organised them into broad groups that represented the key themes within the data. For example, codes in relation to loneliness were grouped into four categories: perceptions of loneliness, determinants of loneliness, negative effects of loneliness, and overcoming loneliness. Key themes were then generated based on these groups of data. After that, I translated highly illustrative findings into English for further interpretation in deliberation with my supervisors. For this analytic step, illustrative verbatim comments of the participants were only translated into English during the reporting phases.

### **5.4.3 Standardised measurements data**

#### **Data gathering**

Following the individual qualitative interview, I arranged a separate one-hour individual interview with 23 participants who had completed a face-to-face interview in Phase One. Again, I met each of the participants at their home or in a private room of their activity centre or church, depending upon their preference. Actually, for their conveniences, most participants preferred completing both qualitative and quantitative interviews within one visit. All participants were invited to complete five measures: The Chinese version of the 6-item de Jong Gierveld loneliness scale, ADLs scale, IADLs scale, Social Support Rating Scale (SRSS) and Chinese version of WHO Quality of Life Scale (QOLS-BREF). The simplified Chinese characters were used for five translated surveys. As anticipated, all participants could read the simplified Chinese characters without any difficulty, whether they spoke Mandarin or Cantonese.

#### **Data measures**

The de Jong Gierveld Loneliness Scale (Leung et al., 2008) was the primary outcome measure to determine the status of loneliness. This scale consists of emotional loneliness and social loneliness two subscales, each of them contains three items. They are three response categories for each item: “no”, “more or less”, and “yes.” When scoring, responses were recorded into dichotomous scores with “more or less” and “yes” as positive responses (scored 1), and “no” as a negative response (scored 0). The Chinese version of the questionnaire has been validated by Leung (2008) and suggested as a reliable (Cronbach’s  $\alpha$  of the 6-item scale was 0.76, the intra-class correlation coefficients ranged from 0.98 to 1.00) and valid (the content validity was

high as shown by the results of the Delphi panel) measure of loneliness in older Chinese (Leung et al., 2008). The scale has been used in studies among older Chinese populations in Hong Kong (S. Tang & Chow, 2017) and Chinese late-life immigrants to measure loneliness in Canada (X. Lin et al., 2016).

The extent of functional ability was measured by the ADLs scale and IADLs scale with an intention to identify physical independence as a potential implication for loneliness. The inclusion of this measure was based on the research evidence that people who have lower ADLs scores may have a greater risk of becoming lonely than those with higher ADLs scores (W. Chen et al., 2015; Shankar et al., 2017). The Chinese translation of ADLs scale, which includes the following six items: dressing, feeding, transferring, walking, bathing, and toileting, had been used in a number of studies with Chinese populations across various ages. Among them, one study indicated that this scale demonstrated good reliability (test-retest reliability was  $>0.95$ ) when assessing functional status of 900 older adults in China (H. Lin et al., 2002). IADLs include a range of activities that are more complex than those categorised as ADLs and may have a broader impact on older adults' ability to work independently in the community. IADLs include the ability to use the *telephone, cook, shop, do laundry, housekeeping, manage finances, take medications, and prepare meals*. The scores of this scale range from 0 to 8, where 0 means the least independent and 8 being the most independent in dealing with the above eight tasks (Lawton & Brody, 1969). Internal consistency of the Chinese translation scale was measured by Cronbach  $\alpha$  coefficient among 291 Chinese older adults, and the result was 0.74 (Ran et al., 2017).

I utilised the SSRS in this study to understand the level of social networks and availability of social support. The scale was designed by Xiao (1994) with 10 items in the context of mainland China. The 10 items include three-items of objective support, four-items of subjective support, and three-items of social support. The range of score is 12 to 83, where a higher SRSS score represents better degree of social support. The tool had been used to examine the social support status and has also been used in a loneliness study among rural Chinese older people (Yu, Gu, Xiao, Hu, & Zhou, 2017). The test-retest reliability for this scale has been shown to be 0.92 ( $P<0.01$ ) and has good predictive validity (Xiao, 1994). However, no published literature was located reporting that the scale had been utilised with any older Chinese immigrants. The

impact of this limitation was assessed during the interviews with participants about the usability of the scale. The details will be presented in the findings.

I employed the WHO's abbreviated quality of life questionnaire (WHOQOL-BREF) within this study since it has been adapted into a widely used Chinese version (Hao & Fang, 2002). The WHOQOL-BREF is a 26-item version of the WHOQOL-100. It is based on a four-domain structure composed of physical health, psychological health, social relationship, and environment (The WHOQOL Group, 1998). Each domain includes three to eight items, such as satisfaction with physical health, psychological health, social relationship, and environment. Moreover, two questions yield general information: question one asks about an individual's overall perception of quality of life; and question two asks about an individual's overall perception of health. The scores of each domain are transformed to a 0 to 100 scale (a higher score indicates better quality of life) according to the guidelines. Potential association between mental health and quality of life have been identified by studies among older Chinese (Ran et al., 2017; Zhao et al., 2017). The Chinese version of WHOQOL-BREF reported the Cronbach's  $\alpha$  coefficients from 0.67 to 0.79 and test-retest reliability from 0.64 to 0.90 when examined among older people in Hong Kong. These index have showed a good reliability and validity of this scale (Chan, Chiu, Chien, Thompson, & Lam, 2006).

### **Data analysis**

The survey data were analysed using descriptive statistics. As mixed-method methodology, results of quantitative method were subsequently synthesised with participants' individual interview findings. Qualitative interview data were utilised to explain quantitative results. Furthermore, a comparison was undertaken to examine if scales covered the domains indicated in the qualitative data as being important. The concordance and discordance between standardised measurements and interviews were examined.

In addition, the result of these standardised questionnaires was used to explore participants' experiences of answering the standardised surveys, such as usability and acceptability by asking open-ended questions at the end of the data gathering. For example: 1) How easy was it to understand the questions? 2) What was the most difficult part of the questionnaires? 3) Is there anything relating to loneliness that was

not included in the questionnaires but that you are currently experiencing? 4) Can you think of any suggestions for the questionnaires? I adopted these standardised questionnaires to pilot test what is a good measure for co-design. The results of Phase One were used to co-design community-based resources in Phase Two.

## **5.5 Implementing the Phase Two study**

Following Phase One data analysis and interpretation, a community-based participatory research process was conducted as Phase Two of the current study. In this phase, a series of co-design workshops were undertaken for data generating. The terms 'co-design group' or 'co-design workshop' are employed in this thesis to signify the form of data generating used.

### **5.5.1 Phase Two objective**

To work with Chinese late-life immigrants (co-researchers) to co-design community-based resources or services aimed at preventing and/or ameliorating social isolation and loneliness.

### **5.5.2 Recruitment of co-design participants**

#### **Inclusion criteria**

- Participants who had completed Phase One;
- Had engaged in a conversational way during interview; and who
- Consented to engage as co-researchers to reflect on the Phase One findings and co-design resources or services to address loneliness.

There was no exclusion criterion for Phase Two. The reason was that the participants had completed Phase One study and already expressed their interest in being a co-researcher of Phase Two. Initial contact with all Phase Two potential participants occurred during Phase One of the study when their contact information was collected.

#### **Selection framework & recruitment**

A selection framework was developed with the aim of maximum variation of participants for Phase Two. The selection framework utilised Phase One participants' demographic data and the Chinese de Jong Gierveld Loneliness Scale results. Potential participants were selected using a range of loneliness scores (from not lonely to very

lonely), a mix of men and women, a diversity of ages, duration of time in New Zealand and living situations to ensure diverse demographic backgrounds. The provisional list of co-design participants was reviewed in a supervision meeting. Together we considered how well the provisional list represented meaningful diversity and potential to bring diverse perspectives to the co-design phase. No changes were made to the provisional list.

Letters of invitation, the Phase Two participant information sheets and consent forms, in simplified Chinese, were then sent to the selected participants (Appendix F).

Recruitment continued until 10 participants had consented to engage as co-researchers in this phase. All potential co-researchers had an opportunity to ask questions about the study in Chinese language. Two weeks were given for them to consider the invitation. Potential co-researchers responded me directly by phone. Eight people became co-researchers. One potential co-researcher indicated her reluctance to speak in front of a group. She expressed how challenging it would be for her to openly talk about individual experiences of loneliness. My explanation resolved her concern and encouraged her joining the co-design workshops with more confidence. Two potential co-researchers travelled back to China suddenly and dropped out after recruitment.

### 5.5.3 Participants' profile

Eight co-researchers participated in the Phase Two of the study. The majority were female (63%), aged 76-80 years (38%) or over 80 years old (50%) and had been educated in China (65%). Most co-researchers scored 3 or above by De Jong's loneliness scale (62%) or identified as lonely (65%) and having poor English ability (63%). All of them were married, retired, and had at least one child. More details including religion, family situation and economic status are described in Table 3 below.

Table 3. Socio-demographic characteristic of the Chinese late-life immigrated co-researchers in the Phase Two study

	n (%)		n (%)
<b>Sex</b>		<b>No. of people living in home</b>	
Female	5 (63)	1	2 (25)
Male	3 (38)	2	3 (38)
		2+	3 (38)



<b>Age (years)</b>		<b>No. of children</b>	
70-75	1 (12)	1	3 (38)
76-80	3 (38)	2	4 (50)
80+	4 (50)	2+	1 (12)
<b>de Jong's Loneliness scale score</b>		<b>Employment status</b>	
	3 (38)	Retired	8
2	2 (25)		(100)
3	1 (12)		
4	2 (25)		
5			
<b>Self-identified lonely</b>		<b>Source of income</b>	
Y	6 (65)	NZ superannuation	6 (65)
N	2 (25)	Pension in China	2 (24)
<b>Education</b>		<b>Times returned to China in last year</b>	
Secondary	2 (25)	0	7 (88)
Tertiary	6 (65)	1	1 (12)
<b>Marital status</b>		<b>English ability</b>	
Living as married	4 (50)	Poorly/not at all	5 (63)
Divorced	1 (12)	Fairly well	3 (38)
Widowed	3 (38)		
<b>Religious</b>			
Y	1 (12)		
N	7 (88)		

### 5.5.3.1 Preparation for the co-design workshops

This section describes the pre-field preparation and field methods for the co-design workshops. I will critically reflect on the challenges I encountered, including the arrangement logistics and contingency management. The co-designers' positive reactions to me are reported as they indicate how I created a comfortable space for them to discuss and engage with each other safely (Cahill, 2007). In the next section, I begin with the pre-field preparation (e.g., choosing the right space, booking a time that worked for all co-researchers, travel logistics, room set up, etc.).

#### Pre-field preparation methods

Within a Chinese-centred community-based participatory research, it was important to design and use methods that reflect Chinese cultural values. The inherent Chinese value of 'saving face' (*Mian Zi* 面子) was reflected in all steps of planning. Thus, how to make co-researchers feel respected and valued was considered when planning for them to come together. I selected key Phase One results to share with co-researchers

and prepared overview slides. I made the PowerPoint presentation concise and easy to read. For instance, I utilised a large font size and used brightly coloured slides. I also extracted interview data on large pieces of paper to enhance their impressions. In addition, I made people's travel plans for bus or taxi, and prepared refreshments for them.

### ***Transportation***

Transportation arrangements in the preparation section were a challenge in the co-design study for older Chinese immigrants. Language and transportation were identified as main difficulties for Chinese late-life immigrants in New Zealand (W. W. Li et al., 2010). Hence, details had to be checked to ensure co-researchers travelled safely from different parts of Auckland.

A meeting room at AUT's North Shore campus was selected as the most convenient meeting venue because the Akoranga bus station is adjacent to the campus and it is the closest bus station to Britomart Transport Centre in city centre. Public transport services, such as bus and train, are principle transport tools for older Chinese in Auckland. All study co-researchers could get free travel on public transport services with their SuperGold card. I was told by one co-researcher that she even practiced her tour from home to the campus one day ahead the workshop to ensure arrival on time. However, all of them needed my assistance with preparing the bus routes and timings, including return trips.

For those people who were unable to use a public transport tool, taxis were booked and were recognised as advantageous. One male co-researcher, who was over 85 years old, with some hearing problems, rejected the taxi service and presented his independence by catching a bus. I kept connection with his daughter to ensure he arrived home safely.

On the day of workshop, an indication sign in simplified Chinese was posted on the meeting room's door (see Figure 4) and two student volunteers helped me to pick up co-researchers at the Akoranga bus station and at Gate 2 of the AUT North Campus by holding a welcome board in simplified Chinese.



Figure 4. A sign in Chinese on the door window of meeting room

### ***Koha***

Chinese culture was an essential element to be considered when preparing the room and Koha. It determined whether a comfortable, respectful, and engaging space for the discussion had been created. Koha, is a New Zealand Māori custom. The term Koha can be translated as gift, offering, donation and contribution, especially when maintaining social relationships and showing a value of reciprocity. In this study, Koha involved offering food and drinks to the co-researchers to make them feel respected and welcomed. It is similar to a Chinese custom of hospitality (*kuan dai*, 款待). Green tea and a collection of china cup and saucers were prepared. Moreover, Chinese specific sweets, nuts in shell, and fruits were offered. The purpose of providing culturally relevant hospitalities was to create a welcoming and friendly atmosphere.

In the first co-design workshop, I noticed participants were shy to collect food from a side table (Figure 5) due to unfamiliar group members and environment. To make some improvement in the second co-design workshop, I tried to set out the foods on the main table with personalised servings (Figure 6). It was interesting to identify that they engaged more with each other compared with the interaction in their previous co-design workshop and were spirited in their mutual discussions. The group dynamics were improved. I reviewed the whole process and assumed it might be partly due to the preparation. Specifically, we observed that all food was gone compared with many leftovers in the first co-design workshop. It was interesting to identify group dynamics through behaviour changes.



Figure 5 A side table with drinks



Figure 6 Foods were set out on the main table with personalized servings

## In the field methods

### *Welcome & introductions*

The Chinese version of the information sheet was reviewed, and consent forms were signed and collected before the co-design workshop began. The group agreed that we would speak Mandarin during the co-design workshop. I lead an ice-breaker round in order to build connections so that everyone could feel free to express their opinions in the group. At the beginning, I introduced my primary supervisor, Professor Valerie

Wright- St Clair, to the group. She welcomed the co-researchers in English, and I translated. Each co-researcher was introduced using their name initials. I assisted them with interpretation between English and Mandarin. We later discussed ground rules, environment, and fire exits.

### ***Ground rules***

Ground rules for the co-design workshops were generated with co-researchers at the beginning of the first gathering. First, we encouraged the principle of partnership throughout the whole research process for acknowledging the rights of the participants. Second, the major role of co-researchers was sharing their knowledge and experience. They needed to work collaboratively to co-design potential community resources and services. Third, was the agreement to keep confidence. Confidentiality was ensured by using individuals' initials rather than their names on their place settings at the table. The co-designers were reminded that the group workshops were not designed for sharing their personal experiences of loneliness. The study methods were designed to help them feel comfortable and safe. Last, being ready with respectful ways to keep or get the group discussion back on track was another essential point in the ground rules of the co-design workshops to achieve the study objective.

## **5.5.4 Workshop process**

### **Overview**

In Phase Two, data were generated with the co-researchers using a co-design workshop method. The community-based participatory research cycle (Figure 7) guided the process. Accordingly, the research cycle started with the results of Phase One (quantitative dataset, qualitative interviews, and standardised surveys) to understand the situation of loneliness in Chinese late-life immigrants' own language. I presented collated quantitative data and selected interview data to co-researchers. I made sure that none of the interview extracts were from co-researchers. The second step of the cycle involved reflection on Phase One results by co-researchers, and the third step involved co-designing community-based resources or services to address loneliness. Moreover, what might be an appropriate evaluation method was also co-

designed by the co-researchers in the fourth step. After the consultation stage, the outcome helped improve the next participatory cycle.

In this study, several factors determined the number of participatory cycles implemented. These were: the overall study timeline, quality of data, and challenging impacts of involving older Chinese co-researchers to achieve the aim of this study phase. In regards to Figure 7, considering the factors of age, transportation, and health status to ensure the commitment of all co-researchers, we combined the first and second steps into one co-design workshop, and arranged the fourth step from a co-design workshop into a way of summary report sharing and telephone follow up. Next, consultations with Housing New Zealand and Age Concern were organised with the findings from the previous co-design workshops. In the final co-design workshop, co-researchers reviewed those reflections and ideas collected from consultations and offered further critique to improve their co-designed outcomes.

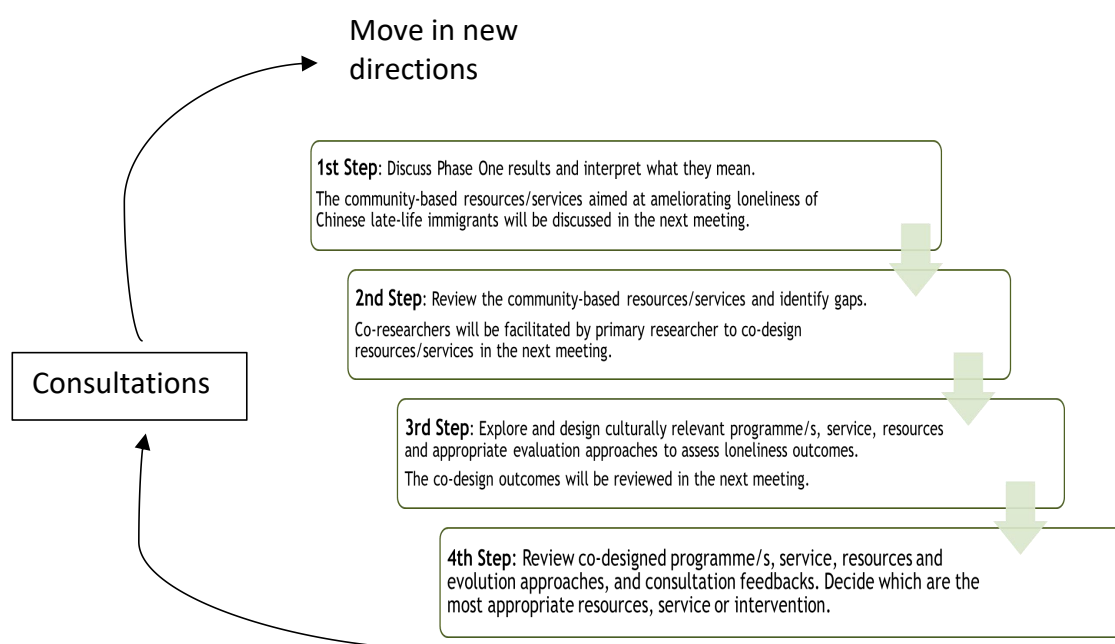


Figure 7. The community-based participatory research cycle

### **The first co-design workshop**

The first co-design workshop was held on 26 March 2019 in room AE109C at AUT north campus. Eight co-researchers attended as expected. I presented the steps of the participatory research cycle and explained their roles as co-researchers. In the first step, I presented Phase One findings through a PowerPoint presentation. A photocopy of the summary report in simplified Chinese was also provided to co-researchers.

The second step of the co-design workshop was to review the community-based resources/services and identify gaps by co-researchers. This section was audio-taped as permitted in the signed informed consent forms. I facilitated the group discussions. Eight co-researchers were divided into four pairs and flip charts were used to record and map the key points of discussion. All the information written on flip charts were photographed and recorded by me. My primary supervisor stayed in the room to support the team and be available for consultation as needed during the co-design workshop.

Around 70 minutes was allocated to discuss and present their ideas on any deficiency of the community-based resource/services for older Chinese immigrants in New Zealand. The time was pressured and I had to continually draw them back to the topic away from irrelevant discussions. Regarding Chinese Confucianism tenets of propriety (*Li* 礼), it is not respectful to interrupt other people, especially older people when they are talking. The issue was discussed with my primary supervisor. As she recommended, a sandglass was utilised and the ground rule was further clarified in the second co-design workshop. A sandglass or hourglass is a device for measuring time. It comprises two glass bulbs connected vertically by a narrow neck that allows sand flowing from the upper bulb to the lower one. The details of utilisation will be discussed in the section of “the Second Co-design Workshop”.

### **Contingency management**

Several days after the first co-design workshop, one of the female co-researchers was sent to the hospital by her family due to a suspected stroke. They contacted me to report this accident and requested absence for her and her husband from the second co-design workshop. I reviewed the potential participants list immediately but there

were no potential candidates available to fill their absence. After consultation with my supervisors, I decided to still include the couple by visiting them later at their home.

The preparations for the co-design workshops taught me a lot. I found co-design workshops are an effective strategy for gathering information from special audiences, such as older people and ethnic groups. The co-design workshop method is able to collect information in a way that respects traditions and culture, and uses language as an advantage (Wallerstein, 2010). However, as the researcher, it was important that I remained alert to unexpected factors arising in the co-design study. For instance, older Chinese immigrants have varying needs, such as health status, accidents and language barriers, which could potentially obstruct their attendance. I had to remain flexible to manage the meeting location, time, and scheme.

### **The second co-design workshop**

After reviewing the first co-design workshop data, the meaning of loneliness (*gu du* 孤独) was found to still not be clearly understood by co-researchers. As recommended by my supervisors, in the second co-design workshop I opened our conversation with reading a short excerpt from other participants' stories who did not participate in Phase Two.

The second co-design workshop was conducted on 2<sup>nd</sup> April 2019 in room AE109C at AUT north campus. As planned, I read a short excerpt from other participants' stories to the group. I could identify from their faces that stories of loneliness or isolation touched their heart. I found they became more proactive with engaging in the discussions and more likely to interact with other co-researchers than what they appeared to do in the first workshop. Before starting to explore and co-design culturally relevant programme/s, services, resources for ameliorating loneliness and an appropriate evaluation tool to test outcomes, I summarised their previous discussions in the first co-design workshop with highlighted points by using flip charts (see Figure 8). The yellow colour flip charts recorded their perspectives and ideas from the last co-design workshop and were displayed on the table for them to supplement during this time. An audio recorder was utilised from the beginning of the co-design workshop to record the whole discussion.



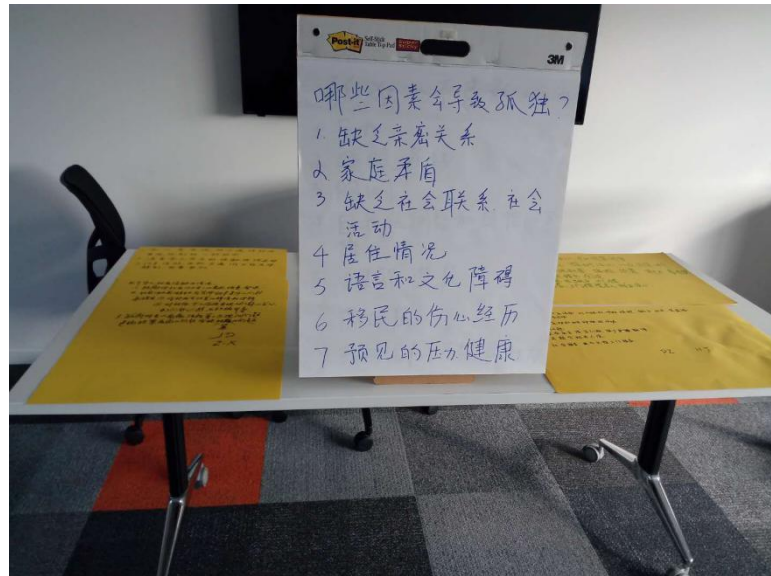


Figure 8. Summaries of co-researcher's discussions in the first co-design workshop on flip charts

Two co-researchers were not able to participate in the second co-design workshop as described in the above section. Therefore, the remaining six co-researchers were divided into three pairs. It was interesting to find that they preferred to work with their previous partner from the first co-design workshop. Similarly, flip charts were used to record and map the key points of discussion. All the information written on flip charts were photographed and recorded by me. My primary supervisor stayed with the co-researchers during the whole co-design workshop.

The sandglass was found to be an effective tool in managing the time and reminding co-researchers in a polite way to focus their discussions on study questions. By using the sandglass, one co-researcher who dominated some of the discussion in the first co-design workshop noted when the sand in the sandglass had stopped flowing. He said "to cut a long story short, I will not waste other people's time" and invited the next person to talk.

### **Co-researcher follow up**

As agreed by all co-researchers, a summary report comprised of all discussions from the two co-design workshops was sent to each of them via WeChat or mail within one week after the second co-design workshop. I then followed up with them by a telephone call to collect their opinions on the summary report. For the couple who

missed the second co-design workshop, I kept in contact with them. After two weeks I noticed that the wife was mostly recovered. With their permission, I visited their home and brought with the summary report. Following Chinese culture, I also took them flowers. Both of them had reviewed the report.

### **Consultations with potential stakeholders**

The purpose of the co-design workshops was to co-design community resources or services for older Chinese immigrants through their own engagement. The nature of community co-designed resources or services should be practical and achievable. In order to inform services providers or key stakeholders about co-designed results and collect their opinions on how to implement them into actions, consultations are an essential step in the co-design cycle. In this section, the consultation process involved presenting the research findings of co-design workshops and some major findings of Phase One study to the following organisations to see if they could navigate any service or resources based on the research findings.

#### ***Housing New Zealand***

Housing New Zealand was considered a potential stakeholder by co-researchers due to its status as the biggest residential property owner in New Zealand and their extensive partnerships across the public and private sectors. As a part of the participatory research cycle, the research findings, especially the issue of participants feeling less connected and lonely in the community of public housing, were addressed in consultation with Housing New Zealand. Ms Megan Somerville-Ryan, the senior Advisor of Research & Evaluation of Housing New Zealand, met with my primary supervisor and I on 06 June 2019 at Piko Café in AUT city campus.

According to Ms Somerville-Ryan's introduction, Housing New Zealand has been adhering to the vision of 'Building lives and communities' and developing the customer strategy to direct the services and housing for its customers. The customer strategy outlines three main domains to be achieved, including living well, with dignity and stability, and in connected communities, which aligns with my study objective. She acknowledged that the findings of the current study provided a decent foundation to navigate further investigations and strategies on Chinese late-life immigrants' social inclusion and belongingness in the community. Following this consultation meeting,

Ms Somerville-Ryan planned another meeting on 23 July 2019 for my primary supervisor and me to discuss the study findings with her colleagues. It was a very productive and valuable consultation with Ms Somerville-Ryan as we expected to collaborate with Housing New Zealand and explore their role of being a stakeholder to improve social connectedness and integration of Chinese late-life immigrants.

My second consultative meeting with Housing New Zealand was organised on 23 July 2019 at Housing New Zealand's Greenland office. Ms Somerville-Ryan and her colleagues from the Governance Advisory Unit, Stakeholder Engagement and Communication team, and Community Development team attended the meeting. My primary supervisor was present to support me. Three important considerations for social loneliness and emotional loneliness of Chinese late-life tenants in public social housing were addressed. First, more Mandarin and Cantonese speaking tenancy managers are needed to support maintenance issues in Chinese late-life tenants' home. Tenancy managers need to be aware of research findings of the current study as they could help provide more support to late-life Chinese tenants or household members. Second, housing topologies and design of the surrounding neighbourhood and community were discussed. Shared housing or co-housing was proposed alongside other social infrastructures such as schools or early childhood education facilities for interaction with people of different ages. Finally, placement decisions, where to place new tenants and their families or existing tenants when relocating, will be considered based on research evidence. More studies need to be undertaken to support those ideas.

### ***Age Concern***

My consultation with Janferie Bryce-Chapman, the CEO of Age Concern North Shore (ACNS) was undertaken on 17 June 2019 at Janferie's office. My primary supervisor attended this consultative meeting alongside me. Age Concern was considered a principle potential stakeholder given its long history and reputation in providing expert information and support services in response to older people's needs in communities around the country. In addition, Age Concern North Shore provides extensive Chinese services in elder abuse and neglect prevention, community development and health promotion; as well as a Chinese accredited visiting service, which has been providing companionship and social contact for older Chinese on the North Shore for more than

10 years. In our meeting, Janferie showed great interest in hearing more voices from the Chinese community identified in the research study.

First, we addressed the co-designed idea of an Information Guidebook for older Chinese people in New Zealand, and those working with them to improve the breach in information and communication. Janferie suggested that a Chinese version of the Information Guidebook has already been developed and applied in the North Shore community for several years; however, she expected the co-researchers of this study could review it in the next co-design workshop and make further suggestions on the content and promotion approaches. A formal permission letter (Appendix G) was granted by Janferie after our meeting for the utilisation of the existing Chinese Information Guidebook of Age Concern North Shore. All three Age Concerns in Auckland were to be amalgamated into one single entity on 01 July 2019; thus, for future contact, Janferie recommended the Asian Service Manager Ray Law as the potential stakeholder in Age Concern Auckland to navigate the project and bring the Information Guidebook up to a generic one for national application. She also suggested inviting Chinese community leaders to establish an advisory group for the project. For promotion, she considered the published paper version and the online electronic version should be available and anticipated developing the Chinese Information Guidebook Apps for smart phones. Age Concern could consider cooperating with Ministry of Social Development, whereby older Chinese people would receive the Information Guidebook with their SuperGold Card after they sign up for superannuation. Thus, the next step of this study would be a review of the Chinese Information Guidebook and feedback to Ray Law.

Second, we referred to the need for resources to help resolve family issues among older Chinese people. Janferie discussed the social prescription model, which has been proposed to the new Community Development and Connection team of Age Concern Auckland. The team would consider employing a field worker as a navigator to support older people integrating with all social resources and services they need in Auckland. Finally, Janferie recommended the North Shore Chinese Network and The Asian Network (TANI) as functional platforms to disseminate information and increase the awareness of loneliness in the Chinese community.

The consultation with Age Concern was further progressed when my primary supervisor had a meeting with Stephanie Clare, the Age Concern New Zealand CEO. The identification of Age Concern as a key stakeholder and Janferie's consent to use the Chinese information Guidebook as a foundation document for my co-researchers to review and re-develop were discussed by them. Stephanie Clare is interested in receiving the results from this stage and will look at Age Concern New Zealand piloting the resource in another area, with the idea that it may become a national resource with local features.

### ***Age-friendly Auckland's community workshop***

As a part of Auckland's Council's commitment to joining the WHO Network of Age-Friendly Cities and Communities, Auckland Council and its partners have developed a series of region-wide cross-sector forums in the community. The forums are focused on different topics, which are based on the domains set out in the WHO Age-Friendly Framework to improve the well-being of older people in Auckland. I attended the communication and information workshop on 10 June 2019 at Northcote Citizens Centre to explore potential stakeholders given one of the findings of the co-design workshops that co-researchers raised was lack of information as new settlers in Auckland. Findings and suggested resources or services from the co-design workshops have been provided to the Auckland Council in this forum.

In terms of whether to further consult with Auckland Council regard study results at this stage, my primary supervisor and I agreed that Auckland Council could be a desirable potential stakeholder to navigate some actions. However, considering the short timeline of this study and long processing timeframe of Auckland Council, I decided not to explore it with them at the current time. I would like to recommend it for future navigation.

### **The final co-design workshop**

The final co-design workshop was organised on 07 August 2019 in room AE109C at AUT north campus. Three co-researchers attended the workshop. The remaining co-researchers apologised for their absence as they had returned to China for a holiday. A summary report of this workshop was sent to them via WeChat. Since people knew each other and were familiar with the environment, I opened with highlighting the key

ground rules and safety procedures in case of an emergency. The group discussions were undertaken following a semi-structured meeting agenda. The session was audio-taped and facilitated by me.

The discussion started with the summary report they had received after the recent co-design workshop. It contained all discussions of the two co-design workshops, which would help them retrace what had been accomplished in the previous two workshops. They were encouraged provide further feedback and comment on the report. Next, I presented my consultations with Age Concern North Shore, Housing New Zealand and Auckland Council. I showed them the Herald article, where my study was quoted. They felt proud of themselves for their contribution to the community to help older Chinese immigrants to have a say. In the next step, they were asked to review and re-develop the Chinese Information Calendar of ACNS. Then, they were asked to co-design family centred resources/services or tools for adult children to address Chinese late-life immigrants' social and emotional loneliness. Finally, I summarised their co-designed results and closed the workshop with my appreciation for all of their participation and contributions. A summary reported of the final co-design workshop was sent to all co-researchers through WeChat. Details of the co-design group discussion will be critiqued in the chapters of findings.

#### **5.5.5 Data analysis of Phase Two**

Several domains that contribute to Chinese late-life immigrants' experience of loneliness have been discussed in the co-design workshops and consultations with potential community stakeholders. These domains include the existing community-based resources/services for Chinese late-life immigrants to combat loneliness, the gaps in relevant resources/service, and the Chinese late-life immigrants' co-designed culturally based programme/s, services, and resources to improve loneliness. In this study, the data were analysed under the guide of a theoretical framework which was critiqued in the previous chapter. Because of the complex and dynamic interactions between the Chinese late-life immigrants' loneliness experience, individual risk factors and the New Zealand environment in which they are situated, the theoretical framework has also taken a social ecology concept (Burholt et al., 2019;

Bronfenbrenner, 1986) and cultural scheme (Sun, 2008; Kleinman, 1998; Kleinman, 2011) into account.

## **5.6 Rigour**

In the current section, I outline the criteria used to establish rigour in the mixed-method study and community-based participatory research. Rigour is usually illustrated as accurateness of a certain research process in relation to its strength to produce reliable results. Rigour is also interpreted as the quality to ensure that the research is conducted appropriately in terms of its specific paradigm and methodology (Whittemore, Chase, & Mandle, 2011). It is essential for me to establish rigour in this mixed-method study to ensure that the research processes are all performed appropriately.

### **5.6.1 Rigour in the mixed-method research**

Criteria for evaluating rigour in mixed-methods research has received little consideration from researchers (Sale & Brazil, 2004) and has not yet been agreed upon by researchers (K. M. Brown, Elliott, Leatherdale, & Robertson-Wilson, 2015; O'Cathain, Murphy, & Nicholl, 2008). Although there is no definitive criteria used for rigour in mixed-method research, the Good Reporting of a Mixed-Method Study (GRAMMS) guidelines is identified as a common evaluation tool adopted by researchers (K. M. Brown et al., 2015; O'Cathain et al., 2008). The GRAMMS guidelines (O'Cathain et al., 2008) include six criteria, which are outlined in Table 6. The current research programme has met each of the GRAMMS guidelines.

Table 4. The GRAMMS guidelines for evaluating rigour in mixed-method research

<b>GRAMMS criteria</b>	<b>Explanation</b>	<b>Chapters in the thesis that evidence each criterion</b>
1.	Describe the justification for using a mixed-method approach to the research question	Chapter 4 presents a justification of selecting a mixed-method methodology, underpinned by a pragmatist epistemology, was appropriate to a situation that knowledge about the loneliness of Chinese late-life immigrants in New Zealand is sparse.
2.	Describe the design in terms of the purpose, priority and sequence of methods	Chapters 5 outline the criteria used to select the design of this mixed-method study. The study was a convergent parallel mixed design because the quantitative and qualitative strands were conducted and analysed concurrently.
3.	Describe each method in terms of sampling, data collection and analysis	Chapter 5 demonstrates each method including sampling, data collection and analysis
4.	Describe where integration has occurred, how it has occurred and who has participated in it	Integration has occurred across the whole research process. Chapter 1 presents the integrated research question. Chapters 6, 7 and 8 demonstrate how the qualitative and quantitative data inform Phase Two of the co-design study. In addition, concordance and discordance between standardised measurements and qualitative interviews by using mixed-method were examined in Chapters 6 and 7.
5.	Describe any limitation of one method associated with the present of the other method	Chapter 4 critiques the limitation of one method associated with the present study questions.
6.	Describe any insights gained from mixing or integrating methods	Chapter 9 presents the insights that have been learned from the synthesised findings.



## **Rigour in the community-based participatory research**

In the context of participatory research, nuanced scientific criteria to ensure the consistency in methodology and philosophy is undeveloped, which compromises its credibility (Langlois, Goudreau, & Lalonde, 2014). However, Lincoln, Lynham, and Guba (2011) developed the criteria of *credibility* to establish rigour in the field of quality research. Additionally, Creswell and Miller (2000) proposed *researcher reflectivity* and *collaboration* to ensure rigour within the critical social research paradigm. For the purpose of ensuring rigour in participatory research, Langlois et al. (2014) further referred to the criteria of *collaboration* according to Kemmis' (2008) philosophical stance of critical theory. The rigour of *collaboration* developed by Langlois et al. (2014) contains "historical conciseness, action stimulus for person as well as social transformation and equity among co-researchers" (p. 228). In the current study, rigour was developed throughout the research process by the adoption of *credibility* (Lincoln et al., 2011), *researcher reflectivity* and *collaboration* (Creswell & Miller, 2000; Langlois et al., 2014).

Firstly, the co-researchers are all from Phase One of the study. A trustworthy and receptive relationship was established between the co-researchers and I during the individual interview and survey completion. Such relationships are helpful in securing quality participatory research data (Creswell & Miller, 2000; Kemmis et al., 2014). Moreover, I improved the study's *credibility* by keeping all flipcharts available over the co-design workshops for co-researchers to re-check and update information at any time. Furthermore, an accurate and timely *researcher reflectivity* contributes to the *credibility* of participatory research data. For instance, I summarised my reflections each time after the co-design workshop. Based on that, my supervisors provided their feedback on the process of data collection and formulating the preliminary findings of the research. Prior to each co-design workshop, I read the themes gathered from the co-researchers and carefully listened to the audio recordings. Then, I presented a summary of reflection to the co-researchers at the beginning of the next workshop. Co-researchers were asked to check and confirm the essential points highlighted by the data. To further understand the participatory research data collected in the current study, a number of consultations with potential key stakeholders were undertaken. I brought all the feedback to co-researchers for further discussion. Finally,

the *credibility* of the data is based on my close *collaboration* with the co-researchers and the dynamic collaborations among them as a team. Langlois et al. (2014) contended *collaboration* underpins the research methods design, the response of research questions, and what resources or services to be co-designed. More specifically, in the present study, Chinese specific culture, principles, and quotes using original Chinese words were considered, applied, and included throughout the whole study process to strength *collaboration*.

## **5.7 Chapter summary**

I started this chapter by presenting the ethical considerations for this study. I stated why the ethical considerations were important and how this study followed ethical requirements. The chapter then outlined the implementation of Phases One and Two, including the participant inclusion criteria, recruitment methods, data collection and analysis methods. I also described how rigour was developed in the mixed methods and community-based participator research to ensure the study was undertaken appropriately in relation to the mixed-method methodology and pragmatism paradigm of the study. The next chapter presents the results of the Phase One study.

## Chapter 6 Qualitative Interview Findings

### 6.1 Chapter introduction

This chapter presents the findings of the 23 individual interviews conducted with participants in Phase One of the study. Implications, experiences, and impacts of Chinese late-life immigrants' loneliness and social isolation in New Zealand, and what they have done for them, are revealed. The participants' descriptions are grouped into four main themes. Each theme consists of associated, interrelated notions. The main themes are:

1. Optimal family obligations (理想的家庭责任);
2. Feeling a deep sense of imbalanced intergenerational reciprocity (深刻地感觉到与子女之间相互不平衡的付出);
3. Disrupted social relations and sense of alienation (中断的社会关系和疏离感); and
4. Overcoming the loneliness (克服孤独).

During the individual interviews, participants cited several Chinese idioms (*chengyu*, 成语) or literary quotations (*diangu*, 典故) to describe their feelings. This type of traditional idiomatic expression embraces the experiences, moral concepts, and admonishments from previous generations of Chinese. They are considered as the collected wisdom of the Chinese culture. These Chinese idioms, or literary quotations, are often derived from myth, story, or historical fact. The information they convey are more concise than normal vernacular speech or writing. Yet, the meaning of a Chinese idiom or literary quotation usually linked with a Chinese traditional myth, story, or historical event. The implied meaning might surpass its surface meaning carried by the characters. On this basis, in writing the findings for this chapter, I worked in a thoughtful way to match the same expression in English language; although sometimes I needed to translate it from the literal meaning. In order to accurately present the information participants expressed, and to ensure readers of this thesis whose native language is Chinese would understand, the relevant Chinese words are included in reporting the findings. Thus, the method of *invivo* coding (Given, 2008a), using a word

or short phase taken from an interview transcript, was adopted in this chapter. It ensures that concepts keep as close as possible to participants' own words. Hence, in the following sections, I will define each notion before presenting highly illustrative direct quotes from participants.

## 6.2 Optimal family obligations 理想的家庭责任

The first theme is "optimal family obligations". As members of a collectivistic culture, Chinese people place a high value on family obligations, as described by Participant 2: *"in Chinese traditional culture, having ageing parents, young children, and a job, my personal spiritual demands were less important than my family and career obligations. So, I had no choice"* 中国人的传统，上有老下有小，还有工作责任，个人精神需求是次要，也没有选择的余地. His only felt choice is to fulfil his obligation to migrate from China and support his adult son living in New Zealand.

As expressed by the study participants, family obligations are weighted over their personal needs. They expected to continue their financial support to adult children for their overseas education and housing. *"Giving financial support to the adult son is my responsibility and obligation. I should not shirk my responsibility"* 自己不处理就是‘躲’ (Participant 2). *"My son made a decision of immigrating to New Zealand. I agreed that young adult should go out and venture into the world 年轻人应该出去闯世界. So, I would give him more money"* (Participant 7).

Additionally, all participants had chosen to reunite with their adult children, and very often grandchildren, in New Zealand in this later phase of their lives. They felt obliged to share their children's immigration burden, childcare, and domestic work; even though they could enjoy a more comfortable retirement life in China. Participant 2 commented:

*I am a conservative person, which means I prefer to stay in my hometown with my big family and friends 我思想比较保守，就想在家乡生活. My son immigrated to New Zealand because he was not used to the whole system in China. Immigration was not my real intention 移民不是我们本意. His life in this new host country was difficult. As older parents, my wife and I must fulfil our grandparental obligations. Nobody would help him only his parents 在这里生活有*

困难，作为父母亲，我们不帮谁帮他。 *It was the only reason for us to move to this country.*

His perspective was echoed by a female participant. She emigrated from Beijing city, the capital of mainland China, to support her son in Auckland of New Zealand:

*I chose to reunite with my son and his family [daughter-in-law and grandchildren] in terms of my belief that they would encounter many difficulties when living in a foreign country without parents' support. So, I think they need us. (Participant 9)*

Paradoxically, these older parents who immigrated to New Zealand during their late phase of life became more dependent on their adult children because of the language barrier and the changes they experienced with ageing. As per their custom, they expected to receive filial piety from their adult children, which is normally identified as material support and emotional/ spiritual support. In regard to material support, they expected their adult children would provide physical care, financial support, practical and informational support, as well as provide living arrangements for them. Participant 6 stated:

*My husband has passed away due to the lung cancer, so my only son has the obligation to look after me. He had promised his father that he would not leave me alone in China. We bought a unit in Auckland. I felt that I have a home in New Zealand now 有了自己的房子，我在新西兰有家了。 Before, I only regarded Shanghai as my home. Now, I feel some belongingness after we bought the house 以前觉得新西兰不是我的家，上海才是。现在有了归属感。 My son offered me a bedroom in his house which is light and airy. It could well represent his filial piety and I feel more settled in a foreign country within my own little bedroom 我儿子比较孝顺，给了我一个光线好的房间，我心里比较安定了，至少有个自己的小房间。*

The participants' language showed how material support from adult children was received as filial piety to them. In addition, Participant 17's quote illustrated how the Chinese one-child policy and indigenous culture determined her late-life immigration for the purpose of being looked after in old age:

*I have only one son due to the 'one-child policy' in mainland China. He is the only one I could have a reliance on. I have to immigrate to New Zealand because I need his care and support. I could not live in China without any guarantee in my old age 我们不能自己在中国生活了，*

晚年没有保障. *There will be no retreat for my immigration since my house in China was sold by my son* 我儿子把中国的房子都卖掉了, 我们没有退路的.

However, not all of them had expected to immigrate to New Zealand for supporting their adult children. They tried to move away from the convention of filial piety and live independently. Old age, loss of a partner in the late phase of life, and decreased health status restricted their other options. Participant 16's story showed her hard choice:

*In fact, if it was not due to my old age, I would not consider immigrating to this country. My husband has passed away, so I was left alone. I had no family member in China then. My only daughter had immigrated to New Zealand in 2001. I had no choice, because that no one took care of me if I was in hospital. My daughter told me that if I stayed in China, she would not have time and energy to fly around between two countries. Although I did not plan to come over at the beginning, but I had to* 其实如果不是这个老年的问题, 我也不会考虑到这个地方来。就剩我自己了, 国内没有什么家人亲属, 就只有一个女儿在这里, 我不来没办法。最起码她能帮我解决问题, 在国内生病缴费住院都没有人。我女儿说你不来, 让我总是跑国内我也是跑不了, 我没有这个时间和精力, 你不能不来。虽然一开始我没有打算过来, 我女儿是 2001 年过来了, 所以还是过来了.

In addition to practical support, they anticipated receiving emotional and spiritual support from their adult children. Such emotional support included intimate or close family relationships, companionship, understanding, respect, and encouragement. Therefore, “immigration for family reunions” 移民就是为了家庭团聚 was identified as one of the most common purposes for them to sustain their nurturing intimate family relationships and companionships. Two participants expressed their experiences to highlight this point of view:

*I need more companionship from my daughter since my partner has passed away. I felt very lonely after I lost my partner. I immigrated to New Zealand because I expected to live with my daughter and her family [son-in-law and grandchildren].* (Participant 15)

*I need encouragement from my daughter on all aspects in this new country, but she was unlikely to do that. I have a friend from my community group who always encourages me. I hoped my daughter*

*could encourage me as well. I know I never encouraged her before, so I think I did not show her a good role model on that.* (Participant 16)

### **6.3 Feeling a deep sense of imbalanced intergenerational reciprocity** **深刻地感觉到与子女之间相互不平衡的付出**

The second theme generated is “feeling a deep sense of imbalanced intergenerational reciprocity”. Historically, in Chinese culture, people have a common sense of raising a son for old age (*yang er fang lao*, 养儿防老). The character ‘er’ 儿 means a son. But due to the one-child policy, the *er* 儿 in the idiom of *yang er fang lao* 养儿防老 is currently treated as a son or a daughter. Hence, the concept of reciprocity (*hu hui* 互惠) is universal in that most people, in return for the intangible education, love, care, and concern they receive from their parents, feel some sense of obligation to care for them, particularly in their old age. However, for these participants, reciprocity within their families is subject to disruption in terms of family structure; and intergenerational relationships change after people immigrated to a western country. A large majority of Chinese late-life immigrants in my study regarded the act of immigration as *no choice* 很无奈. Nonetheless, their feelings of a deep sense of imbalanced intergenerational reciprocity were conveyed as arising from four complicated feelings; demonstrated as four sub-themes in this section: feeling disappointed 感到失望; feeling overburdened and isolated 感到吃不消和孤立; feeling lonely, sidelined, and subordinated 感到孤独, 被冷落和委屈; and feeling rejected and cold hearted 感到被排挤和心寒.

#### **Feeling disappointed 感到失望**

The first sub-theme is “feeling disappointed”. A majority of participants originally co-resided with their adult children when they immigrated to New Zealand. However, family dynamics and conflicts caused by generational differences disappointed them and disrupted the harmony in their co-residential living arrangements. As Participant 21 stated:

*A deep feeling of loneliness came from a disappointment of my daughter 内心深处的孤独感来自于对子女感到失望. The intergenerational disagreements and arguments were intensified when I educated the granddaughter through my approaches which were considered as outdated by my daughter and the granddaughter. I did not like their lifestyle. For example, they slept very late in the night and got up late in the noon. I had high requirements on that,*

*but they were unhappy about my speech 他们嫌我话多，管得多。 I felt lonely when I was not understood by my younger generations 我觉得深处的孤独感是因为不被年轻人理解。*

The feeling of loneliness identified by this participant was linked to her disappointment of her daughter and grandchildren. The sense of loneliness and intergenerational conflicts were conveyed as relating to the traditional child-rearing pattern of over-control, demands for proper behaviour, and harsh discipline in the next generation. The feeling of loneliness was significantly associated to the culture of Chinese filial piety, rather than the social and emotional loneliness discussed in the literature review and the theoretical framework. This type of loneliness is assumed as a cultural loneliness. The same feeling was highlighted by other participants. The stories below show this shared experience:

*Now that if I had displeased my son-in-law or daughter-in-law, the contradiction between us would not be dissolved. Their hatred was very strong. It is a problem between two generations and will not be sorted out easily. But it is very important. Older people like to carry the old experiences, young people want to take new ways, and the two generations could not match with each other. Older people should converge a little and learn some new knowledge. If an older man thought himself as the Chairman Mao in the family, everyone should listen to him, it would not work. So sometimes I just pretended I did not see anything. Do not say what you should not say, do not ask if you should not do. I did not say anything about them at home. They did whatever they wanted. My daughter did not ask for my money, but I still receive her support. My living expenses are paid by them. I could not come to New Zealand without them. 现在就是你把女婿、儿媳得罪了，终身就别想翻身，仇非常厉害。这是年轻人和老人之间的困难，不好解决，但很重要。老人喜欢拿老一套，年轻人拿年轻人一套，两代人吻合不了。老人应该收敛一点，学些新的知识。老人觉得爷爷在这家里，大家应该都听爷爷的，就跟毛爷爷似的，说一句话大家都得听，那不行。所以有时候我们看见了跟没看见一样，赶紧躲开。不该说的不说，不该问的不问。孩子想干什么干什么。第一她没要的钱，我现在还占着她的便宜。我的生活费都是他们给的，没有他们我也出不来。(Participant 4)*

*The conflicts between me and my son were increased when the son did not accept my opinions anymore. Feelings of lonely appeared when I had conflicts with my family or other people 当我和家人或者别人发生矛盾的时候，就会感到孤独。(Participant 6)*



This kind of disagreement or conflict was potentially foreseeable. Before these older parents immigrated to reunite with their offspring, their two or three generations had been living separately from each other for years. A distinctive lifestyle had been formed during the time they lived in two different countries, prior to reunification in New Zealand. Participant 16's quote showed how her family reunion exacerbated the intergenerational tensions. Her social loneliness was caused by immigrating to an alienated western country. Alongside, a feeling of emotional loneliness seemed to arise from inadequate emotional support and intimate relationships from her daughter:

*My daughter and I had the most intensive conflicts at the early stage of living together, that feeling was... 刚来的时候最不好, 那种感觉... We had lived separately for a long time. We are independent individuals. She has her life, but I have my own 我们两人其实都是单独的个体, 她有她的生活, 我有我的生活. The condition did not allow me to establish another home in New Zealand 到这里条件不允许我再建一个家. I did not know how to communicate with my daughter since we did not have a common language 有时候就没有话题了. Both of us have our own characters, but I do not want to change mine, because I am an older person 我觉得吧大家都是挺有个性的, 但是我不想改, 因为我老了. She also felt hurt sometimes because I did not show appreciation for her filial piety 孩子挺孝顺的, 但是她也委屈. 为什么呢, 我这么孝顺你, 你一点不领情. I had to wander outside alone every day to avoid any conflict with my daughter 没办法我就出去. But sometimes I had tears running down when I could not get on the bus and sit in a big wind and rain. Life was not easy 但是有时候在外面坐不上车, 又是风又是雨的时候, 我当时眼泪都下来了, 不容易. I felt lonely since I did not have too many places or activities to go 像我这样有孤独的, 没处活动, 都要去很远. Sometimes, I was tired and wanted to stay at home, but I could not. I must go out to avoid confrontations with her 有时候累了就想回来, 可是真没发待, 在家就有矛盾. I felt my life was so hard by being old 就是觉得人到老了怎么这么难啊.*

### **Feel overburdened and isolated 感到吃不消和孤立**

The second sub-theme is “feel overburdened and isolated”. Apart from conflicts caused by generational dissimilarities, the participants' expressions also showed how the intensive and long-term housework in the host country exacerbated feelings of being overburdened and isolated as Chinese late-life immigrants. Their experiences suggest such social isolation influenced their developing sense of loneliness.

It was evident that these older parents provided childcare and domestic assistance to their adult children in New Zealand. Repeatedly, participants, particularly those over 80 years of age, expressed their dissatisfaction in doing or assisting with household chores. Participants' quotes described their lives as being devoted to domestic work:

*Eighty was a border age for me to withdraw from the family obligations in terms of my restricted functional abilities and deteriorated physical strength. And also, I considered the situation in family became quite stable. However, my daughter-in-law did not allow me to enjoy my leisure life. I was tired but had no choice* 后来我到 80 岁, 我觉得吃不消了, 脑子也不行了。我觉得家里情况比较稳定了, 就提出来想休息。但是媳妇不肯, 我没有办法。  
(Participant 6)

*I felt upset to prepare food for the whole family as a 90-year-old man. The loneliness bothered me when I had an unhappy mood* 你说我都快 90 了, 哪能还帮他们做饭。一般就是心情不愉快的时候, 会觉得有点孤独。  
(Participant 4)

In addition, one participant's comment described the imbalanced reciprocity between him and his adult son, "*the more you have done for him, the less he is willing to return. I had been longing for a leisure time, but the family obligation is predominant*" (Participant 2). Being overwhelmed by domestic tasks further obstructed these older parents' social networking, compounding their socially isolated situations:

*Older Chinese parents were mostly tired of household chores and had no spare time to think of participating in social activities. My wife and I had sacrificed 牺牲 seven years looking after three grandchildren. I had no chance to visit China. I had to reduce my time for community activities. My life could be described by a Chinese idiom as 'drawing a circle on the ground to serve as a prison (hua di wei lao 画地为牢)'.*  
(Participant 2)

*画地为牢* *hua di wei lao* is a Chinese idiom, which means to confine oneself within a restricted range or scope. These older Chinese parents saw their social isolation as being caused by the limited range of activities. Although the participants did not mention loneliness as such, their social isolation might be a potential cause of loneliness. Sometimes, those older Chinese parents who were allowed to attend social activities felt uncomfortable taking time to socialise outside the home. As Participant 8 described: "*housework made me anxious when participating social activities*" 因为想

着家里的事，出来参加活动心里也不安。She felt she should be doing housework. Consequently, a feeling of isolated and a need of new friends and information were raised by most of the participants:

*I was new to this country. My information source was totally blocked. So, I felt very isolated. I hoped to receive more information from my community. (Participant 17)*

*I hoped to expand my social relationships, but I found Chinese older people here all have their own obligations 别人都有别人的事情. They had no time to socialise with other Chinese. They needed to assist with childcare and cook meals for their family. So, we did not have too much chance to contact with each other. (Participant 1)*

*I had friends to share about my bad mood when I was in China. But I could not find a person to chat here when I am feeling lonely 我心里不好受，感觉寂寞了，在国内不管怎么样，还有人唠唠嗑，这里我跟谁说去. (Participant 13)*

### **Feel lonely, sidelined, and subordinated 感到孤独、被冷落和委屈**

The third sub-theme is “feel lonely, sidelined, and subordinated”. Imbalanced reciprocity in co-residential living arrangements with adult children and grandchildren was commonly experienced by these participants. Lack of freedom at home, an unsettled living environment, financial difficulties, and lack of deep communication with adult children were identified. Some stories revealed how emotional loneliness and cultural loneliness resulted in feelings of being sidelined and subordinated. Such experiences were associated with the deep sense of imbalanced reciprocity:

*I felt very upset and subordinated when depending on my daughter's support in old age 年纪大了依靠女儿生活我很不开心和委屈. By quoting a Chinese idiom, it refers to 'living under others' fence (ji ren li xia 寄人篱下)'. For instance, I was unwilling to get up early every morning to cook the breakfast for my daughter's family, but it was the purpose of my immigration 我们来的目的就是为了这个. My friends and I usually avoided to visit each other if our adult children were at home. Because it was inconvenient to talk when they were there. (Participant 11)*

*Maintaining a relationship with daughter-in-law or son-in-law is always challenging in a co-residential household. My son usually appeased his wife and left me in a situation of being wronged 儿子要对媳妇迁就让老人受委屈. I did not want to bother my son by*

*disclosing the conflicts with his wife. I felt lonely when he was too busy and overlooked my needs. (Participant 8)*

Our relationship became worse in a co-residential household. My son and his family started to abuse me verbally and emotionally 对我发脾气, 辱骂我 in recent years. But I decided to stay with them for upholding his face 我决定继续跟他们一起住, 为了照顾他的面子. He would be blamed by our relatives in China if he lived in a beautiful house without me. (Participant 6)

寄人篱下 *ji ren li xia* is another Chinese idiom, which means being lower than others. It is used as a metaphor to demonstrate being reliant on the lives of others without an independent life. Older parents in this study felt they were living under the authority of their adult children. Emotional loneliness was identified when they felt they were overlooked, sidelined, or subordinated by them. Consequently, in order to seek a more independent and less confrontational living environment, some of the older parents sought alternative living arrangements. However, with respect to their financial constraints, there was an expectation their adult children would buy them another home or apply for public social housing for them. A male participant was holding back his tears as he talked about his immigration experience during the individual interview. In his memory:

*The financial trouble reminded me about the economical harsh time in China during the Anti-Japanese war. I had seven years hard time in New Zealand 日本人侵占中国的时候, 生活非常艰苦。我到这里也经历了 7 年辛苦的生活. I really admired local white people who could afford living in a retirement village. (Participant 13)*

Moreover, Participant 21 shared her perspective of her daughter's subordination:

*I felt sad when my daughter intended to kick me out from her house and asked me to rent another private house. I really could not understand it. I wanted to go back to Shanghai. I hoped she could buy a house for me since I had supported her a lot previously 我那时候跟他们不开心, 嫌我烦, 想让我到外面去借房子。我当时真想不通。想回到上海去。我付出这么多。*

For those participants who turned towards public social housing, or Housing New Zealand accommodation, as a living alternative, they believed residing in this type of

accommodation was more settled than private tenancy. A participant described reasons for this:

*Public social housing is more secure and exclusive than the private tenancy. It is more likely a home, where I do not have to worry about getting sick or death. I told myself I 'must not die, must not die' when I was sick in a private tenancy 我身体一不舒服，我就怕，告诉自己不要死，不要死在别人家里. I could not die in a private tenancy since I did not want to stain their room 你死在别人家 不是把家里的房子弄脏了吗. If I have my own home, sick is sick, I will not worry about that 要是在自己家里，我就无所谓，不舒服就说不舒服. (Participant 8)*

### **Feel rejected and cold hearted 感到被排挤和心寒**

The fourth sub-theme is “feel rejected and cold hearted”. Some quotes disclosed how the emotional and cultural loneliness was amplified when Chinese late-life immigrants did not receive enough recognition, respect, and gratitude from their adult children:

*Beggars cannot be choosers 来到屋檐下，不得不低头. I was manipulated 主导 by my daughter. I had lost my rights of independence and being respected. (Participant 16)*

*I felt rejected by my son-in-law because they always travelled together in a holiday but left me alone at home. They usually included me before, but now they said there was not enough space in the car 以前他们会带我一起，现在他们都不带我去，说车里坐不下那么多人. I usually ate alone in my room. I was very lonely when I found that I did not belong to the family 现在我都单独吃，这时候会孤独。他们是一家人，我只有自己. (Participant 4).*

*They [adult children] kept parents' superannuation but still asked us to pay for a high rent. A deep feeling of cold surrounded in my heart 子女收了父母的卡，还要收父母很高的房租，我觉得很心寒. (Participant 5)*

A participant even commented on the historically valued obligations of older parents as feudal remnants 封建残余思想 when compared with the western culture: *I prefer the western culture in New Zealand to the Chinese traditional one. If I will have an afterlife, I wish to concentrate more on my individual needs, rather than to sacrifice everything to my adult children 如果有来世，我就想要洋人的这个方式。宁肯把房子卖了周游世界。中国还是封建. To be honest, I expected to go back to China as I could not bear to live with my children. (Participant 13)*

On the contrary, although most of the participants aspired to being more independent and autonomous, they tended to associate poor perceived health and their future caring with strong feelings of social loneliness and stress. For one, there was no one except her daughter to rely on when she considered her health status and future care:

*I felt lonely when I worried about my ageing and death. Uncertainty of life is just like a time bomb 生活的无常就像一个定时炸弹. My recent loneliness was raised from a concern about my legs. I was struggling with walking independently. Also, my daughter's health is another big worry for me. Nobody will look after me if she is unwell or anything happens to her. (Participant 23)*

In regard to the ingrained perspectives and values of the current generation of older Chinese, as discussed in the previous chapters, shifting their views from the cultural and historical values of filial piety to accepting social services was not easy. Participant 23 considered that: “a Rest Home will be the last helpless choice for me when I lost my independence”. Participant 1’s strong conviction of maintaining his dignity also underpinned such value:

*I do not want to talk about my future care by other services at this stage. I do not like a stranger come to my house or do a shower for me. I think I would consider a suicide if I lost the capacity of caring myself. Because I do not want to lose my dignity.*

Above all, the perceived imbalanced reciprocity undermined family relationships and subsequently impacted on these Chinese late-life immigrants’ social and emotional health. The quotes illustrated their experiences of being disappointed, overburdened, isolated, sidelined, subordinated, and rejected. All of these feelings contributed to their feelings of cultural, emotional, and social loneliness within the host community.

#### **6.4 Disrupted social relations and sense of alienation 中断的社会关系和疏离感**

The third main theme is “disrupted social relations and sense of alienation”. As new immigrants to a Western country, Chinese late-life immigrants from a different cultural and social system mentioned their lack of established social networks, limited information about social and health services, and poor English language skills. They described how these problems impacted their activity possibilities and led to their emotional loneliness and social loneliness:

*I had never come to the New Zealand before my immigration. It took me around two to three years to adjust the life in this new country. The second year was the worst, in which I was bored 闷得慌 at home all day. My mood became depressed and anxious. I could not sleep in the night because of the loneliness. I was diagnosed with high blood pressure when I visited my GP. I had no high blood pressure history and family history. After then, I travelled back to China. My doctor in China told me I had an anxiety disorder. Because of that, I am still taking medicine from China currently. (Participant 11)*

*The life in New Zealand was very lonely. A day was like a year 一天当作一年过. I had no other leisure activity except for one Chinese television channel. I remembered there was a Chinese TV series at 7 o'clock in the evening. I could not miss any episode no matter how much housework I had to do 每天那一集的电视连续剧我是一定要看的, 不管有多么忙. (Participant 8)*

*度日如年 du ri ru nian* was another Chinese idiom quoted by participants. It means to pass a day as if it is a year because of deep boredom and not having any interests. Their descriptions of an emptiness in their lives represents a type of emotional loneliness. Some activities they used to do in their original country were highly valued while residing in the new host country, such as watching Chinese TV series. It was regarded as a biographical tie for them to still being connected with their hometowns.

The linguistic issue was regarded as one of the biggest barriers for this study's older Chinese immigrants. It prevented them from using social and health resources and services. As some participants said: *"I saw some social services' information from the internet, but I never thought to use or join them because of my language problem"* (Participant 4); and *"It was disappointing to know Chinese services in the Rest Homes and retirement villages were very limited"* (Participant 9). There was a general reliance on medical interpreting service in the hospital, as Participant 2 stated: *"I was worried the interpreter could not correctly convey my information to doctor all the time"*. Poor English language skills brought several inconveniences into their daily lives. One participant told a story of getting herself lost when she was out for haircut. It resulted in a deep sense of social loneliness for her:

*I was unable to travel far by myself in terms of my language problem. I had to familiarise myself with a new environment in New Zealand gradually. I had lost my way to home when I wanted to try a new hair salon which was introduced by a friend. After I had my hair cut, it was*

*getting dark. I got on a wrong bus, then I lost my way. There were no other Chinese people in the bus. I felt sad the bus driver asked me to get off the bus when he could not understand my body language. I felt so helpless and lonely when I was lost. I could not call anybody to help me because I lived alone here. My only son had moved back to China for his new job. I even had no knowledge of how to contact the police. My brain was screaming, and I suddenly could not see anything 我脑子嗡嗡地响, 眼睛因为太紧张, 突然看不见了 I was too nervous to cry 我放声大哭. It felt like I was close to die 我感觉自己已经到了死亡的边缘. Luckily, two Kiwi ladies passed by me and stopped their car. They saved me but I did not know their names. (Participant 8)*

The aim to integrate into the community through learning English to overcome language barriers was a common strategy among these Chinese late-life immigrants. *“I gained more confidence to go out independently after I had some English skills”* (Participant 10). However, to learn a new language in old age was not easy. As Participant 1 commented:

*In related to our history, our generation was required to learn Russian when I was in school. I had to start it from alphabet ‘ABCD’, which were hard for me to remember. My memorial ability was getting declined.*

As a result of their disrupted social networks, limited information about social/health services, and poor English language skills, the study’s older immigrants described feeling frustrated and marginalised. One mentioned that *“I was marginalised by the society and I missed so many beautify things of this country”* (Participant 9). They needed a considerable amount of support from their adult children to familiarise themselves with the new home. Most of the participants mentioned they had to rely on their adult children or friends of adult children helping them deal with English letters or affairs of hospital, banking, shopping, and housing. Participant 3 commented:

*A hero is silent about his past glories 好汉不提当年勇. Currently, I am less capable than a child. I was happy for my son and daughter-in-law to arrange everything for us. My husband and I had to be re-trained on the necessities of life in an alienated country, such as clothing, food, shelter, and transportation 衣食住行都需要重新开始被训练. We usually avoid eating or shopping outside since we did not know how to deal with the money.*



However, not everybody happily accepted their reliance on others; *"I did not like to rely on others for such basic things in my daily life. It made me feel lonely and introduced my life into meaningless"* (Participant 17). *"I did not want to be a burden on my son"* 我不想成为我儿子的负担 (Participant 18), *"so I usually tolerated to my illness or physical discomfort 我生病了或者感觉不舒服，通常都会忍着不去医院. My son was busy, I did not want to waste his time taking me to the hospital"* (Participant 17). Furthermore, the feeling of social loneliness and isolation was identified when they limited their outdoor activities which diminished their opportunities to integrate into society. A need of suitable community spaces for activities and exercise was noted:

*I missed the metropolitan convenience in Shanghai 我怀念上海大都市的便利. There were so many exercise facilities in our community. I benefited a lot from those exercise options and also the free space for dancing and playing Tai Chi. However, my original exercise routine was disrupted by immigration 因为移民，这些活动都没有了. I could not find an appropriate place to play aerobics 没有什么地方适合我们跳广场舞. I tried once in my garden, but concerned the music would disturb my neighbours 我们有的时候也拿着小录音机去做做操啊，又怕吵到别人，没有合适的地方. Moreover, compared with other areas of Auckland, we need more free space to hold group activities in West Auckland.* (Participant 17)

The participants' ageing was identified as another major cause of their reduced outdoor activities. They had to confront once more network disruption following immigration owing to decreased mobility and loss of friends. In the following quotes, participants' talk about how their emotional and social loneliness are related to unhappy experiences:

*As we are getting older and older, the previously constructed friendships were disrupted again, we needed some younger friends 随着年龄变大，我们需要年轻一些的朋友，但是新的朋友圈还没有形成. Our older friends were too old, they had passed away, moved to the rest homes or had mobility problems 原来的朋友太老了，走的走，养老院的养老院，在家里的根本出不来，比我们还麻烦. We found it very difficult to meet up and have a cup of tea. Perhaps once or twice per year could be achieved 大家都想聚，约很多次，但是一年也就一两次能成功. A new network needed to be established when people became older old. However, I had no idea of how to create a new one because my mobility was also restricted. The*

*daily activities became tedious and I felt so lonely 日常生活变得乏味也很孤独. (Participant 9)*

*After I was older than 80, I had to rely on a walker. I avoided catching a bus because some bus drivers, especially Chinese drivers would comment on the filial piety of my children. I was tired to explain it to them. I would not like to bother them 但是司机，尤其是中国司机，闲话多了。他们就说像你这么大岁数家人应该管，这样多不方便。我就不想麻烦他们。 More unacceptably, I was not welcomed by the Chinese dancing group in the community anymore. They said they would not like to dance with me because they could not take responsible for my safety in dancing 但是好多人说闲话，说别带她，摔跟头你担不起。 But I thought I could dance slowly, why would you just reject me? I felt rejected and very sad 我心里想我要是能跳我就跳嘛，慢慢地跟我跳嘛，她那么一说，我觉得特别难过。 Now I felt lonely when dancing by myself. (Participant 23)*

The participants' quotes showed that those of more advanced age with mobility problems longed to participate in social groups, activities, and re-establish a friendship network. Transport options for taking them to and from home community activities and services are few. Participant 23, who used a mobility walker, also commented on her reluctance to take a bus since the Chinese bus driver would challenge the filial piety of her daughter. To uphold the face of her adult child and herself, she decided to walk with her walker from home to church:

*It will take about 20 minutes for normal people walking from my home to the church. But I will need an hour, about 6000 steps as I counted. Sometimes, I had to walk in a heavy rain 有时候，我得再大雨下走。 However, my participation in activities cannot be stopped by wind or rain 风雨无阻. (Participant 23)*

On the whole, all of these Chinese late-life immigrants longed to integrate into mainstream society. One participant's words stood for many when he commented:

*I had few communications with our neighbours due to my inadequate English. It felt like I was married to this new country. China felt like my parents' home and New Zealand liked my husband's family 中国政府是我的娘家，新西兰政府是我的婆家，我当自己是嫁过来的。 So, I had to be very careful to avoid making any mistake here. (Participant 13)*

Finding themselves alienated from society seemed to be the state that orientated them towards making meaningful social connections. For instance, they worked hard to learn English and some of them tried sharing Chinese traditional food, such as dumplings, with English speaking neighbours. They felt that such sharing could fill the language gap between them. However, cultural difference was found to obstruct social connections beyond the routine interactions. Their stories described a type of culture-related loneliness. Participants' quotes highlighted the feeling of disconnectedness because of the difference in culture:

*Cultural difference caused several misunderstandings and embarrassed moments for us. For example, we used to play bowling with an older Kiwi lady. We thought she was older than us, so we usually picked up the [bowling] balls for her and supported her by the arm. It was a virtue encouraged by Chinese culture 尊老爱幼是中国传统美德. But she did not come along to play with us anymore. We realised our behaviours might be inappropriate in her culture of being independent. We felt sorry to her about this. (Participants 9 &10)*

Interestingly, the disconnectedness and loneliness caused by culture difference not only occurred outside the family, but also among the family generations. Their efforts to connect family were rejected when the younger generations turned their food preferences to more western tastes. Grandparents and their young generations could not share family meals anymore. Such challenges to Chinese family patterns became a big issue as described by Participant 9:

*Originally, children loved my cooking. I was happy to cook for them. Now my granddaughter does not like my cooking. I feel that I am getting more and more useless. Our taste is much different now. For example, when we went out for dinner, she was unlikely to go to a Chinese restaurant. She preferred Western food, but I would not. So, we don't go out often now. Many older Chinese people encountered the same experience. When my children drank water with ice, I could not accept it. I believe this is bad for your stomach. So, we avoided eating together after that. If I wanted to take her out, I would not take her to eat Western food. She did not like it, but I would not change my mind. I don't think it's good for health. So the only activity to take the children out for dinner was also cancelled 原来孩子非常想来吃奶奶做的饭，现在口味就不一样了。比方我们一起出去吃饭，她就不想去中国餐馆了。她要去那些西餐，我可就不愿意了。所以现在也不经常出去。原来不想做了，我们就一起出去吃，她也挺愿意的。现在一上学，他们就吃快餐吃习惯了，慢慢口味就*

变了，这个是普遍的，很多老人都有同样感受，下一代西化了。他们上来就喝冰水，我接受不了，我觉得这个坏胃。所以这样就吃不到一起了。比方我要带她出去，我就不会带她吃西餐，她就不喜欢，最后就变很少了。我也改不了，我觉得这个对健康不好。所以这个唯一带孩子出去吃饭的活动也取消了。 *Eating together was considered as family happiness 天伦之乐, but the tradition was broken. It was the only time for whole family engaging and catching up with each other every week. Now we had to cancel it.*

In summary, for these Chinese late-life immigrants, the original ties with other relatives, friends, and professional networks were impacted or broken after they immigrated to New Zealand. They understood their adult children and often grandchildren to be key family connections in this new country. Hence, their experiences of loneliness, including emotional and cultural loneliness, were intensified and deeply disappointing when the times for gathering with family and promoting familial intimacy were reduced.

## **6.5 Overcoming loneliness 克服孤独**

The fourth main theme is “overcoming loneliness”. Alongside the stories pertaining to being socially isolated and feeling lonely were those that showed these Chinese late-life immigrants moved intentionally or unintentionally towards independence, social inclusion, and getting rid of loneliness. Moving away from filial expectations 转变养儿防老的期望, re-partnering in older age 晚年找个老伴儿, and seeking solace from a religious practice 通过宗教的修行寻找心灵的慰藉 were identified as significantly useful by the participants during their journey towards overcoming loneliness. I will further discuss these three sub-themes in the following sections.

### **Moving away from filial expectations 转变孝养的期望**

The first sub-theme of overcoming loneliness is “moving away from filial expectations”. To avoid family conflicts and becoming a burden to adult children, these Chinese late-life immigrants shifted their views from the traditional value of filial piety to becoming more independent. For example, they became more reliant on formal social services, residential care options, and peer support. Participants’ language showed their new perspectives, beyond their filial expectations, on planning their retirement lives and overcoming social and cultural loneliness. For example, Participant 23 said: “*I believe that loneliness comes from an uncertainty about the future. It is very important to*

*establish an effective social supporting system when we are still eligible". "A good plan for late phase of life, such as completed an Advanced Care Planning and wills made me feel more settled. It also helps with my loneliness" (Participant 22). "I think as older Chinese immigrants in New Zealand, we should plan our retirement life earlier, rather than immersed in looking after grandchildren" 埋头带孙子 (Participant 9).*

Accordingly, a wealth of quotes from participants illustrated their intentions to become less dependent on their adult children: *"my children have their own burdens. I could rely on my New Zealand superannuation rather than a financial support from children" (Participant 20). "My state of loneliness was much improved after I received my superannuation" (Participant 13). "I think social workers could provide practical assistances to older people, especially for those living alone" (Participant 6).*

Moreover, most participants expressed their unwillingness to co-reside with their children. Some of them planned to live in a residential aged care facility in the future. They expressed a change in their cultural values related to filial obligation which became unreliable when anticipating future life with their adult children. Alongside the plan of utilising residential aged care facilities, some participants expected peer support among other older Chinese immigrants by moving together to areas where most Chinese people resided, or Chinese businesses were clustered, as explained by Participants 9 and 10:

*Now we want to move to a lively place, with convenient transportation. If we are not available to cook or we are sick in the future, we can buy some food from those Chinese restaurants by walking. It is not convenient for us to walking to the bus station at the current address. It will become more and more troublesome 现在我们想搬去热闹一点的地方，交通方便，不想做饭或者生病了可以去买点，这里买都没法买。这里到公交车站都不方便。所以说越来越麻烦。*

For one who had to look after his/her ill older partner, day care service was considered to offer more flexibility. A participant worried that her husband would feel lonely if he moved to a rest home, but the option of a day care centre seemed to help with their social loneliness:

*I wanted to send him to a day care centre 日间护理中心 for older dementia patients. My daughter was busy, so all of my time had been contributed to looking after my husband. I hoped a day care centre could free me sometime by giving me some personal time and space. (Participant 12)*

### **Re-partnering in old age 晚年再找个老伴儿**

The second sub-theme of overcoming loneliness is “re-partnering in old age”. Some older single Chinese considered re-partnering in old age. Company and sharing generational similarities were identified as helpful to improve their emotional and social loneliness. One participant shared her enjoyable story:

*I met with my boyfriend when I was 82 years old, four years older than him. We were classmates in the English classes. He came to me and said he would like to look after me. I felt that was a falling pie in the sky 天上掉馅饼. We had a wonderful time of living together for three years before he died. He shared my household work, and I cooked for him. We had similar life experiences and a lot of common language to share. The life was so interesting. We were never bothered by loneliness. (Participant 23)*

Some of them received negative feedback from their friends, families, or Chinese communities regarding re-partnering as a way of overcoming loneliness. For instance, Participant 24 shared her experience of people who opposed her re-partnering:

*I did not discuss with my daughter about re-partnering, but I had consulted with some friends within the same Chinese community group. They reminded me keeping my money carefully in the pocket 他们说你只要不上经济当就行. But some of Chinese peers laughed at me, they said ‘you feel lonely because you need a man’. I was shamed about their attitude. They looked down on me. I can have a boyfriend whenever my age was young or old 他们瞧不起我。我交朋友怎么了，年轻地时候可以，老了为什么不可以。*

Nevertheless, to have company and someone with whom to share the late phase of life was endorsed by two participants, both of whom had re-partnered. However, re-partnering in old age was referred to as a somewhat sensitive space between two families, particularly concerning the heritage of the original family. Another participant, who met her partner after immigrating to New Zealand, shared:

*We knew each other in a community group. The re-partnering for us is just a companionship and support. You have a person to participate*

*in community activities, do physical excises and eat meals together. It was very helpful for overcoming loneliness. However, we could not talk about money. His money will go to his children and mine will go to my daughter. We would break up if any of us reach to the borderline 不讲究他给我多少钱，我要他多少钱，不谈这些，我想要是谈这些，就会崩. (Participant 22)*

### **Seeking solace in religious practice 通过宗教的修行寻找心灵的慰藉**

The third sub-theme of overcoming loneliness is “seeking solace in religious practice”. Some of the participants sought comfort and social connectedness through their religious practices. In accordance with Buddhism, Participant 21 expressed her perspectives on adult children:

*If my daughter did not treat me well, I think she would come to collect her debts 她是来讨债的. I owed her in the past life 我前世欠了她的债. It is cause and effect 这就是业因果报. I felt fair enough when I thought in that way. Buddha taught us to be a good person, to help others. He showed us a method to change our destiny 他告诉我们如何改变命运. I was oriented toward positive energy, which prevented me from loneliness 我们要多靠近正能量，这可以改善我的孤独感. Additionally, I personally believe that keep learning the truth of life 生命的真相 can ameliorate loneliness as well.*

This view was echoed by another participant who considered the philosophy of Buddhism helped her to open her heart and put down 放下 all negative emotions, such as loneliness. She expressed her opinion in this way:

*All phenomena arise together in a mutually interdependent web of cause and effect 万物都是因缘和合的. When a feeling of loneliness raised, I could find something else to do. I coped with loneliness by switching my attending to other positive things. Loneliness means you have longed need from outside 向外求. If you know how to manage your inner peace 管理内在的平和, the feeling of loneliness would disappear just in a moment. In this sense, I would not put a high filial piety expectation on my children. They are busy, I need to adjust myself. (Participant 22)*

Overall, the term overcoming loneliness came from invivo coding. As discussed earlier, the purpose of using the words ‘overcoming loneliness’ is to stay close to participants’ own terms as they capture a key element of what was being described (Given, 2008a). ‘Overcoming’ was not about a specific strategy planned and adopted by people to get

rid of loneliness. It means the participants described, intentionally or unintentionally, doing something to keep away from the uncomfortable feelings of loneliness. They tried to overcome social loneliness and cultural loneliness through accessing formal social and residential care services or seeking a re-partnering opportunity, while moving away from filial expectations on adult children. They also sought solace in a religious practice to cope with emotional loneliness. It showed their anticipations and efforts toward inclusiveness and connectedness in the host country.

## **6.6 Discussion**

From the participants' perspectives, a feeling of loneliness from the bottom of their hearts was associated with a deep sense of imbalanced intergenerational reciprocity and disrupted social relations, as well as a sense of alienation. The Conceptual Model of Exclusion from Social Relations for Older People and Confucianism's filial piety underpinned data interpretations. The qualitative data collected for this phase of the study have extended current conceptions of Chinese late-life immigrants' social isolation, emotional loneliness, social loneliness, and cultural loneliness in three ways.

Firstly, in line with conclusions from studies of loneliness and social isolation in New Zealand (Wright-St Clair & Nayar, 2019), Chinese late-life immigrant might experience greater loneliness and/ or social isolation than general population. Yet, we do not know if they held back some details or covered stories in terms of the perceived stigma of loneliness in Chinese culture.

In the participant's story of re-partnering, the loneliness was stigmatised as infidelity to her ex-husband. In relation to historical Chinese theory, a widow was expected to be loyal to her husband even after his death. The situation of remarriage or re-partnering was more complex and controversial in Ming and early Qing China than the current time (Waltner, 1981). However, some effects from the traditional perspectives remained.

The stigma would inhibit Chinese late-life immigrants seeking assistance or peer support for loneliness, which was informed by Arthur Kleinman's theoretical framework of this study. Importantly, findings suggested that loneliness had negatively impacted on participants' health and quality of life. For instance, loneliness related



stress, experience of lost weight, sleeplessness, poor appetite and unhealthy lifestyle, such as watching TV for whole days, were reported by participants of the present study. A participant also identified her diagnosis of anxiety, hypertension, and depression with a potential relationship with loneliness.

Secondly, these Chinese late-life immigrants are foreseen to change their mind from filial expectation of adult children to utilise formal social services and residential aged care facilities. The implications of their loneliness and/or social isolation were associated with indigenous culture, values, and historical experiences. Confucianism, Taoism, and Buddhism contribute to the traditional philosophical backdrop of Chinese. From a Buddhism belief, the relationships with adult children were decided by Karma *业*, which made them feel more comfortable to accept the unsatisfactory situation with adult children. Karma means action, work, and deed. In the philosophy of Buddhism, Hinduism, Jainism, Sikhism and Taoism, karma is also associated with the principle of cause and effect *因果定律*. The intent and actions of an individual (cause *因*) could result in the future of that individual (effect *果*), including the life of rebirths *转世* (Sun, 2008). According to Chinese Buddhism, the concept of karma requests people to assume responsibility for their behaviours, affects, and cognitions (Sun, 2008). Thus, older Chinese people considered adult children's feedback as effect and responsibility from their own causes in past lives.

In addition, a deep interpretation showed a vivid picture of immigrant life in New Zealand while integrating Chinese historical experiences. It was surprising to see one participant compare his immigration life in New Zealand to the bitter time during the Anti-Japanese war. The Anti-Japanese war named as the Second Sino-Japanese War; a military conflict fought primarily between China and Japan from 1937 to 1945. Millions of Chinese soldiers and civilians were killed or injured during the war. It was the most bitter and destructive war the region had experienced. His loneliness experience in New Zealand was flavoured with bitterness.

Lastly, the need for cultural and multilingual services will be in a high demand. For instance, Housing New Zealand is providing social housing for people who are most in need of housing and have low incomes. However, according to current data, the demands for social housing (Ministry of Social Development, 2019b) and cultural

services are far beyond that available across the country. Moreover, Chinese late-life immigrants mostly relied on medical interpreters to access the hospital services. The participant's concern that the interpreter did not deliver his information correctly to the doctor aligns with Tang's study (2017) on older Chinese people's experiences of accessing health services with translator support. The evidence is expected to receive more attention from policy makers and service providers.

## **6.7 Chapter summary**

Loneliness is a common experience among older people; however, for those Chinese late-life immigrants in New Zealand, the experience of loneliness was complicated. Findings from the qualitative data suggest Chinese late-life immigrants' feelings of loneliness are associated to cultural, social, and emotional factors. Thus, a concept of cultural loneliness was identified in this chapter. Strengthening ethnic communities and improving culturally specific services will enhance the richness and value of New Zealand culture. The next chapter will present results of the standardised measures and how quantitative data were used to complement qualitative data.

## **Chapter 7 Standardised Measures and Reviewing the Measures' Utility**

### **7.1 Chapter introduction**

All participants (n=23), at the end of their qualitative interviews, were invited to complete five standardised measures. The results of the standardised measures were used to explore the participants' experiences of answering the standardised surveys, such as their usability and acceptability; and examine the discordance and concordance between qualitative data and quantitative data. In addition, the pilot data explored the implications and the impacts of loneliness on Chinese late-life immigrants' health status, functions, and quality of life.

Results of the standardised questionnaires are presented in tables and figures and are only discussed descriptively due to the small numbers of participants (n=23). The purpose of applying standardised measurements of loneliness, ADLs, IADLs, social support and quality of life in the presenting study was to pilot test potentially suitable tools for use with Chinese late-life immigrants in New Zealand. Furthermore, the results were used as data resource for the subsequent co-designed study with selected participants.

The results reported in this section will examine if scales covered the domains indicated in the qualitative data as being important. Following the convergent parallel mixed methods methodology used in phase one of this study, the results of the qualitative and then the quantitative sequential component were critically compared in order to answer the study questions. The concordance and discordance between standardised measurements and interview results were analysed in the presenting study.

### **7.2 Loneliness of Chinese late-life immigrants**

The Chinese translated de Jong Gierveld Loneliness Scale (Leung, de Jong Gierveld, & Lam, 2008) was adopted in this study to determine the status of loneliness. This scale consists of two subscales, emotional loneliness and social loneliness, and each subscale

contains three items. The 6-item De Jong Gierveld Loneliness Scale gives a range of scores from 0 to 6, reading from 'least lonely' to 'most lonely'.

Participants' overall loneliness scores ranged from 0 to 6 with a median of 2, which is lower than the average loneliness score of 3. The emotional loneliness score and social loneliness score had a median of 1 (0-3) and 2 (0-3) respectively. The reported social loneliness is higher than emotional loneliness for study participants. Following the 6-item questions, participants answered the final, direct question "do you feel lonely"? Interestingly, 52 percent participants (n=12) reported "no", that they did not "feel lonely". This result shows an inconsistency in reported loneliness between the subscale scores and the direct question result. Although nobody had scored 6, the highest loneliness score, around 34 percent of participants scored 3 or higher, meaning one in three older Chinese immigrants in New Zealand might experience different degrees of loneliness (see Table 5).

Table 5. Self-reported loneliness status

Indicator	No* (%)
<b>Loneliness total score</b>	
0	5 (22)
1	2(9)
2	6(26)
3	2(9)
4	4(17)
5	4(17)
6	0(0)
<b>Feel lonely</b>	
Yes	11 (48)
No	12 (52)

<sup>1</sup> 6-item De Jong Gierveld Loneliness Scale gives a range of scores from 0 to 6, reading as from the least lonely to most lonely.

\*Study participants (n=23)

### 7.3 The activities of daily living scale (ADLs) and instrumental activities of daily living scale (IADLs)

The ADLs scale and IADLs scale were used in this study to measure the extent of participants' functional ability. The aim was to explore physical independence as a

potential implication for loneliness. The ADLs scale total score above 60 means the basic ADLs, such as dressing, feeding, transferring, walking, bathing, and toileting can be achieved independently. For instance, people can feed themselves without assistance. All of the study participants reported being independent in their daily activities of dressing, feeding, transferring, walking, bathing, and toileting (see Table 6).

Table 6. The Chinese ADLs scale

<b>ADL Total Score<sup>1</sup></b>	<b>*No (%)</b>
85	1(4)
90	2(9)
95	3 (13)
100	17 (74)

<sup>1</sup> The total score of the Chinese ADLs scale is 100. The scores of this scale range from 0 to 100, with 0 being the least independent and 100 being the most independent.

\*Study participants (n=23)

In Table 7, the total score of the Chinese IADL scale range from 0 to 8, with 0 being the least independent and 8 being the most independent. Forty-eight percent of study participants scored 8 in the Chinese IADLs scale. It suggested that, among all of the participants, they were the most independent in using the telephone, cooking, shopping, laundry, housekeeping, managing finances, taking medications, and preparing meals. One participant scored 4, the lowest score in the current study, which indicated that this participant might have to partially rely on other people's assistance for the eight activities mentioned above. On the whole, participants' most reported difficulties were unable to use telephone (30%), incapable of handling money (26%), and not able to participate in any housekeeping tasks (13%).

Table 7. The Chinese IADLs scale

	<b>*Disability No (%)</b>
4	1 (4)
5	2 (9)
6	2 (9)
7	7 (30)
8	11 (48)

<sup>1</sup> The scores of the Chinese IADLs scale range from 0 to 8, with 0 being the least independent and 8 being the most independent.

\*Study participants (n=23)

## **7.4 Social support**

The SSRS was originally developed in China. This scale is in Chinese and no English translated version has been identified. It was considered for examining my participants' level of social networks and access to social support. The scale includes four measurement items: overall social support, objective social support, subjective social support, and social support utilisation. Total scores for overall social support range from 12 to 83, where a higher SRSS score represents better overall social support. Objective social support scores range from 1 to 39 and subjective social support score from 8 to 32. A higher score represents better reported objective and subjective support. The range of social support utilisation score is 3 to 12, where 12 is the highest degree of social support utilisation and the 3 is the lowest social support utilisation.

In this study, participants' scores for overall social support (23 to 39), objective social support (10 to 16,) and subjective social support (11 to 25) appeared relatively low (see Table 8). Around one in five participants reported social support utilisation scores above 10, which means those people had a higher rates of social support utilisation. However, 34 percent of participants scored under 7 for this item. Among them, one reported the lowest score as 4. However, social support utilisation is one of the associated factors for loneliness or social isolation prevention. It was interesting to see that some participants reported higher scores of loneliness and social support during the same survey sections. However, their self-reported social support utilisation scores were low. These data suggest that these participants reporting loneliness had well developed and available social supports, but they did not access or utilise them.

Table 8. Social support rating scale (SSRS)

Indicator	*No (%)
<b>Social support total score<sup>1</sup></b>	
20-29	15 (65)
30-39	8 (35)
<b>Objective support score<sup>1</sup></b>	
10-15	21 (91)
16	2 (9)
<b>Subjective support score<sup>1</sup></b>	
10-19	21 (91)
20-29	2 (2)
<b>Social support utilisation<sup>2</sup></b>	
4	1 (4)
5	0 (0)
6	4 (17)
7	3 (13)
8	5 (22)
9	5 (22)
10	4 (17)
11	1 (4)

<sup>1</sup> The range of social support total score is 12 to 83, where a higher SRSS score represents better social support; the range of objective social support score is 1 to 39; the range of subjective social support score is 8 to 32. A higher score represents better objective support and subjective support.

<sup>2</sup> The range of social support utilisation score is 3 to 12, where 12 is the highest degree of social support utilisation and the 3 is the lowest degree of utilisation.

\*Study participants (n=23)

## 7.5 Quality of life

The WHOQOL-BREF (WHO, n.d.) was used to measure quality of life profile.

Participants' quality of life was self-reported across four domains: physical health, psychological, social relationships, and environment. Participants' mean scores on the WHOQOL-BREF were multiplied by 4 in order to make domain scores comparable with the WHOQOL-100 (WHO, 1996). Hence, in this study, raw scores were converted to range between 0-100 for its comparability with the final question on overall self-scoring on quality of life. A higher score indicates better quality of life (WHO, 1996).

The majority of participants scored 80 or lower for four domains of quality of life.

Average total score for healthy populations is about 90 (Burckhardt & Anderson, 2003).

Conversely, half of participants self-scored 80-100 in the final overall quality of life question (see Table 9). This means, participants' overall self-reported quality of life was higher than their total quality of life scores across the four domains. The reason for this discrepancy was unable to be explored further in this study.

Table 9. Quality of life

	*No (%)
<b>WHOQOL-BREF Total score (0-100)<sup>1</sup></b>	
<b>Domain 1 (Physical)</b>	
0-39	9 (39)
40-79	13 (57)
80-100	1 (4)
<b>Domain 2 (Psychological)</b>	
0-39	3 (13)
40-79	19 (83)
80-100	1 (4)
<b>Domain 3 (Social relationship)</b>	
0-39	8 (35)
40-79	15 (65)
80-100	0 (0)
<b>Domain 4 (Environment)</b>	
0-39	0 (0)
40-79	23 (100)
80-100	0 (0)
<b>Overall self-scoring (0-100)</b>	
50-59	2 (9)
60-79	9 (39)
80-100	11 (48)
n/a	1 (4)

<sup>1</sup> The scores of each domain are transformed to a 0 to 100 scale (a higher score indicates better quality of life) according to the guidelines.

\*Study participants (n=23)

## 7.6 Reflection on standardised surveys

Participants' experiences of answering the standardised surveys were asked after they completed those surveys. The surveys' usability and acceptability for the participants are reported in relation to the open questions:

- 1) How easy was it to understand the questions?



- 2) What was the most difficult part of the questionnaires?
- 3) Is there anything relating to loneliness that was not included in the questionnaires but that you are currently experiencing?
- 4) Can you think of any suggestions for the questionnaires?

In relation to the 6-item De Jong Loneliness scale, some participants identified that they could not clearly understand the western word of “loneliness”. Moreover, those survey questions could not comprehensively reflect their loneliness situations. For instance, they had scored low on the severity of loneliness scale but still felt lonely. In addition, when reflecting on the scale’s three response categories, “no”, “more or less”, and “yes”, some participants argued that the answers did not adequately reflect how frequently they felt lonely, such as “sometimes”. In addition, the word “emptiness” was translated as “*kong xu* 空虚”. Four participants asked about the definition or meaning of this word. One participant misleadingly interpreted it as “weakness” (*xu ruo* 虚弱), which has one Chinese character “*Xu* 虚” as the same. For the last two questions: “There are many people I can trust completely” and “There are enough people I feel close to”, three participants reported difficulty defining “many” and “enough”. Hence, discordance was identified between the loneliness scale and participants’ understandings of what was being asked. The discordance could be due to the shortage of quantitative measurement tools and different interpretations between eastern and western countries. The 6-item De Jong Loneliness scale was identified as not working well for older Chinese. Culturally appropriate measure would need to be developed for its use in the New Zealand context with Chinese late life immigrants.

Overall, the ADLs and IADLs scales, SSRS, and WHOQOL-BREF questionnaires were identified as useful and easy to answer. However, some participants found the questions about support from colleagues in the SSRS and working performance in the WHOQOL-BREF questionnaire were less applicable to them as they had already retired. One study participant identified the WHOQOL-BREF was comprehensive, but another participant commented that there were too many questions for older people to complete. This variance might be related to older participants’ differing health status and preferences.

One interesting reflection is, due to the traditional Chinese conservative culture, none of them liked to answer the WHOQOL-BREF question 21, which asked about their satisfaction with sex. I gently encouraged a male participant to answer this question. He seemed to be embarrassed and ticked the “yes” item very quickly. The validity of his answer, given his seeming embarrassment, is uncertain. He might have covered his reality in terms of saving face in front of a female researcher. His experience suggests the responses to question 21 should be interpreted with caution.

## **7.7 Discussion of results**

In this study, 78 percent of the study participants reported some degree of loneliness (i.e., non 0), and 34 percent scored 4 or more on the de Jong loneliness scale. Of those that scored 4 or more, only half reported that they felt lonely when asked a direct question about loneliness. However, about half participants reported that they felt lonely in a direct question, which should be cause for attention and concern.

Moreover, around one in three participants reported having trouble with utilising telephone and handling money. It means they were unable to contact their family and friends through the phone, which seemed to be a risk factor of social isolation or loneliness for independently living individuals or people with mobility issues (Tong, Lai, Zeng, & Xu, 2011). Further, older Chinese adults who had to rely on others for financial management were likely to feel socially excluded (Tong et al., 2011).

In addition, the SSRS data survey suggested two aspects for consideration when designing community-based resources or services for older Chinese immigrants. They were to develop resources or services for older Chinese immigrants and to encourage their access and utilisation. It informs the research method of study Phase Two, the beneficial impacts of Chinese late-life immigrants’ involvement in loneliness research as co-researchers to co-design community-based resources or services and engage peer support.

As stated above, some inconsistencies were identified between the survey results and self-scoring outcomes when analysing data of De Jong Gierveld loneliness scale and Quality of Life questionnaire. For instance, one subject scored 3 for his total loneliness score on the 6-item De Jong loneliness scale but responded “no” that he did not “feel

lonely”; while another subject scored as 2 but answered “yes” that she felt lonely. Similarly, discordance was identified between the quantitative and qualitative data. Participant 2, whose loneliness score was 3, had mentioned in his interview “feeling very lonely in New Zealand”. Yet, when further exploring his qualitative interview data, he stated that his feeling of lonely had become as “*numb (ma mu 麻痹)*”, which means insensitive to the internal feeling or external environment. According to his narrative data, feeling numb was a part of his life already, although he said, “a strong feeling of lonely was always surrounding me”. This discordance of results demonstrates, in part, the problems of accurate reporting of loneliness from older Chinese immigrants when using direct reporting, which helps validate the recommendation of using tools such as the De Jong Gierveld loneliness scale. Another possibility is the perceived stigma of loneliness and face management culture influenced the results. There was a risk that Chinese late-life immigrants will cover their loneliness for upholding face.

## **7.8 Chapter summary**

The number of data are too small to generalise to the whole population; however, the results of standardised measurements data complement the qualitative data to show a comprehensive picture of Chinese late-life immigrants’ loneliness in New Zealand. Discordance was identified by this study between quantitative data and qualitative data on loneliness for Chinese late-life immigrants. It suggests the usability and acceptability of existing Chinese measurements for loneliness study in Chinese late-life immigrants. Moreover, the data reflect profiles of Chinese late-life immigrants in New Zealand in terms of their loneliness, ADLs, IADLs, social support, and quality of life. Subsequently, findings of Phase One will be used to co-design community-based resources or services for ameliorating loneliness in Phase Two of this study.

## **Chapter 8 Results of the Phase Two study**

### **8.1 Chapter introduction**

Results from Phase One of this study indicated a detailed examination of the existing community resources or services for supporting Chinese late-life immigrants to combat loneliness and the deficiencies between their needs and existing resources or services was warranted. This chapter presents the Phase Two findings that arose from the community-based participatory engagement with the participant co-researchers. It describes the data gathered through three co-design workshops and the priority strategies designed to address Chinese late-life immigrants' loneliness and social isolation. The potential evaluation methods for measuring those co-designed resources or services are discussed. Finally, the co-researchers' feedback on my consultations with potential stakeholders are presented.

### **8.2 The first co-design workshop**

#### **8.2.1 Overview**

In the first co-design workshop, I introduced the process of participatory research cycle for this study and summarised Phase One results to co-researchers. Co-researchers provided their feedback in the workshop, reviewed their personal strategies, and the community-based resources/services for addressing loneliness.

#### **8.2.2 Co-researchers' feedback on Phase One results**

A summary of quantitative data and three key themes of qualitative data were reviewed by co-researchers. They did not ask questions or show their disagreement.

#### **8.2.3 Personal strategies/activities**

In the first co-design workshop, co-researchers worked in pairs and wrote down on the flip charts their ways of overcoming loneliness (Figures 28-30). The activities done at home are listed as below (Table 10):

Table 10. The activities done at home

The activities done at home	Co-researchers' comments	Gender preferred activities
<ul style="list-style-type: none"> <li>• Read Chinese books;</li> <li>• Watched TV; and</li> <li>• Listened to Chinese radio broadcasting stations*</li> </ul>	<p><i>I was supposed to do something meaningful after retired. However, my poor English language skills hindered my intelligence, wisdom, and capability. Reading Chinese books, watching TV, or listening to Chinese radio stations are completely my daily life. It is simple and a little bit tedious 乏味". (Co-researcher 8)</i></p>	All gender
<ul style="list-style-type: none"> <li>• Participated in home-based gardening</li> </ul>		Female
<ul style="list-style-type: none"> <li>• Entertained with other older Chinese friends and peers, such as sharing gardening skills, arranging short-term travel, drinking tea together (yum cha), and chatting</li> </ul>		Female
<ul style="list-style-type: none"> <li>• Adopted information and technology instruments to support their social connections, such as WeChat to maintain relationships with friends and families in China</li> </ul>		All gender
<ul style="list-style-type: none"> <li>• Contacted Helpline for loneliness</li> </ul>	<p><i>I utilised Chinese Positive Ageing Telephone Befriending Services for overcoming loneliness. But I found a regular and long-term service might help. Family issue related loneliness is hard to be solved by just talking over the phone. (Co-researcher 5)</i></p>	Male

\*Chinese language radio stations located in New Zealand that broadcast to the Mandarin and Cantonese speaking community. Their programmes include news, music, talk shows, entertainment, and documentaries.

#### 8.2.4 Review the community-based resources/services aimed at addressing loneliness of Chinese late-life immigrants

In regard to social or community services or resources access, co-researchers identified group activities in libraries, services from local social or cultural organisations, and some exercise and entertainment facilities (Table 11). These were key resources or services for them to obtain information, join community-based health promotion talks, get assistance from social workers, and become involved as volunteers.

Table 11. The community-based resources/services

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##### Local social or cultural organisations

- Connect Supporting Recovery (ember);
- Age Concern;
- Citizens Advice Bureau; and
- Chinese Positive Ageing Charitable Trust

##### Exercise and entertainment facilities

- Bowls club for older people at Takapuna; and
  - Chinese community-based activities, including Tai Chi, singing, dancing, gardening, English learning classes, and tour groups
- 

Overall, co-researchers identified that they felt most isolated in the first two to three years after landing in New Zealand. They had to adapt and respond to disrupted social ties and loneliness by working to establish new daily routine during this period. Co-researcher 4 shared how she adapted:

*Initially, I did not participate in any community activity or group. Within an alienated environment, without any friend, I had to start from some individual activities or behaviours to overcome loneliness. For example, through reading and home-based gardening, I restored my life by shifting my focus from feeling of lonely to positive developments 正向发展 in a new setting.*

When asked about their experiences with Chinese community groups, co-researchers were unanimous in the view that:

*My community group has high quality and plentiful of activities. It fills the emptiness of my life and particularly has a function of referring me to relevant social services. The group leader had introduced me to*

*a social worker previously. He was very helpful for sorting out my family problem. (Co-researcher 3)*

*My group organises activities four times in every month. They invite expertise from other organisations regularly delivering health promotion talks to us. We also join free English learning classes run by the group. These activities are all helpful for ameliorating my loneliness. (Co-researcher 7)*

Co-researchers found belonging when coming together to participate within Chinese community groups. Hereafter, they wanted to expand their scope, integrate into mainstream society, and contribute to ethnic and local communities and society. A co-researcher described her story of contributing to society through participating in a Chinese community group:

*I became a visiting service volunteer for Age Concern with the reference from my community group leader. I have visited my client, an older Chinese woman every week. I found my voluntary service benefited myself and helped other older Chinese. My own feeling of lonely was getting much better than before. (Co-researcher 7)*

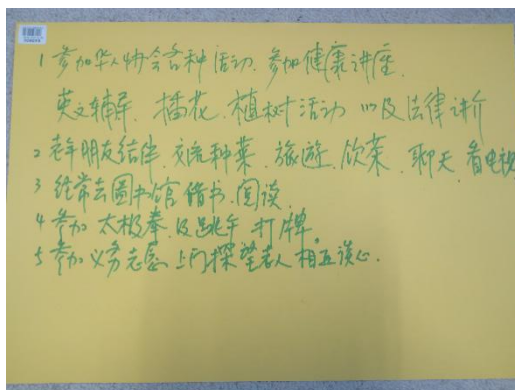


Figure 28 personal strategies and community-based resources/services aimed at ameliorating loneliness of Chinese late-life immigrants (Group 1)

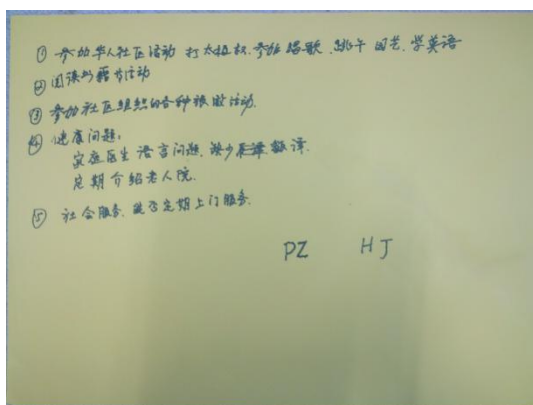


Figure 29 personal strategies and community-based resources/services aimed at ameliorating loneliness of Chinese late-life immigrants (Group 2)

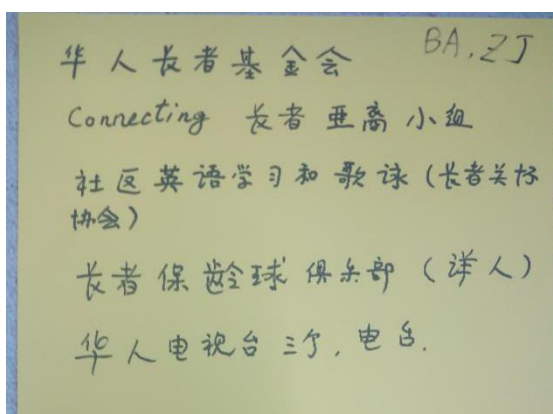


Figure 30 personal strategies and community-based resources/services aimed at ameliorating loneliness of Chinese late-life immigrants (Group 3)

### 8.2.5 Gaps of resources or services in the community for loneliness

After the co-researchers listed the available community resources or services they knew about, they brainstormed what resources or services they felt were necessary but missing for preventing or reducing loneliness (Figures 31-33). The collated list refers to Table 12.



Table 12. Gaps of resources or services in the community for loneliness

Resources or services identified as necessary but missing	Co-researchers' notes
<b>Inadequate information in Chinese language</b>	
<ul style="list-style-type: none"> <li>• Knowledge about local Chinese family doctors (GPs), rest homes, retirement villages, dementia homes, and hospices in local districts;</li> <li>• How to apply for home-based care support services; and</li> <li>• New Zealand policies and regulations for older people</li> </ul>	
<b>Insufficient information delivery channels</b>	
<ul style="list-style-type: none"> <li>• Poor basic internet technology skills prohibited them obtaining information from internet; and</li> <li>• Chinese Radio Stations did not broadcast useful information for older Chinese immigrants</li> </ul>	<p><i>I could not access to internet, because I had no idea about utilising a computer. It means online information could not be accessed or received by me. Many older people refused to gain new skills or knowledge because they considered themselves as old. However, I did not agree with them. A basic level training workshop in our language is anticipated. I hoped to learn more information about New Zealand through the internet. (Co-researcher 7)</i></p> <p><i>Many Chinese telephone lines were terminated due to the low rate of usage. But the fact is that the information about which services are available in Chinese did not outreach to most of older Chinese immigrants. (all Co-researchers)</i></p> <p><i>I think Chinese radio lives could reach out most of older Chinese immigrants in Auckland. They should broadcast</i></p>

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*more useful information for older immigrants accessing social services rather than too many commercial advertisements. (Co-researcher 7)*

### **Inadequate language/cultural support service**

- Hard to communicate with GP and public social housing staffs;
- Insufficient Chinese services in rest homes, retirement villages, dementia homes, and hospices;
- No resources in local communities to mediate Chinese intergenerational family conflicts/issues;
- Communication barriers and potential misunderstandings in public social housing community; and
- Lack of multilanguage and culture services in residential care settings and retirement villages

*In public social housing community, we lived in an isolated environment and had less opportunity to connect with each other. The language barrier could sometimes frustrate my enthusiasm in supporting, caring and engaging with neighbours. I care about the safety of my neighbours, but nobody came to check about me. (Co-researcher 6)*

*I am living in a public social house. Older people have difficulty in cleaning their house, especially the ceiling. I am happy to pay people for assisting with ceiling cleaning, but there was no resource to find a cleaner. It was because that my inability to speak or understand English. (Co-researcher 6)*

*I hoped more rest homes and retirement villages could expand multilingual and cultural services. It will be very helpful for reducing loneliness and depressive issues of older Chinese immigrants. The current services of residential care institutions are difficult for us to access. I will consider returning to China for rest of my life. (Co-researcher 4)*

*One of my friends was very lonely in a rest home encountering language barriers with service providers*

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*and other residents. She was alone and could only use body language to communicate. (Co-researcher 7)*

**Insufficient exercise facilities for older Chinese immigrants**

*West Auckland (Henderson area) found difficult to book a place playing Tai chi or dancing due to limited free venues in the community and funding. (Co-researcher 2)*

**Function of Chinese community groups were unsatisfactory**

*I think the community group I participated did not have an appropriate supervision and complaint procedure. The group was only for entertainment, mostly playing chess or dancing, but without any support for older immigrants. For instance, Chinese community group should mediate between older immigrants and their adult children for family issues. In addition, I hoped participatory in activities should gear us toward the mainstream. For example, they should give us some guidance and directions after the Christchurch event for eliminating panic in the community. (Co-researcher 1)*

*I hoped a Chinese community group could take a role of bridging us with mainstream society other than just doing leisure. A low quality of services provided by a local Chinese community group could influence the reputation of Chinese in New Zealand on the whole. Where I could provide my feedback if a Chinese community group underneath our expectations. (Co-researcher 3)*

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**Inadequate resources or attention from the government on health and loneliness of older Chinese immigrants**

**Insufficient affordable transportation options for older people who could not drive and catch up buses anymore**

*Public transportation is vital for older Chinese immigrants' mobility. Owing to restricted mobility, older Chinese immigrants seldom socialized with people outside their family circle and neighbourhood. Lack of transportation alternatives is a major factor contributing to older Chinese immigrants' isolation and loneliness with functional disability. (Co-researcher 4)*

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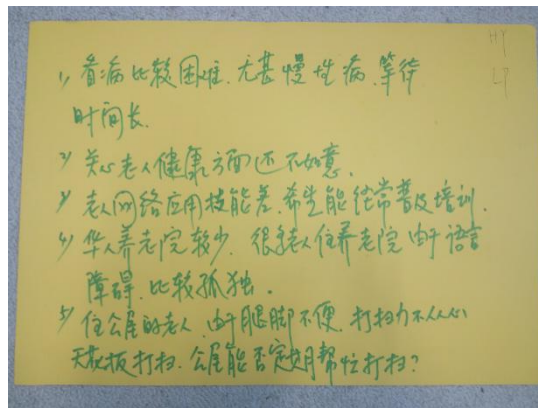


Figure 31: Gaps of resources or services in the community for loneliness (Group 1)

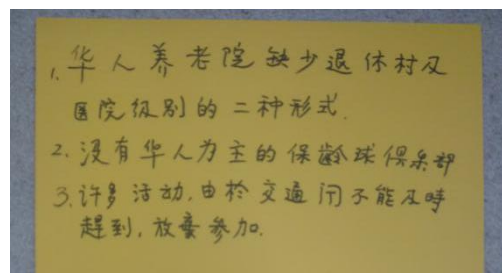


Figure 32 Gaps of resources or services in the community for loneliness (Group 2)

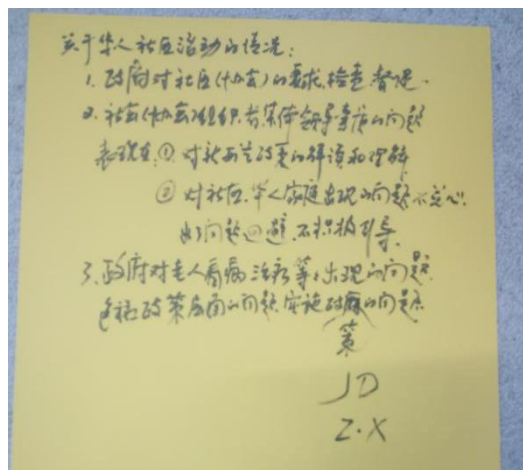


Figure 33 Gaps of resources or services in the community for loneliness (Group 3)

### 8.2.1 Healthcare resources/services accessing barriers

To further elaborate the gaps identified by co-researchers, the systemic and institutional differences between mainland China and New Zealand were identified as

preventing Chinese late-life immigrants' access to healthcare resources or services. Co-researcher 6 shared her experience of healthcare access:

*My partner was died of a cancer. Due to our poor English proficiency and lack of information about healthcare system in New Zealand, he did not access to healthcare service instantly. It was a shame that his disease progressed to the final phase upon his diagnosis. When I watched TV, I saw there were so many high technology instruments and new drugs for cancer. Why we could not access to them? A lonely mood followed to a helpless feeling with my partner's healthcare and mine.*

This view was echoed by Co-researcher 1 who stated:

*Access to healthcare services is still underdeveloped for a fast-growing number of older Chinese immigrants in New Zealand. Many of my friends had to return to China for treatment in relation to inadequate guidance for older Chinese in New Zealand.*

Most residential care institutions in New Zealand lack multilingual services for older Chinese immigrants. Although paid interpretation services in hospitals and rest homes were utilised, family members, especially adult children, had been asked for help with culturally related questions.

## **8.3 The second co-design workshop**

### **8.3.1 Overview**

The second co-design workshop was focused on exploring and recommending culturally relevant programmes, resources, and services for ameliorating Chinese late-life immigrants' loneliness. All of these resources or services were co-designed to be useful and practicable for older Chinese immigrants (Figures 34-36).

### 8.3.2 Co-designed culturally based programme/s, services, resources, and relevant stakeholders

The culturally based programme/s, services, resources, and relevant stakeholders as identified by the co-researchers in the second co-design workshop are summaries in Table 13.

Table 13. Co-designed culturally based programme/s, services, resources and relevant stakeholders

Co-designed culturally based programme/s, services, and resources	Potential stakeholders
An Information Guidebook for Older Chinese people in New Zealand	Age Concern; New Zealand Immigration office; and Citizens Advice Bureau
A Chinese Information Guide of family doctors (GPs) in New Zealand	Primary Health Organisations (PHO)
A Chinese 'Information Guide of Long-term Residential Care in New Zealand'	Ministry of Health
Field worker service	Age Concern

The co-researchers emphasised the need for developing an Information Guidebook for Older Chinese people in New Zealand. It was valued as one of the most beneficial resources for both existing and new immigrants' understanding of basic life support, transportation, the healthcare system, and social services in New Zealand. Age Concern, New Zealand Immigration office, and Citizens Advice Bureau were identified as potential stakeholders for this book. One co-researcher suggested that her feeling of loneliness *"would be ameliorated after gaining some necessary information from the society and community"* (Co-researcher 8).

Secondly, a Chinese Information Guide of family doctors (GPs) in New Zealand, containing information about GP's background, locations, working hours, contact information and costs, was recommended by co-researchers. All of them affirmed that it would be another essential tool to ensure older Chinese immigrants could receive prompt and appropriate diagnosis and treatment in New Zealand. Primary Health Organisations (PHO) were identified as the potential stakeholder for this guide.



Alongside the list of GPs, the co-researchers identified a Chinese 'Information Guide of Long-term Residential Care in New Zealand' to provide information of rest homes, retirement villages, dementia homes, hospices, and home-based care support services. Information about application procedures and any availability of Chinese services were suggested as being helpful. The Ministry of Health was considered as the potential stakeholder to develop such a guide. In addition, co-researchers recommended a dedicated field worker service for Age Concern to resolve older Chinese immigrants' issues at home.

### **8.3.3 New resources recommended by co-researchers**

New resources of housing, community support, social media, government policy, and transportation were recommended by co-researchers. They also identified the key stakeholders to navigate the resources for supporting Chinese late-life immigrants. Detailed information and participants' language are listed in Table 14.

Table 14. New resources recommended by co-researchers

Key stakeholders	New resources recommended	Co-researchers' notes
Housing New Zealand and other public housing providers	<ul style="list-style-type: none"> <li>To appoint an active contact person in each public social housing community. These contact persons or tenancy managers will be available for older Chinese residents to ask for help and provide feedback; and</li> <li>To organise community-based meetings or activities regularly for residents to connect with their neighbours, share cultures, and improve older residents' loneliness.</li> </ul>	
Chinese community group	<ul style="list-style-type: none"> <li>To take a role of referring older Chinese to relevant service providers;</li> <li>To form an ethnic working group supporting older Chinese who report feeling lonely, and advocating for them in their family;</li> <li>A free care support service and compassionate companionship for Chinese late-life immigrants diagnosed with a life-limiting illness or condition; and</li> <li>Assist with older Chinese immigrants through various methods. Such as WeChat groups.</li> </ul>	<p><i>WeChat group is helpful to connect people who could use a mobile phone. People could ask for assistance or information by sending a quick message in the group. (Co-researcher 7)</i></p> <p><i>WeChat is really helpful. While receiving a letter in English, I could easily ask help from my daughter by sending her a photo. (Co-researcher 6)</i></p> <p><i>If social services could publish official information on WeChat platform, it would</i></p>

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		<i>be accessed by us conveniently. (Co-researcher 3)</i>
Counselling services	A culturally diverse counselling service is required to underpin older Chinese immigrants experiencing typical problems of loneliness.	
Chinese Mass Medias in New Zealand, such as Chinese radio stations, WeChat, televisions, and newspapers	To promote the awareness of loneliness and inclusion in society; and  Chinese Mass Media were expected to develop programmes for Chinese late-life immigrants to transmit accurate information and knowledge about New Zealand policies, cultures, and community-based resources/services to keep them informed and feeling included.	
New Zealand government	More attention and resources from the New Zealand government for solving their loneliness related problems.	<i>What is loneliness? It is a feeling of helpless when problems could not be solved promptly. (Co-researcher 1)</i>
NZ Transport Agency	Buses to be equipped with a next-bus stop announcement and display system.	<i>The next-bus stop announcement and display is very important for older immigrants and people with eyesight or hearing disabilities. We do not mind it will be in English or multilinguals. (all Co-researchers)</i>

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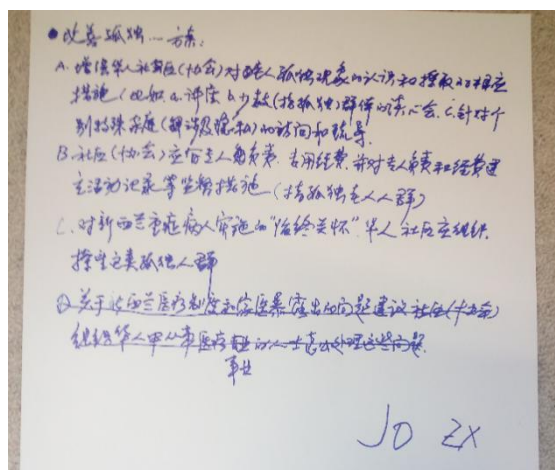


Figure 34 Co-designed culturally based programme/s, service, resources and relevant stakeholders (Group 1)

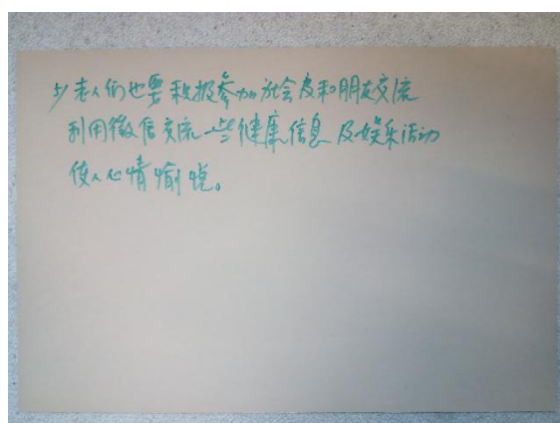
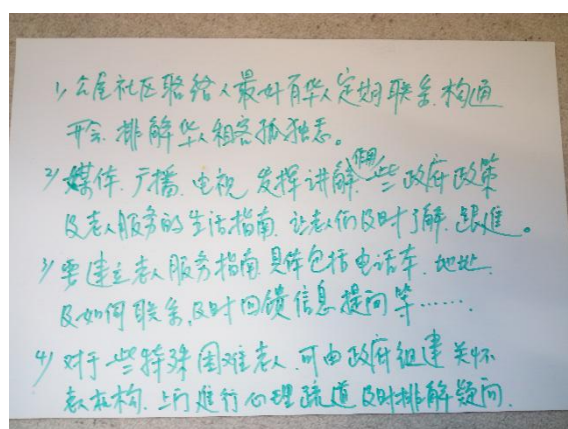


Figure 35 Co-designed culturally based programme/s, service, resources and relevant stakeholders (Group 2)

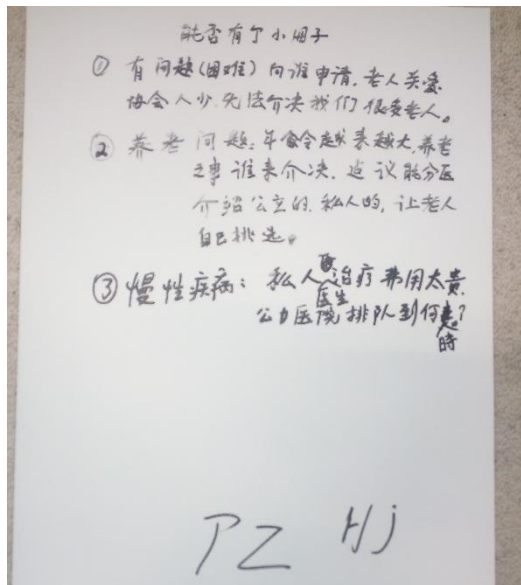


Figure 36 Co-designed culturally based programme/s, service, resources and relevant stakeholders (Group 3)

### 8.3.4 Co-designed evaluation methods

This research adopted a community-based participatory research framework to co-design resources or services in the community to ameliorate Chinese late-life immigrants' loneliness. It is anticipated that effective and culturally specific measuring approaches could then be co-designed to evaluate the outcomes. A list of measurement methods was considered and critiqued by co-researchers for social institutions, community groups, and policy makers. Organisations or institutions, who provide services for older Chinese immigrants, should be accessed to provide feedback and respond to questions in a timely manner.

The co-researchers suggested the relevant organisations or institutions use scales or rating tools, such as the Chinese 6-items De Jong's Loneliness Scale and SSRS, to evaluate their services. The co-researchers agreed, on the whole, that their opinions or suggestions should be heard by healthcare and social services, and responded to in a timely manner. They expressed their expectation that service providers would take a role in referring to potentially helpful resources if they were not eligible to solve the problem themselves. At a national level, a loneliness scale, such as the 6-item De Jong's Loneliness Scale, should be included in the national census surveys to measure the prevalence of loneliness. Statistical data, containing Chinese late-life immigrants' life expectancy, physical health, loneliness and other mental health status were

considered by co-researchers as essential to influence the generation of future policy for this group of people. Co-researchers thought it could be helpful for New Zealand Statistics to adopt the Chinese 6-items De Jong's Loneliness Scale in the national census survey.

### **8.3.5 Co-researchers' follow up results**

I wrote a summary of results report and gave it to each of the co-researchers. They all affirmed the report's accuracy and expressed their satisfaction with the co-designed results. For the couple who missed the second co-design workshop, due to ill-health, I visited them at their home to collect their feedback on the summary report. They stated: *"I was surprised that the results are much better than what I have expected. Because I felt people were not very active in group discussions during the first workshop. All of our needs and ideas had been covered by the report"* (Co-researchers 4 and 5).

## **8.4 The final co-design workshop**

### **8.4.1 Co-researchers' feedback on consultations with potential community stakeholders**

Housing New Zealand, Age Concern, and Auckland Council's Age Friendly project had been consulted as potential community stakeholders following the second co-design workshop. In the final co-design workshop, I gave feedback on my consultations to my co-researchers. After my presentation, I invited their comments.

Overall, all co-researchers agreed that our discussions had thoroughly covered all aspects they wanted to be included in the stakeholder consultations. However, all co-researchers anticipated that it would take time for their co-designed results to be put into effect. They believed that more resources would be required to navigate the project. However, co-researchers also expressed concern that once the relevant co-designed resources or services were available, older Chinese immigrants may feel a sense of 'losing face' for accessing it because of loneliness since:

*Many older Chinese immigrants might not know who to speak about their loneliness. Actually, they avoided to losing their face by exposing feelings of loneliness to others. (Co-researcher 1)*

Furthermore, from Phase One findings of the present study, the experiences of loneliness were usually associated with poor intergenerational relationships. It is perhaps stigmatised as adult children's impiety or disobedience towards older parents, which is considered as not acceptable within Chinese society. Regardless, co-researchers hoped a project navigator could be on board soon to initiate cooperation with potential community stakeholders in order to develop culturally and community-based resources or services for older Chinese immigrants. This initiative was deemed important in light of their experiences of older Chinese parents moving away from filial expectations of their adult children and instead moving towards becoming independent. As voiced by one co-researcher:

*Most of older Chinese immigrants rely on their adult children to access to the healthcare and social services. It would be a problem if they have to be independent one day. (Co-researcher 7)*

Co-researchers' feedback will be sent back to community stakeholders for consideration when developing Chinese services for older adults. Culturally specific factors are closely associated to services' access or utilisation.

The potential for misunderstanding between older Chinese immigrants and service providers was identified. For example, potential misunderstandings might come from older Chinese immigrants' language barriers and lack of knowledge about the context and operation rules of Housing New Zealand. While a summary of consultation with Housing New Zealand was presented, a co-researcher questioned:

*I appreciated their assistance with the property maintenance. But they did not organise any activities in our community. One of my neighbours died in his toilet four days before my daughter called them came to check. Another neighbour of mine did not show up for days. I asked my daughter to call Housing New Zealand if they could send people to check. However, we were told that it might be out of their responsibilities. I was disappointed on them. (Co-researcher 6)*

However, when I asked which department they contacted, she responded:

*I had no idea. I could not communicate with them because of my language. I had to rely on my daughter. What I said was from my daughter. (Co-researcher 6)*

Communication barriers and lack of information were affirmed as common issues by the co-researchers. Hence, to compensate for the shortage of language services, co-researchers suggested home visits are done regularly for those older Chinese people who live alone. Chinese community groups were identified as the potential stakeholders to take the role.

Another potential misunderstanding was raised when discussing transportation as an important consideration for placement decision. The co-researcher who was a public housing tenant described her inconvenience in taking a bus to access services:

*The bus route near my house is one way. So, I have to walk a very long distance from bus station to my home. There is a steep slope, older people would have a trouble. I hoped to send my complaints to the Transportation of Auckland, but I did not know how to do it. I believe our tenancy manager would not advocate for us. The Age Friendly project sounds very good for us, but how my voice to be heard by Auckland Council or local board. (Co-researcher 6)*

In spite of the communication problems with service providers, public social housing was described as favoured among older Chinese immigrants. This type of housing is considered as “*more secure and private. Chinese late-life immigrants feel more settled in a public housing in comparison with a private tenancy*” (Co-researcher 6). In accordance with the current high demand for social housing, the concept of shared housing or cohousing was proposed by Housing New Zealand during my consultations. It was interesting to note that the idea of shared housing was not welcomed by all of my co-researchers. They worried about potential conflict or incompatibility with roommates when sharing a kitchen or bathroom. As Co-researcher 1 expressed:

*In respect to the culture of saving face, Chinese people would not address the issue straightforwardly when they felt uncomfortable. Accordingly, little inconsistencies between roommates would be accumulated into a major problem.*

However, co-researchers living in the general community and public housing community expressed their preference for living in residences surrounded by Chinese neighbours. The concept of cohousing, a self-chosen group of other people as neighbours with some common facilities and shared neighbourhood life (Cohousing New Zealand, 2018), was welcomed by them. The co-researchers considered this



model of cohousing would be a helpful approach to enable community interaction and reduce alienation, isolation, or loneliness. They hoped Housing New Zealand's future placement plan could include constructing Chinese cohousing communities.

Lastly, the Chinese Information Guidebook of Age Concern North Shore was considered a useful tool for older Chinese immigrants to access relevant services and activities by co-researchers. They expressed their encouragement for Age Concern New Zealand to scale up its use at a national level, customised for geographic regions by the inclusion of local features. A co-researcher who lived outside the North Shore was eager to have one for her area. Furthermore, the co-researchers recommended Age Concern New Zealand commit resources to reformat the current version to further improve its readability. All agreed the best way to promote the Chinese Information Guidebook was through Chinese community groups.

#### **8.4.2 Potential stakeholders' feedback after the consultations**

As mentioned in the methods chapter, Age Concern New Zealand expressed its interest to pilot the Information Guide for Older Chinese in another area and look at the opportunity to make it as a national resource with local features. Moreover, as a result of consultation, Housing New Zealand published an intranet article (Appendix H) showcasing an aspect of the participatory phase of this study. The findings from Phase One were considered in Housing New Zealand staffs' activities, services, and the general interactions their customers, with the idea to include practical solutions to reduce and prevent loneliness.

#### **8.4.3 Co-researcher's final follow-up results**

All co-researchers received and reviewed a summary report of the final co-designed workshop. They expressed their satisfaction with the reported results. None of them made further comments. The role of adult children was not expressly addressed by co-researchers during the whole co-design research phase. In the last section of our group discussion, I asked about the possibility of developing family centred resources/services or tools for adult children supporting their older parents to overcome loneliness. It could be a pamphlet or a video to remind them how loneliness would be experienced by being a Chinese late-life immigrant in New Zealand. However, my co-researchers suggested *"no necessary to have a discussion between two*

*generations. At my age, we must adjust ourselves to fit them, rather than they adapt to us*" (Co-researcher 1). *"It is even difficult for a judge to make an accurate decision on another's family matters 'qing guan nan duan jia wu shi 清官难断家务事'"* (Co-researcher 6). *"Perhaps we could co-design something for our young generations, but I do not think it will make any help"* (Co-researcher 7).

## **8.5 Reflection on Phase Two results**

The co-researchers I worked with in the second phase of this study were willing to work with me to consider the Phase One results. The data from Phase One offered a comprehensive picture of Chinese late-life immigrants' loneliness in New Zealand for co-researchers in Phase Two to subsequently co-design appropriate community-based resources and services. From conducting a PowerPoint presentation, sharing a photocopy of the summary report, and having a group discussion to disseminate Phase One results, co-researchers were able to exchange and identify ideas of loneliness and social isolation among Chinese late-life immigrants in New Zealand. Hence, my study has gained trust among the co-researchers which is a necessary step process for engaging them in the following steps.

Co-researchers showed their passion and proactiveness to engage in the workshop activities and discussions. They were open to share opinions and ideas in the group, and to help craft resources for addressing loneliness. The co-researchers affirmed that a co-design workshop was an important method to understand the loneliness and social isolation of Chinese late-life immigrants who are underserved, and whose unique loneliness issues are closely linked to cultural diversity. The application of this technique was useful because my findings were suggestive of the interplay of Chinese older adults' cultural perception on loneliness toward their unmet social and emotional needs. My findings showed that Chinese older adults expressed their cultural conceptions of loneliness, personal strategies, and services/resources utilised for addressing loneliness. I also discussed the gaps of resources or services in the community for Chinese late-life immigrants to address their loneliness, and new resources/services recommended by co-researchers for loneliness. This way of synergistic collaboration offered me an opportunity to hear from Chinese late-life

immigrants regarding their experiences and the needs of loneliness that truly reflect their own voice.

At the end of the co-design meeting, my co-researchers expressed their willingness to attend my doctoral graduation ceremony in 2020. At this stage, we are not just a researcher and participants. Our friendship has been established with a common objective to improve the inclusion and wellbeing of older Chinese in new host communities.

## **8.6 Chapter summary**

I started this chapter by presenting the co-designed results of the Phase Two study. The review of existing resources or activities to combat loneliness; the incomplete areas; co-designed resources or services; and potential community stakeholders flowing with a community-based participatory research cycle were reviewed. The chapter then described the evaluation methods designed by co researchers. I also discussed co-researchers' feedbacks on my consultations with Age Concern, Housing New Zealand, and Auckland Council Age Friendly project. The next chapter will discuss the results, and the strengths and limitations of this study, and conclude with recommendations for future researchers and services to ameliorate Chinese late-life immigrants' loneliness.

## Chapter 9 Discussion and Conclusion

### 9.1 Chapter introduction

Previous chapters have outlined the focus on Chinese late-life immigrants' loneliness and social isolation as a primary issue, and a priority health and social concern in New Zealand. First, I presented the study backgrounds and the Conceptual Model of Exclusion from Social Relations for Older People, and philosophies of Confucianism and Arthur Kleinman's social suffering theory. This model and the theories worked as a framework and culturally specific lens to underpin this study. Thus, Chinese late-life immigrants' social isolation and loneliness were explored through their original values, cultures, moral principle, and the New Zealand context, under the wider context of immigration.

Second, the evidence from empirical research findings indicated the potential negative effects of social isolation and loneliness can be more distinct for Chinese late-life immigrants compared to non-immigrants. According to the NZGSS 2016, of these Chinese late-life immigrants, more older Chinese *recent* immigrants reported feeling lonely than older *New Zealand-born* Chinese and older Chinese *long-term* immigrants (Statistics New Zealand, 2016b). However, I identified a paucity of gap in knowledge about how social isolation and loneliness was experienced and addressed by Chinese late-life immigrants, as mediated through their deeply held cultural understandings. New Zealand is an ideal country to study this topic and address the dearth of research in the area because of the country's recent increase in late-life immigrants from China.

I justified the research question and presented my rationale for utilising mix-method methodology as the methodology of choice for conducting a two-phase study to research a complex topic with limited existing data. In this study, the experience of social isolation and loneliness of Chinese late-life immigrants was captured by quantitative data, four qualitative themes, and co-designed results. These results will be discussed in relation to how they inform evidence-based actions toward addressing loneliness.

In this, the final chapter, I overview and discuss the key findings in relation to answering the study's six aims. What I offer is a synthesis of understandings gained from my analysis across the findings, the nation census data, the participants' stories, and their co-designed ideas. The findings are situated within the relevant gerontological and loneliness literature. Next, I consider how this study's results contribute original knowledge to the field; I will critique the strengths and limitations of the study and make recommendations for further research and community service organisations. The chapter concludes with my argument for how Chinese late-life immigrants' loneliness can be measured and addressed in New Zealand.

## **9.2 Discussion of key findings**

This study examined the original research question "how is loneliness manifested and addressed among Chinese late-life immigrants in New Zealand?" It aimed to:

- Examine how loneliness is understood and experienced by Chinese late-life immigrants in New Zealand;
- Identify the implications of loneliness;
- Identify the impact of loneliness on Chinese late-life immigrants' health status and well-being;
- Explore participants' experiences of usability and acceptability of the standardised surveys;
- Examine the concordance and discordance between standardised measurements and interviews; and
- Co-design evidence-based resources to address Chinese late-life immigrants' loneliness.

### **9.2.1 How loneliness is understood and experienced by Chinese late-life immigrants in New Zealand**

To address this aim, I synthesised data from the participants' individual stories, their results from the standardised questionnaires, and their conversations in the co-design workshops on the basis of three theoretical frameworks of this study. Participants' interview data revealed these Chinese late-life immigrants understood loneliness as a personalised emotional or spiritual feeling. More than half the participants felt it was

difficult to define loneliness. All of them perceived loneliness as a negative feeling. However, one male participant included loneliness as a part of life. He stated that he did not expect to experience loneliness before immigration from mainland China. After he arrived in New Zealand, he endured many problems that he felt contributed to him experiencing loneliness. Nonetheless, he felt he had done his best by accepting loneliness as part of his life. Additionally, participants' experiences of loneliness were complicated. They emphasised their cultural values of familial obligations, filial piety expectations, and their relationship with adult children. Therefore, most of this study's older Chinese participants considered the predominant experience of cultural loneliness as a feeling of disappointed regarding children's impiety. This finding was interpreted as congruent with the theoretical framework of Confucianism's filial piety value. The finding is also consistent with what is considered as unacceptable children's behaviour in traditional Chinese society (Yeh & Bedford, 2004).

The results of the standardised questionnaires of Phase One provided some evidence of the profiles of older Chinese in New Zealand. Participants' responses to the overall loneliness question suggested that the experience of social isolation and loneliness is common among Chinese late-life immigrants. In the NZGSS 2016, more older Chinese *recent* immigrants (75%) (arrived in New Zealand less than 5 years) reported feeling lonely than older *New Zealand-born* Chinese (42%) and older Chinese *long-term* immigrants (40%).

Co-researchers of Phase Two reported the most isolation and loneliness during the first two to three years after arriving in New Zealand. Their experiences are in accordance with a recent Australian study (X. Lin et al., 2016) that found the experience of loneliness was associated with cultural adjustment and more than three years were needed for older Chinese immigrants to minimise its impacts in the host country. Cultural adjustment or conflicts were further explained by the study's theoretical framework and the impact of social relations.

Overall, my findings are consistent with existing studies, which suggest that the understandings and perceptions of loneliness vary in different cultures. Older adults from Western societies may perceive loneliness as an unpleasant experience which happens when there is a deficiency in an expected number, or perceived quality, of

social relationships (Fokkema, De Jong Gierveld, & Dykstra, 2012; Peplau & Perlman, 1982). Social isolation, a closely related term, is the objective lack of relationships, social support and social networks for individuals (Cloutier-Fisher, Kobayashi, & Smith, 2011). Whereas most of my study participants migrated to New Zealand during their late phase of life to be reunited with an adult child, they reported feeling lonely and without an adult child taking care of them. Such experiences are consistent with a Chinese definition of loneliness (gudu, 孤独) is 'older without a child' (老而无子) (Institute of Linguistics, 1978-2012). In other words, the participants' feelings of being 'disowned' by their adult child were like not having a child. This belief could be explained well by the filial piety of Confucianism. Compounding this type of loneliness, after arrival in New Zealand, the alienating environment and language barriers of a western country added to their isolated and dependent situation. Further, their original activities and relationship ties were disrupted, so they found it difficult to cope with free time. Moreover, some of them were left alone in New Zealand, as the adult child moved to another country or back to China for career development. The disrupted social relations and the weakness of social supports are consistent with the factors identified by Conceptual Model of Exclusions from Social Relations for Older People. An intense sense of loneliness came along with a feeling of helplessness and being abandoned, which resonates with other Chinese definitions of loneliness as isolated and helpless (孤立无援, 孤单无助) and being alone and feeling emptiness, abandonment, depressive, and anxious (只身独处; 孤单寂寞) (Institute of Linguistics, 1978-2012). Nonetheless, different understandings and perceptions of loneliness will subsequently determine people's particular way of responding and coping.

In this study, older Chinese participants were reluctant to talk about their loneliness with others, including family members, friends, and social services as they perceived their feelings of loneliness would stigmatise them as having difficulties in establishing social ties and support. Only one participant mentioned that he utilised a telephone service for talking about his loneliness but found it was less helpful than what he had expected. He found his problem could not be solved by only talking on the phone. Another participant talked about her feelings of loneliness to some Chinese friends but was laughed at by them. In terms of Chinese traditional culture, they all believed that disclosing their loneliness to others was to expose family shame and loss of face.

Linking back to Arthur Kleinman's theory of this study's theoretical framework, the perceived stigma of loneliness and the culture of upholding face would negatively impact Chinese late-life immigrants' seeking assistance from others.

Furthermore, the loneliness was often stigmatised as adult children's impiety or disobedience towards them as older parents in a Chinese family, which was considered as unacceptable in the Chinese community. Hence, to uphold their children's face, they avoided revealing family issues to others. One participant mentioned she was afraid that her son-in-law was going to blame her if she disclosed their conflicts to people outside of the family. The philosophy of Confucianism and Arthur Kleinman's theory were used to understand the underlying schema. This finding is consistent with an issue indicated by Yang (2007) that older Chinese immigrants might avoid seeing doctors or health professionals when thinking of loneliness as a stigma. Loneliness or social isolation might socially stigmatise older Chinese immigrants' low capability for integration into the community which aligned with reported results from Lau and Gruen (1992).

This study's finding of the participants' deep sense of cultural loneliness makes an original contribution to knowledge. These Chinese late-life immigrants' expressions of cultural loneliness were associated with their deeply rooted culture, values, and histories from growing up and ageing in China. Their experiences do not quite fit with social loneliness, the dominant framework people are using. It also does not fit completely with emotional loneliness in the framework. The theoretical frameworks of this study provided a culture specific lens to understand their cultural loneliness.

The study findings cannot demonstrate a full and complete meaning of social isolation and loneliness for Chinese late-life immigrants in New Zealand. However, the mixed-method study design offers a rich analysis of how older Chinese immigrants might come to understand and experience loneliness positively. Education awareness sessions of loneliness in communities should be available.

### **9.2.2 Implications of loneliness for Chinese late-life immigrants**

This aim will be discussed utilising data from the participants' individual stories, their results on the standardised questionnaires, and their conversations in the co-design



workshops. The qualitative interview data analysis shed light on the cultural understandings of social isolation and loneliness from the perspectives of Chinese late-life immigrants in New Zealand. Results of the individual interviews suggested that, for this study's participants, the implications of loneliness were associated with their disrupted social relations, a sense of alienation in New Zealand, and commonly associated with poor intergenerational relationships. Their inadequate English language skills and limited information about the new country made their situation worse. Relevant research for Chinese late-life immigrants in New Zealand was limited. However, my research results are consistent with a study in New Zealand indicating that adjustments to life in the new host country could be difficult for Chinese late-life immigrants (W. W. Li et al., 2010).

All Chinese late-life immigrants who participated in this study had originally co-resided with their adult children when they immigrated to New Zealand. Residing together fulfilled their initial purpose of moving to New Zealand due to obligation to the family. This finding is consistent with the Confucianism's filial expectations and Zhang's (2014) study and evidence in the literature that family obligation is a strength of duty felt towards other family members (Nuyen, 2004; Sun, 2008). Alongside family obligation, the study's participants held high expectations for receiving filial piety from their adult children. Similarly, literature reports older Chinese parents have higher filial expectations from their adult children than the local non-Chinese population (X. P. Lin et al., 2015) and emigrate from China for their children's material support and emotional support (J. J. Zhang, 2014). However, loneliness, as reported by participants in this study, was associated with feeling a deep sense of imbalanced intergenerational reciprocity. Older Chinese parents were more prone to emotional distress when the expectation from adult children was not achieved. In addition, the sense of loneliness and intergenerational conflicts were intensified by the traditional harsh and over-controlling, child-rearing pattern. Confucianism's reciprocal filial piety and authoritarian filial piety provided a robust theoretical explanation (Yang & Hwang, 2003). During the co-residential living arrangements, participants' language in the present study elaborated upon the uncomfortable feeling of living under the dominance of their adult children. As they stated, *beggars cannot be choosers* 来到屋檐下, 不得不低头, which has a similar meaning with 寄人篱下 *ji ren li xia*. It was

difficult for them to treat their adult children's home as their own. In Australia, Lin (2015) reported the experience of loneliness intensified when younger generations do not have enough time to spend with their elders and promote familial intimacy.

Overall, qualitative data of the presenting study adds value in understanding factors behind why Chinese late-life immigrants experience loneliness and contribute to envisioning culturally relevant interventions to address loneliness. Participants of this study were expected to move away from the predominant mindset of parental or grandparental obligations and towards a western independent culture. For instance, a study participant wanted to eradicate the historically valued obligations of older parents while treating it as feudal remnants. As Arthur Kleinman suggested, Chinese individuals are continuously changing, which extend to shaping their families and communities.

The national census data and standardised surveys data of the current study were not sufficient to examine Chinese late-life immigrants' prevalence rates of loneliness in New Zealand due to the small numbers. However, a lower score of ADLs and IADLs might be associated with a higher level of loneliness. High score in social support and social support utilisation might help to alleviate loneliness. Nevertheless, a larger sample is needed to investigate associations between loneliness and standardised measurements variables of ADLs, IADLs, social support, and quality of life.

According to the findings identified from the co-design workshops, the current inadequacy of language support services and cultural services was universally applicable to general communities, public social communities, and residential care settings. Communication barriers between service providers and older Chinese immigrants were discussed as negatively impacting older Chinese immigrants' service accessibility and aligned with research that revealed most residential care institutions in New Zealand, such as rest home and retirement villages, lack services in Chinese language for older Chinese immigrants (Ho, Lewin, & Muntz, 2010). The same situation has also been reported in Canada where older Chinese immigrants encountered systemic, institutional, and personal barriers, such as government policies, culturally inappropriate programmes and language problems to accessing social and health services. Correspondingly, service providers also faced inadequate information about

the needs of older Chinese immigrants (Stewart et al., 2011). Adult children were very often asked to provide cultural support. However, service providers reported that adult children could not recognise their parents' needs all the time (Stewart et al., 2011). The risks factors of loneliness, such as language, culture difference, and services access are consistent with the explanatory value of the Conceptual Model of Exclusion from Social Relations for Older People. Consequently, the feeling of being excluded and helpless within a disparate society would contribute to their experience of loneliness in some way (Wright-St Clair & Nayar, 2019).

### **9.2.3 Impact of loneliness on Chinese late-life immigrants' health status and well-being**

To discuss the impact of loneliness on Chinese late-life immigrants' health status and well-being, I synthesised data from the participants' interview data and their responses on the standardised questionnaires. Participants' interview statements affirm that loneliness is associated with adverse physical and mental health consequences. Study participants reported their loneliness related to stress, loss of weight, sleeplessness, poor appetite, and unhealthy lifestyle, such as watching TV for whole day. A participant also identified her diagnosis of anxiety, hypertension, and depression as having a potential relationship with loneliness. Furthermore, guided by the three components of this study's theoretical framework, I speculate that the immigration process may have exacerbated Chinese late-life immigrants' vulnerability towards loneliness in New Zealand. Children's filial responsibility to older parents was weighted as a high value in traditional Chinese culture. However, in the context of immigration, the value of filial piety may not be adhered to by adult children due to the impact of Western culture, intergenerational differences, as well as their socioeconomic disadvantages as immigrants. This finding is echoed by Dong (2012).

Study participants' responses to the quality of life questionnaire showed greater loneliness was associated with a poor quality of life. However, further research is needed to examine the casual relationships. Overall findings in the current study has evidenced that Chinese late-life immigrants' experience of loneliness and/or social isolation in New Zealand and its associated negative health impact is common. Importantly, findings suggested that loneliness was negatively associated with mental health of older Chinese immigrants.

#### **9.2.4 Experiences of usability and acceptability of the standardised surveys**

To discuss the usability and acceptability of the standardised surveys, I have synthesised results from the participants' feedback on the standardised questionnaires and their conversations in the co-design workshops. The Chinese translated 6-item De Jong Loneliness scale was useful to measure Chinese late-life immigrants' loneliness status. However, some participants identified that they could not clearly understand the meaning of "loneliness". My review of the existing literature suggested that the measurement of loneliness varies across cultures. To develop a loneliness scale for older Chinese people, individual attributes, such as Chinese culture, values, filial piety expectations, and grandparenting should be considered.

Moreover, study participants identified the items of the Chinese translated 6-item De Jong Loneliness scale could not comprehensively reflect their loneliness situations. Other Chinese translated loneliness measurements with an acceptable validation among an older Chinese population have not been located. My study suggested future research is required to develop a scale in Chinese from a completely conceptual basis rather than trying to translate Western/English concepts into Chinese. Such a tool could then be compared with existing scales in Chinese and English. This is especially critical when concepts such as loneliness do not necessarily have simple direct translation across cultures and languages. Nonetheless, the ADLs and IADLs scales and SSRS and WHOQOL-BREF questionnaires were identified as useful and easy to answer by study participants.

Chinese late-life immigrants' loneliness was underreported, and more data were needed to examine the existing measurements. The experience of usability and acceptability of the standardised survey were essential features to be examined. However, no other literature was located that examined these features. This study contributes original knowledge in relation to the usability and acceptability of commonly used standardised measures with Chinese late-life immigrants in New Zealand and, potentially, to their utility within other Westernised settings. Additionally, the theoretical framework constructed for this study would be a useful reference point when developing a cultural specific measurement for Chinese late-life immigrants.

### **9.2.5 The concordance and discordance between standardised measurements and interviews**

To discuss this aim, I synthesised results from the participants' individual stories and their standardised questionnaires. The inconsistency identified in Chapter Seven was that participants' levels of loneliness were expressed differently between their individual interview data and standardised measurement results. The reasons for the inconsistency might be twofold. One reason was that participants reported that the western definition of "loneliness" was different from their Chinese concepts. Another reason might be related to the perceived stigma of loneliness and face management in Chinese culture. Participants may have held back details or stories when directly asked about loneliness. It has been suggested that there is stigma associated with late-life immigrants' loneliness (Taube, et al., 2015; Wright-St Clair & Nayar, 2019). Therefore, this study's results indicate a culture specific loneliness measurement is necessary. In addition, the study's qualitative and quantitative data were complementary in how they revealed and explained discordance in how Chinese late-life immigrants experienced loneliness. The theoretical framework helped to understand underlying schemas on discordance via a culture specific lens. This finding offers sound evidence for the advantage of utilising a mixed-method design as reported by Creswell and Clark (2011).

### **9.2.6 Co-designed evidence-based resources to address Chinese late-life immigrants' loneliness**

For this aim, I synthesised results from the four co-design workshops and three consultations with potential stakeholders. In Phase Two, Age Concern and Housing New Zealand were consulted as two key stakeholders identified by the co-researchers' as co-designed resources or services for addressing loneliness. Steps of the research cycle were designed with flexibility.

Undertaking co-design workshops with older Chinese co-researchers was challenging as previously indicated in Baldwin's (2018) study. A detailed transportation arrangement for each co-researcher was necessary, owing to their limited English skills. Most of the older Chinese co-researchers had grandparenting duties, so had little flexibility regarding time to attend the workshops. This challenge was consistent with a western study undertaken among older non-Chinese people acting as co-researchers (Bindels et al., 2014). For their convenience, I combined some steps of the research cycle into one workshop and changed some face-to-face feedback sections to online or telephone conversations. In the first co-design workshop, co-researchers had difficulty navigating relationships with other co-researchers. It echoes Baldwin's (2018) research where difficult relationships and dissatisfaction with level of involvement were identified. In terms of the patriarchal value of traditional Chinese culture, a power imbalance was identified during my first workshop, where one male co-researcher dominated the discussion. In the following workshop, to uphold his face, I emphasised that everyone should have a chance to express his/her ideas and a sandglass was utilised strategically to manage the time. Additionally, I tried to engage them in discussion by reading stories from other participants' interview records. The stories brought resonance to the experiences of loneliness, which led to a warm discussion. The liberal ways of participatory research were accepted by older Chinese co-researchers. However, some of them showed uncertainty as to whether their voices would be heard by their identified potential stakeholders. Positive feedback from Age Concern and Housing New Zealand in the initial stages resulted in co-researchers showing a deeper engagement in the final co-design workshop.

Overall, the study aims were achieved by analysing data from the multiple study methods. The study questions were explored and answered from various angles.

Chinese late-life immigrants' experience of loneliness in New Zealand is complicated. It is imbued with deeply held cultural perspectives that were made evident in this study and by the theoretical framework that underpinned the study's cultural lens. The co-researchers emphasised the need for developing Information Guidebooks about services for older Chinese immigrants, family doctors (GPs), and long-term residential care in New Zealand. They co-designed new resources, such as housing, community support, social media, government policy, and transportation. Specifically, they recommended the Chinese community group establish an ethnic working group to support older Chinese and advocate for them in their family and social contexts. From a cultural perspective, Hwang suggested a conflict resolution model in Chinese society on the basis of upholding face (Hwang, 1997). Interestingly, Chinese prefer to have a superior's mediation to negotiate for a solution of compromise, including parent-child conflicts. In doing so, they avoid confronting each other and being judged by third parties. Data from multiple study methods complement each other to ensure the completeness of study results.

### **9.3 Integration into society**

Social isolation and loneliness are complex global issues and affect Chinese late-life immigrant worldwide. Several researchers reported that Chinese late-life immigrants experienced social isolation and loneliness due to the loss of their cultural surroundings, social networks, language, and physical activity in Canada (S. Johnson, Bacsu, McIntosh, Jeffery, & Novik, 2019), US (X. Dong et al., 2012), and Australia (X. Lin et al., 2016). This result is also true of older Chinese immigrants in my study and underpinned by the overarching theoretical framework. Language ability plays a pivotal role in immigrant settlement and integration in general community. For older Chinese immigrants, poor English language skill exerted an undermining influence in socialising with neighbours, seeking assistance, accessing services or resources, and maintaining self-identity with relation to social status as well as civic participation (Stewart et al., 2011; A. Tang, 2017). Other research (Wright-St Clair & Nayar, 2016) also suggested that being a late-life Chinese immigrant with limited English language proficiency restricted older Chinese immigrants' ability to interact with members of the larger society and diminished opportunities for social participation.

This study's qualitative data illuminate potential modifiable risk factors to address social isolation and loneliness among Chinese late-life immigrants in New Zealand. Evidence suggests that dissatisfaction with social support was one of the greatest predictors of loneliness for older Asian immigrants in the US, Japan, and Northern Ireland (Katherine & Saissy, 2009; O. Kim, 1999; Matsudaira, 2003). Furthermore, older Chinese immigrants found belonging when coming together to participate within Chinese community groups, which could be considered as *participatory ethnic enclaves* (Wright-St Clair & Nayar, 2016). From there, they start to expand their circle and engage into other community groups. It is congruent with the theoretical framework of this study, *guan xi* (relationship) could protect Chinese people from emotional problems. My findings are in line with results from these studies. Chinese late-life participants in the current study participated in Chinese community or religious groups and offered services for benefiting ethnic and local communities and society through those groups.

Moreover, from the findings of the qualitative interviews, engaging in spiritual activities, such as educational Buddhism courses, offers a source of social support and improve Chinese late-life immigrants' coping and adjustment mechanisms for loneliness. Various studies have shown that there is a considerable relationship between religious beliefs and mental health. Religious beliefs and practices provide older people with problem solving skills, improve self-confidence, develop hope and optimism to improve positive self-suggestion, self-awareness, flexibility, and social responsibility (Motahari & Rahgozar, 2011; Sheikholeslami et al., 2012; Steffen, 2007; United Nations Economic Commission for Europe [UNECE], 2003). Engaging in religious beliefs and practices can have a preventative effect on the feeling of loneliness in older people (Sheikholeslami et al., 2012). Moreover, a study in the US showed that religious attendance is associated with higher levels of social integration and social support, which leads to lower levels of loneliness in late life (Rote, Hill, & Ellison, 2012). However, different racial groups may have various cultural values, religions, or spiritualities that shape the maintenance of relationship and expression of loneliness.



#### **9.4 Residential Accommodation in New Zealand**

Older Chinese participants in the current study preferred to live separately from their adult children and receive services from formal social services and residential caring organisations. The idea of living independently from adult children in old age and being cared for by non-family members contradicts the traditional Chinese filial piety concept. However, it becomes a way to uphold face of both parents and an adult child, and avoid intergenerational conflicts. Older Chinese in this study expressed their changing values of moving away from traditional filial piety toward living in private rental or public social housing. It was a novel finding from this study among Chinese late-life immigrants within the New Zealand context. Due to the English language barrier, most of them had to rent a room or residential unit from Chinese property owners. However, in traditional Chinese culture, dying at home is taboo and thought to bring bad luck to people who live in the house. The price of the house would drop if people died in the house. Chinese property owners usually avoid renting rooms to older people based on the cultural and moral concern of this taboo; thereby, continuously magnifying the difficult situation of private house tenancy for older Chinese immigrants.

According to the most current report published by the Ministry of Social Development (2019a), the demand for public social housing across New Zealand is growing rapidly. Older people, who have low incomes, are experiencing a severe and immediate need. In addressing the current high demand situation, the concept of shared housing or co-housing was proposed by Housing New Zealand during my consultations. The concept of co-housing, where a self-chosen group of people live together with common facilities and shared neighbourhood life (Cohousing New Zealand, 2018), was welcomed by older Chinese participants of this study. They considered co-housing as helpful to enable community interaction and reduce alienation, isolation, and loneliness. This point of view aligned with a study in the Netherlands and Denmark, where co-housing for older people is now a valued housing alternative (Bamford, 2005).

Within the context of living separately from adult children and possibly grandchildren, many older Chinese people have to live alone. Results of the standardised

measurement data suggest that older people who lived with a spouse felt less lonely than those who live alone. Research also showed that the feeling of loneliness is associated with being widowed, especially among people who recently lost their spouse (D. A. Jones, Victor, & Vetter, 2009; Sheikholeslami et al., 2012). According to De Jong Gierveld's (2004) study, the human need for love, friendship and physical contact and the fear of loneliness do not diminish with age. Hence, widowhood and late-life divorce, as well as increased life expectancy, are motivating factors to re-partner in old age (S. L. Brown, Roebuck, & Lee, 2012). De Jong Gierveld also indicated that social networks become larger when two partners enter into a re-partnering relationship (De Jong Gierveld & Peeters, 2003).

Research also revealed that re-partnering is different from lifelong marriage. More re-partnered older adults preferred an unmarried cohabitation to re-marriage. The older adults who chose unmarried cohabitation tended to have the weakest bonds with their children, mostly because of stress and financial insecurity (De Jong Gierveld & Peeters, 2003; Koren, 2014). These results are evidenced by the findings in the current study. Moreover, Chinese traditional rules from Confucianism, such as the belief in staying loyal to one's husband after his death lead to complicated intergenerational relationships in re-partnering. More research is needed to investigate Chinese late-life immigrants' loneliness in re-partnering within the New Zealand context through a Chinese cultural lens.

## **9.5 Strengths of the Study**

The previous sections presented nuanced and novel knowledge contributed by this study. Three strengths of this research were: 1) the development of culturally theoretical frameworks; 2) utilising the mixed-method methodology; and 3) engaging participants as co-researchers in participatory workshops.

First, it is important to note that the theoretical frameworks contained a conceptual model of exclusion from social relations for older people, Confucianism theory, and Arthur Kleinman's social suffering theory, as outlined in Chapter Two. The literature review indicated that there was a critical absence of theoretical models and conceptual frameworks used to understand social isolation and loneliness among older

immigrants (S. Johnson et al., 2019). The model and theories used in this study provide an overarching framework and culturally specific lens for the whole study. In this study, insights were gained from the data across the qualitative interviews, quantitative surveys, co-design workshops and the key stakeholders' consultations, which were then analysed and explained using the theoretical frameworks. No published studies were identified that have used these theoretical frameworks alongside a Chinese culturally specific lens to investigate social isolation and loneliness of Chinese late-life immigrants.

The second strength of this study relates to the mixed-method methodology and the component of community-based participatory research workshops as part of the qualitative branch. This study was the first to use multiple methods to explore Chinese late-life immigrants' loneliness in New Zealand and co-design community-based resources or services to ameliorating loneliness. The results of this study evidenced the advantages of mixed-method design that discordance was explained by complementing qualitative data and quantitative data. Mixed-method design helps to understand the research problem in a more complete manner. This study achieved a novel contribution to the field by demonstrating multiple research methods to gain a more holistic perspective of loneliness. The data were rich and powerful with personal experiences and key stakeholders' advice that add to the Health of Older Persons Strategy discussions with new possibilities of practice engagement. A strength of this methodology is established on a trusting relationship with participants and stakeholders that developed within the ongoing study process.

The final strength of this study was that it gave voice to Chinese late-life immigrants, an otherwise marginalised and silent population. In particular, it was the first to provide data on older people's involvement in co-design research as co-researchers. The beneficial impacts of older people's involvement are in accordance with previous studies reporting increased confidence, exchanging and engagement for older co-researchers, enhanced research quality and consequence (Ross et al., 2005), benefits for other groups in the community (Dickson & Kathryn, 2001), as well as a beneficial impacts for academic researches (Baldwin, Napier, Neville, & Wright-St Clair, 2018). The benefits of involving Chinese late-life immigrants as co-researchers outweighed its

challenges. Older co-researchers' personal and professional contributions in academic research have been increasingly recognised.

## **9.6 Limitations of the Study**

This study had a number of limitations that could be addressed in future research. First, due to the limitation of time and resources in this PhD project, numbers of participants and community-based participatory research cycles were limited. However, the numbers of participants and length of time did not diminish the richness and depth of study data. Second, the participants were Mandarin speaking Chinese late-life immigrants, and all of them were from mainland China. Late-life immigrants from Taiwan, Hong Kong, Macao, and Malaysia were considered in the inclusion criteria; however, those potentially interested in participating failed to meet the inclusion criteria: "were aged 65 years or older on arrival in New Zealand". I acknowledge the absence of their "voice", and their contributions could add value to future research. Further, I understand that the results are based on my interpretations from reading participants' stories. Participants themselves may not understand their experience as what I have interpreted. For instance, the De Jong's loneliness scale I adopted in this study might only show a 'snapshot' of how a participant is feeling on a particular day because feelings of loneliness can fluctuate. Lastly, challenges related to working with older Chinese co-researchers included their language barrier, transportation issue, group dynamics, communication skills, household workload, and health status. All these issues impacted their commitment and quality of the participatory research processes and outcomes.

Findings from this thesis extend existing knowledge on social isolation and loneliness in Chinese late-life immigrants in New Zealand. In general, there has been a paucity of statistics or empirical evidence on older Chinese immigrants who represent one of the fast-growing populations in New Zealand. Although the NZGSS 2016 (Statistics New Zealand, 2016b) offered the only prevalence data on social isolation and loneliness for older Chinese immigrants in New Zealand, the numbers of Chinese aged 65 years or older were small, limiting the generalisability of the results.

## **9.7 Implications for Future Research**

There is a need for continued research on Chinese late-life immigrant' loneliness in New Zealand regarding culture differences, prevalence rate, dynamic cohort changes, and evaluation methods. In this section, I will present implications for future research in detail.

### **9.7.1 National, population-based research to examine prevalence has implications for how the NZGSS is conducted**

An absence of prevalence data on loneliness of Chinese late-life immigrants in New Zealand was identified in this study. The NZGSS 2018 has just been partly published (Statistics New Zealand, 2019), but the data of older Chinese residents are not publicly available. This study implies the worthiness of the updated dataset being made publicly accessible for future studies, which are related to older Chinese immigrants' and residents' settlement in New Zealand. A larger, representative sample of older Chinese immigrants and residents ought to be recruited for future waves of the national survey would enable more detailed analysis of the older immigrant population, and would enrich the New Zealand population dataset. Such data would inform policy makers and services providers considering the diversity of population in New Zealand.

### **9.7.2 Deep cultural differences have implications for local governments conducting age friendly community research**

Future population-based studies among New Zealand Chinese late-life immigrants are needed to improve the knowledge base impacting services providers and policy makers. To better understand the magnitude to loneliness and social isolation, there is also a need for research to assess the rates among various ethnic groups. This study identified discordances between the Chinese 6-item De Jong loneliness scale and qualitative data on loneliness for Chinese late-life immigrants. For future study, a culturally appropriate measure would need to be developed for Chinese late-life immigrants to test their loneliness in the New Zealand context. The qualitative data of this study and the theoretical framework used will be a reference for future measures design.

The small sample size of older Chinese immigrants in the NZGSS perpetuates the challenge of recruiting representative samples in national surveys from which

meaningful conclusions can be drawn. The NZGSS 2016 (Statistics New Zealand, 2016b) was located as the only prevalence data on loneliness for older Chinese immigrants in New Zealand, but the recruitment strategy of Statistics New Zealand for ethnic groups might need to be re-assessed (Statistics New Zealand, 2016b). For instance, based on the qualitative data from this research, the online survey is likely to be a barrier for those older Chinese people who are not able to access information technologies or do not have the skills to use them; and there is a risk that they will be excluded from the national census data. Importantly, for those older Chinese immigrants, I would suggest government set up more inquiry tables located in the community, local libraries, and also door to door service, having bilingual coordinators to help with English census survey completion.

### **9.7.3 A prospective cohort study is implied to explore how loneliness changes over time for Chinese late-life immigrants**

This study's results have implications for future studies to understand and explain whether and how late-life immigrants' loneliness changes over time. The results imply the value a prospective, cohort study conducted over successive years would add to the knowledge base and, therefore, strategies to address the population's health and wellbeing. I suggest including measurement tools for older Chinese, in particular to investigate their loneliness, such as the Chinese 6-item De Jong loneliness scale utilised in the current study, as well as key domains around individual attributes, such as Chinese culture, values, filial piety expectations, and grandparenting. For the existing standardised surveys and scales, it is valuable to explore older Chinese people's experiences of answering those surveys, such as usability and acceptability. Their feedback would be considered as practical guiding information for developing new research instruments.

### **9.7.4 Evaluation of the effectiveness of services set up to address loneliness and social isolation**

In a national cross-sectional study, Jamieson et al. (2017) concluded that ethnic identification and living arrangements were significantly associated with the chance of loneliness for those having an International Residential Assessment Instrument-Home Care (interRAI-HC) assessment. The interRAI-HC is a universal standardised comprehensive geriatric assessment for all community-dwelling older people who are

accessing publicly funded community services or residential care. In the current study, co-researchers raised their needs for cultural and language support within residential care services, but there is a paucity of relevant studies for older Chinese immigrants in New Zealand. Previous research findings identified older immigrants' problems of healthcare service access (Montayre, Neville, & Holroyd, 2017), and older Filipino immigrants anticipated that the residential aged care facilities could ensure their cultural needs (Montayre, Neville, Wright-St Clair, Holroyd, & Adams, 2018). Future investigation of social isolation or loneliness of older Chinese immigrants in the aged care sector is required.

Furthermore, in accordance with another study in the US, depression presented as a main theme in negative health outcome of loneliness among Chinese late-life immigrants (X. Dong et al., 2012). A research in Finland reported that psychosocial group rehabilitation was positively reduced mortality rate and health services usage among older people suffering from loneliness (Pitkala et al., 2009). Hence, my findings and other research imply the need for future study to investigate the association between mental health issues and loneliness, as well as relevant interventions for older Chinese immigrants.

Moreover, the intersection of late-life immigration, Chinese specific cultural influences, loneliness, and its health impact deserve in-depth exploration and further research. Chinese culture and values played an important role during the whole study project, especially in generating research questions, research design, study implementation, and data analysis. The cultural related stigmas of loneliness might impact services or resources accessed by older Chinese immigrants. Therefore, for future research or co-designing relevant resources and services, it is suggested to ensure that the cultural factors are always taken into account when addressing Chinese late-life immigrants' loneliness and their intergenerational relationships.

Finally, participants of this study highlight the effectiveness of religious gatherings and practices for ameliorating loneliness. Future research should establish a deeper understanding and clearer relations between religious practices and loneliness, as well as its functional mechanisms in Chinese late-life immigrants and other racial groups.

## 9.8 Conclusion

The novel and unique knowledge generated in this thesis demonstrated how loneliness and social isolation was manifested in Chinese late-life immigrants and how they can be engaged to co-design community-based resources or services for ameliorating loneliness. By revisiting the research objectives, this concluding chapter has recapped why I chose this research topic and demonstrated how I achieved the objectives. I have summarised the key findings from the explanatory sequential qualitative and quantitative, and the participatory co-design phases, and acknowledged the limitations of this study. The outcomes of this thesis have contributed knowledge in this area and inspired further research. The findings have potential to inform service providers' and policy makers' improving the community-based resources or service for addressing Chinese late-life immigrants' social isolation or loneliness. The potential success of the resources delivered to the partnered stakeholders will be bounded by the participants' voices being heard carefully and needs then addressed appropriately.

The findings of this research have led to the following three conclusions. First, given older and late-life Chinese immigrants make up a significant and growing proportion of the New Zealand population, they are undeservedly, under-represented in the NZGSS. Second, commonly used standardised loneliness, quality of life, and ADLs measures have acceptable utility with Chinese late-life immigrants; yet, they are not sufficient for understanding the nuanced cultural loneliness experienced within this population. The 6-item De Jong loneliness scale score was identified as having discordance with the participant interview results. Third, Chinese culture is an essential consideration when researching or working to ameliorate loneliness with older Chinese. The study's design illustrates how analysis of disparate forms of data helped crystallise the culturally bound understandings of loneliness. The benefits of involving Chinese late-life immigrants as co-researchers outweighed its challenges. The outcome from the co-researchers' participation was greater than what either the researcher or the participants could achieve by themselves.



## References

- Abbott, M. W., Wong, S., Giles, L. C., Wong, S., Young, W., & Au, M. (2003). Depression in older Chinese migrants to Auckland. *Australian and New Zealand Journal of Psychiatry*, 37, 445-451.
- ABC Online. (2015, December). *China officially ends one-child policy, signing into law bill allowing married couples to have two children*. Retrieved from [https://en.wikipedia.org/wiki/ABC\\_Online](https://en.wikipedia.org/wiki/ABC_Online)
- AC Nielson. (2011). *Quality of Life survey 2010 eight cities report*. Retrieved from [www.qualityoflifeproject.govt.nz](http://www.qualityoflifeproject.govt.nz).
- Adelman, C. (1993). Kurt Lewin and the origins of action research. *Educational Action Research*, 1(1), 7.
- Ameratunga, S., Waayer, D., Robinson, E., Clark, T. C., Crengle, S., Denny, S., & ...Teevale, T. (2008). *Youth '07: The health and wellbeing of secondary school students in New Zealand*. Auckland, New Zealand: The University of Auckland, Adolescent Research Group.
- Anderson, E. (2014). Dewey's moral philosophy. In E. N. Zalta (Ed.), *The Stanford encyclopedia of philosophy (Spring 2014)*. Stanford, CA: Stanford University Metaphysics Research Lab.
- Anne, P. F., Wand, M., Peisah, C., Draper, B., & Brodaty, H. (2018). Why do the very old self-harm? A qualitative study. *American Journal of Geriatric Psychiatry*, 26(8), 862-871. <https://doi.org/10.1016/j.jagp.2018.03.005>
- AUTEC. (2020). *Research ethics*. Retrieved January 23, 2020, from <https://www.aut.ac.nz/research/researchethics>
- Baldwin, J. N., Napier, S., Neville, S., & Wright-St Clair, V. A. (2018). Impacts of older people's patient and public involvement in health and social care research: A systematic review. *Age and Ageing*, 47(6), 801-809. <https://doi.org/10.1093/ageing/afy092>
- Bamford, G. (2005). Cohousing for older people: Housing innovation in the Netherlands and Denmark. *Australasian Journal on Ageing*, 24(1), 44-46. <https://doi.org/10.1111/j.1741-6612.2005.00065.x>
- Barnes, M., Blom, A., Cox, K., Lessof, C., & Walker, A. (2006). *The social exclusion of older people: Evidence from the first wave of the English Longitudinal Study of Ageing (ELSA)*. London, UK: Office of the Deputy Prime Minister, Social Exclusion Unit.
- Bedford, R., & Liu, L. N. S. (2013). Parents in New Zealand's family sponsorship policy: A preliminary assessment of the impact of the 2012 policy changes. *New Zealand Population Review*, 39, 25-49.
- Biddle, C., & Schafft, K. A. (2014). Axiology and anomaly in the practice of mixed methods work: Pragmatism, valuation, and the transformative paradigm. *Journal of Mixed Methods Research*, 9(4), 320-334. <https://doi.org/10.1177/1558689814533157>
- Biesta, G. (2007). Why "what works" won't work: Evidence-based practice and the democratic deficit in educational research. *Educational Theory*, 57(1), 1-22. <https://doi.org/10.1111/j.1741-5446.2006.00241.x>

- Biesta, G. (2010). Pragmatism and the philosophical foundations of mixed methods research. In A. Tashakkori & C. Teddlie (Eds.), *Mixed methods in social and behavioral research* (pp. 95-118). London, UK: Sage.
- Bindels, J., Baur, V., Cox, K., Heijning, S., & Abma, T. (2014). Older people as co-researchers: A collaborative journey. *Ageing & Society*, 34(6), 951-973.
- Blakemore, K. (2000). Care and social support: The example of ageing migrants. In W. T. Liu & H. Kendig (Eds.), *Who should care for the elderly? An east-west value divide* (pp. 126-142). Singapore: Singapore University Press and World Scientific.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Braun, V., & Clarke, T. (2012). Thematic analysis. In H. Cooper (Ed.), *APA handbook of research methods in psychology* (Vol. 2, pp. 57-71). Washington, DC: American Psychological Association.
- Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: research perspectives. *Developmental Psychology*, 22, 723-742.
- Brown, K. M., Elliott, S. J., Leatherdale, S. T., & Robertson-Wilson, J. (2015). Searching for rigour in the reporting of mixed methods population health research: A methodological review. *Health Education Research*, 30(6), 811-839. <https://doi.org/10.1093/her/cyv046>
- Brown, S. L., Roebuck, J., & Lee, G. R. (2012). Transitions into and out of cohabitation in later life. *Journal of Marriage and Family*, 74(4), 774-793. <https://doi.org/10.1111/j.1741-3737.2012.00994.x>
- Burckhardt, C. S., & Anderson, K. L. (2003). The Quality of Life Scale (QOLS): Reliability, validity, and utilization. *Health and Quality of Life Outcomes*, 1(60). <https://doi.org/10.1186/1477-7525-1-60>
- Burholt, V., & Dobbs, C. (2014). A support network typology for application in older populations with a preponderance of multigenerational households. *Ageing & Society*, 34(7), 1142-1169. <https://doi.org/10.1017/S0144686X12001511>
- Burholt, V., Dobbs, C., & Victor, C. (2018). Social support networks of older migrants in England and Wales: The role of collectivist culture. *Ageing & Society*, 38(7), 1453-1477. <https://doi.org/10.1017/s0144686x17000034>
- Burholt, V., Winter, B., Aartsen, M., Constantinou, C., Dahlberg, L., Feliciano, V., . . . Waldegrave, C. (2019). A critical review and development of a conceptual model of exclusion from social relations for older people. *European Journal of Ageing*, 17, 3-19. <https://doi.org/10.1007/s10433-019-00506-0>
- Burr, J. A., & Mutchler, J. E. (2012). Housing characteristics of older Asian Americans. *Journal of Cross Cultural Gerontology*, 27(3), 217-237. <https://doi.org/10.1007/s10823-012-9173-2>
- Cacioppo, J. T., Hughes, M. E., & Waite, L. J. (2006). Loneliness as a specific risk factor for depressive symptoms: Cross-sectional and longitudinal analyses. *Psychology and Aging*, 21, 140-151. <https://doi.org/10.1037/0882-7974.21.1.140>
- Cagney, P. (2006). *A healthy drinking culture: A search and review of international and New Zealand literature*. Wellington, New Zealand: Research New Zealand.
- Cahill, C. (2007). Doing research with young people: Participatory research and the rituals of collective work. *Children's Geographies*, 5(3), 297-312. <https://doi.org/10.1080/14733280701445895>
- Centers for Disease Control and Prevention. (2010). *Suicide: Facts at a glance*. National Center for Injury Prevention and Control. Atlanta, GA: Centers for Disease Control and Prevention.

- Chan, S. W., Chiu, H. F., Chien, W. T., Thompson, D. R., & Lam, L. (2006). Quality of life in Chinese elderly people with depression. *International Journal of Geriatric Psychiatry*, 21(4), 312-318. <https://doi.org/10.1002/gps.1461>
- Chen, W., Fang, Y., Mao, F., Hao, S., Chen, J., Yuan, M., . . . Hong, Y. A. (2015). Assessment of disability among the elderly in Xiamen of China: A representative sample survey of 14,292 older adults. *PLoS One*, 10(6), e0131014. <https://doi.org/10.1371/journal.pone.0131014>
- Chen, Y. H. (2015). 计划生育：从机构改革到转型发展 Family planning: from institutional reform to transformation and development. *Population and Society*, 31(2), 42-50.
- Cheung, G., Foster, G., de Beer, W., Gee, S., Hawkes, T., Rimkeit, S., . . . Sundram, F. (2017). Predictors for repeat self-harm and suicide among older people within 12 months of a self-harm presentation. *International Psychogeriatrics*, 29(8), 1237-1245. <https://doi.org/10.1017/S1041610217000308>
- Cheung, G., Wright-St Clair, V., Chacko, E., & Barak, Y. (2019). Financial difficulty and biopsychosocial predictors of loneliness: A cross-sectional study of community dwelling older adults. *Archives of Gerontology and Geriatrics*, 85. <https://doi.org/10.1016/j.archger.2019.103935>
- Chilisa, B., & Kawulich, B. B. (2012). Selecting a research approach: Paradigm, methodology and methods. In C. Wagner, B. B. Kawulich, & M. Garner (Eds.), *Doing social research: A global context* (pp. 1-21). Maidenhead, UK: McGraw-Hill.
- Chinese Herald. (2018). 新西兰是养老天堂还是地狱？真相让人触目惊心  
Is New Zealand a pension paradise or hell? The truth is shocking. *Chinese Herald*. Retrieved from <http://www.chinesenzherald.co.nz/news/socialmedia/heaven-or-hell%E7%BC%9F/>
- among elderly Chinese immigrants. *Ethnicity and Health*, 15(1), 61-72. <https://doi.org/10.1080/13557850903418810>
- Chow, P. H. (2012). Health care service needs and correlates of quality of life: A case study of elderly Chinese immigrants in Canada. *Social Indicators Research*, 106(2), 347-358. <https://doi.org/10.1007/s11205-011-9810-0>
- Clark, P. (2008). *The Chinese cultural revolution: A history*. Cambridge, UK: Cambridge University Press.
- Cloutier-Fisher, D., Kobayashi, K., & Smith, A. (2011). The subjective dimension of social isolation: A qualitative investigation of older adults' experiences in small social support networks. *Journal of Aging Studies*, 25(4), 407-414. <https://doi.org/10.1016/j.jaging.2011.03.012>
- Cohen, S., Gottlieb, B., & Underwood, L. G. (2000). *Social support measurement and intervention*. New York, NY: Oxford University Press.
- Cohousing New Zealand. (2018). *What is cohousing?* Retrieved August 16, 2019, from <https://cohousing.org.nz/what-cohousing>
- Coleman, G. (2015). Core issues in modern epistemology for action researchers: Dancing between knower and known. In H. Bradbury (Ed.), *The Sage handbook of action research* (3<sup>rd</sup> ed., pp. 392-400). London, UK: Sage.
- Colorafi, K. J., & Evans, B. (2016). Qualitative descriptive methods in health science research. *HERD*, 9(4), 16-25. <https://doi.org/10.1177/1937586715614171>
- Confucian Weekly Bulletin. (2016). *Confucius and the cultural revolution-50 years on*. Retrieved August 24, 2019, from

<https://confucianweeklybulletin.wordpress.com/2016/05/17/confucius-and-the-cultural-revolution-50-years-on/>

- Confucius. (1971). *The Chinese classics: Confucian analects* (J. Legge Trans.). New York, NY: Dover Publications.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4<sup>th</sup> ed.). Thousand Oaks, CA: Sage.
- Creswell, J. W., & Clark, V. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.
- Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory Into Practice*, 39(3), 124-130. [https://doi.org/10.1207/s15430421tip3903\\_2](https://doi.org/10.1207/s15430421tip3903_2)
- Creswell, J. W., & Plano Clark, V. (2011). *Designing and conducting mixed methods research* (2<sup>nd</sup> ed.). Los Angeles, CA: Sage.
- Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Sydney, Australia: Sage.
- Da, W.-W., & Garcia, A. (2015). Later life migration: Sociocultural adaptation and changes in quality of life at settlement among recent older Chinese immigrants in Canada. *Activities, Adaptation & Aging*, 39(3), 214-242. <https://doi.org/10.1080/01924788.2015.1063330>
- Dalsgaard, P. (2014). Pragmatism and design thinking. *International Journal of Design*, 8(1), 143-155.
- David, R. (2015). *Data analysis and business modelling with Excel 2013 : Manage, analyze, and visualize data with Microsoft Excel 2013 to transform raw data into ready-to-use information*. Birmingham, UK: Packet Publishing.
- De Jong-Gierveld, J. (1987). Developing and testing a model of loneliness. *Journal of Personality and Social Psychology*, 53(1), 119-128.
- De Jong Gierveld, J. (1998). A review of loneliness: Concept and definitions, determinants and consequences. *Review of Clinical Gerontology*, 8, 73-80.
- De Jong Gierveld, J. (2004). Remarriage, unmarried cohabitation, living apart together: partner relationships following bereavement or divorce. *Journal of Marriage and Family*, 66(1), 236-243. <https://doi.org/10.1111/j.0022-2445.2004.00015.x>
- De Jong Gierveld, J. (2015). Loneliness of older immigrant groups in Canada: effects of ethnic-cultural background. *Journal of Cross Cultural Gerontology*, 30(3), 251-268. <https://doi.org/10.1007/s10823-015-9265-x>
- De Jong Gierveld, J., & Peeters, A. (2003). The interweaving of repartnered older adults' lives with their children and siblings. *Ageing & Society*, 23, 187-205. <https://doi.org/10.1017/S0144686X02001095>
- De Jong Gierveld, J., Van Tilburg, T. G., & Dykstra, P. A. (2018). New ways of theorizing and conducting research in the field of loneliness and social isolation. In A. L. Vangelisti & D. Perlman (Eds.), *Cambridge handbook of personal relationships* (2<sup>nd</sup> ed., pp. 391-404). Cambridge, UK: Cambridge University Press.
- Denzin, N. K., & Lincoln, Y. S. (1994). Introduction: Entering the field of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (pp. 1-17). Thousand Oaks, CA: Sage.
- Denzin, N. K., & Lincoln, Y. S. (2017). Introduction: The discipline and practice of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (pp. 1-20). Thousand Oaks, CA: Sage.
- Dewey, J. (1910). *How we think*. Lexington, MA: D C Health.
- Dewey, J. (1911). Epistemology. In J. A. Boydston (Ed.), *The middle works (1899-1924)* (Vol. 6, pp. 440-442). Carbondale, IL: Southern Illinois University Press.

- Dewey, J. (1922). *Human nature and conduct: An introduction to social psychology*. New York, NY: Henry Holt and Company.
- Dewey, J. (1929a). *Experience and nature*. London, UK: George Allen & Unwin.
- Dewey, J. (1929b). The quest for certainty. In J. A. Boydston (Ed.), *The later works (1925-1953)* (Vol. 4). Carbondale, IL: Southern Illinois University
- Dewey, J. (1930). *The quest for certainty; A study of the relation of knowledge and action*. London: UK: Gifford
- Dickson, G., & Kathryn, L. (2001). Participatory action research: lessons learned with Aboriginal grandmothers. *Health Care for Women International*, 22(5), 471-481. <https://doi.org/10.1080/073993301317094290>
- Dictionary. (1995). Definition of Kiwi. Retrieved from dictionary.com
- Dinh, K. T., & Nguyen, H. H. (2016). The effects of acculturative variables on Asian American parent–child relationships. *Journal of Social and Personal Relationships*, 23(3), 407-426. <https://doi.org/10.1177/0265407506064207>
- Donaldson J. M., & Watson, R. (1996). Loneliness in elderly people: An important area for nursing research. *Journal of Advanced Nursing*, 24, 952-959.
- Dong, X., & Chang, E. S. (2017). Social networks among the older Chinese population in the USA: Findings from the PINE study. *Gerontology*, 63(3), 238-252. <https://doi.org/10.1159/000455043>
- Dong, X., Chang, E. S., Wong, E., & Simon, M. (2012). Perception and negative effect of loneliness in a Chicago Chinese population of older adults. *Archives of Gerontology and Geriatrics*, 54(1), 151-159. <https://doi.org/10.1016/j.archger.2011.04.022>
- Dong, X., Chang, E. S., Wong, E., Wong, B., Skarupski, K. A., & Simon, M. A. (2010). Assessing the health needs of Chinese older adults: Findings from a community-based participatory research study in Chicago's Chinatown. *Journal of Aging Research*, Article ID 124246. <https://doi.org/10.4061/2010/124246>
- Dong, X., & Chen, R. (2017). Gender differences in the experience of loneliness in U.S. Chinese older adults. *Journal of Women & Aging*, 29(2), 115-125. <https://doi.org/10.1080/08952841.2015.1080534>
- Dong, X., Chen, R., Wong, E., & Simon, M. A. (2014). Suicidal ideation in an older U.S. Chinese population. *Journal of Aging and Health*, 26(7), 1189-1208. <https://doi.org/10.1177/0898264314541696>
- Dong, X., Simon, M. A., Gorbien, M., Percak, J., & Golden, R. (2007). Loneliness in older chinese adults: A risk factor for elder mistreatment. *Journal of the American Geriatrics Society*, 55(11), 1831-1835. <https://doi.org/10.1111/j.1532-5415.2007.01429.x>
- Dong, X., Zhang, M., & Simon, M. A. (2014). The expectation and perceived receipt of filial piety among Chinese older adults in the Greater Chicago area. *Journal of Aging and Health*, 26(7), 1225-1247. <https://doi.org/10.1177/0898264314541697>
- Dong, X. Q., Chang, E. S., Zeng, P., & Simon, M. A. (2015). Suicide in the global Chinese aging population: A review of risk and protective factors, consequences, and interventions. *Ageing and Disease*, 6(2), 121-130. <https://doi.org/10.14336/AD.2014.0223>
- Fan, R. P. (2009). Which care? Whose responsibility? And why family? Filial piety and long-term care for the elderly. In H. T. Engelhardt, M. J. Cheery, & L. Rasmussen (Eds.), *Reconstructionist Confucianism. Philosophical Studies in Contemporary Culture* (Vol. 17). Dordrecht, Germany: Springer.



- Federation of Ethnic Communities' Councils of Australia. (2015). *Review of Australian research on older people from culturally and linguistically diverse backgrounds*. Adelaide, Australia: The University of Adelaide.
- Fokkema, T., De Jong Gierveld, J., & Dykstra, P. A. (2012). Cross-national differences in older adult loneliness. *Journal of Psychology*, 146(1-2), 201-228.  
<https://doi.org/10.1080/00223980.2011.631612>
- Freire, P. (2000). *Pedagogy of the oppressed* (M. Bergman Ramo, Trans.; 30<sup>th</sup> anniv. ed.). New York, NY: Continuum.
- Fuller-Thomson, E., Brennenstuhl, S., & Hurd, M. (2011). Comparison of disability rates among older adults in aggregated and separate Asian American/Pacific Islander subpopulations. *American Journal of Public Health*, 101, 94-100.  
<https://doi.org/10.2105/AJPH.2009.176784>
- Gao, X. Y. (2003). Interdisciplinary topics in race, gender, and class. *Race, Gender & Class Journal*, 10(3), 114-125.
- Gerald, G. (2014). *Philosophical, ideological, and theoretical perspectives on education*. Trenton, NJ: Pearson.
- Gerst-Emerson, K., & Jayawardhana, J. (2015). Loneliness as a public health issue: The impact of loneliness on health care utilization among older adults. *American Journal of Public Health*, 105(5), 1013-1019.  
<https://doi.org/10.2105/AJPH.2014.302427>
- Giddings, L. S. (2006). Mixed-methods research: Positivism dressed in drag? *Journal of Research in Nursing*, 11(3). <https://doi.org/10.1177/1744987106064635>
- Given, L. M. (Ed.). (2008a). In Vivo coding. In *The SAGE encyclopaedia of qualitative research methods* (pp. 563-565). Thousand Oaks, CA: Sage.
- Given, L. M. (Ed.). (2008b). Participants as co-researchers. In *The SAGE encyclopaedia of qualitative research methods* (pp. 599-601). Thousand Oaks, CA: Sage.
- Gotesky, R. (1965). Aloneness, loneliness, isolation, solitude. In J. M. Edie (Ed.), *An invitation to phenomenology* (pp. 211-239). Chicago, IL: Quadrangle Books.
- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed method evaluation designs. *Educational Evaluation Policy Analysis*, 11(3), 255-274.
- Greene, J. C., & Hall, J. N. (2010). Dialectics and pragmatism: Being of consequence. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 119-144). Thousand Oaks, CA: Sage.
- Greene, J. C., & J., C. V. (1997). Defining and describing the paradigm issue in mixed method evaluation. In J. C. Greene & V. J. Caracelli (Eds.), *Advances in mixed-method evaluation: The challenges and benefits of integrating diverse paradigms* (Vol. 74, pp. 5-17). San Francisco, CA: Jossey-Bass.
- Guba, E. G., & Lincoln, Y. S. (1982). Epistemological and methodological bases of naturalistic inquiry. *Educational Communication and Technology Journal*, 30(47), 233-252.
- Guba, E. G., & Lincoln, Y. S. (1988). Do inquiry paradigms imply inquiry methodologies? In D. M. Fetterman (Ed.), *Qualitative approaches to evaluation in education: The silent scientific revolution* (pp. 89-115). New York, NY: Praeger.
- Guba, E. G., & Lincoln, Y. S. (2005). Paradigmatic controversies, contradictions, and emerging confluences. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (3<sup>rd</sup> ed., pp. 191-215). Thousand Oaks, CA: Sage
- Hao, Y. T., & Fang, J. Q. (2002). The introduce and usage of WHOQOL instrument in chinese. *Modern Rehabilitation*, 4, 1127-1129.

- Hazer, O., & Boylu, A. A. (2010). The examination of the factors affecting the feeling of loneliness of the elderly. *Procedia - Social and Behavioral Sciences*, 9, 2083-2089. <https://doi.org/10.1016/j.sbspro.2010.12.450>
- Heron, J. (1996). *Co-operative inquiry: Research into the human condition*. London, UK: Sage.
- Hillier, S. (1988). Women and population control in China: Issues of sexuality, power and control *Feminist Review*, 29, 101-113.
- Ho, E. (2006). Contemporary migration and settlement of Chinese migrants in New Zealand. In R. Hibbins & W. H. Chui (Eds.), *Experiences of transnational Chinese migrants in the Asia-Pacific* (pp. 41-58). New York, NY: Nova Science Publishers.
- Ho, E., & Bedford, R. (2008). Asian transnational families in New Zealand: Dynamics and challenges. *International Migration*, 46(4), 40-62.
- Ho, E., Lewin, J., & Muntz, M. (2010). *"I want to have my own small home": Ageing in place of older Chinese immigrants*. Wellington, New Zealand: Centre for Research, Evaluation and Social Assessment.
- Hodgetts, D., Drew, N., Sonn, C. C., Stolte, O., Nikora, N., & Curtis, C. (2010). *Social psychology and everyday life*. London, UK: Palgrave.
- Holmen, K., Ericsson, K., & Winblad, B. (2000). Social and emotional loneliness among non-demented and demented elderly people. *Archives of Gerontology and Geriatrics*, 31(3), 177-192. [https://doi.org/10.1016/s0167-4943\(00\)00070-4](https://doi.org/10.1016/s0167-4943(00)00070-4)
- Holmes, C. (2006). *Mixed(up) methods, methodology and interpretive frameworks*. Paper presented at the meeting of the Mixed Methods Conference, Cambridge, UK.
- Holroyd, E. A. (1998). *Chinese family caregivers: Dilemmas at the extremity of public and private obligations* (Unpublished doctoral thesis). University of Hong Kong, Pokfulam, Hong Kong SAR. [http://dx.doi.org/10.5353/th\\_b3123859](http://dx.doi.org/10.5353/th_b3123859)
- Hong, O. K. (1996). *Antecedents and health-related consequences of loneliness in older Korean immigrants*. (Unpublished doctoral thesis). The University of Nebraska, Lincoln, NE. Retrieved from <https://search-proquest-com.ezproxy.aut.ac.nz/pqdtglobal/docview/304296272/A5E19981C682448FPQ/2?accountid=8440>
- Hsu, Y. (2013). Feeling at home in Chinatown—Voices and narratives of Chinese monolingual seniors in Montreal. *Journal of International Migration and Integration*, 15(2), 331-347. <https://doi.org/10.1007/s12134-013-0297-1>
- Hu, H. C. (1944). The Chinese concepts of "face". *American Anthropologist*, 46, 45-64.
- Huang, Z. B., Neufeld, R. R., Likourezos, A., Breuer, B., Khaski, A., Milano, E., & Libow, L. S. (2003). Sociodemographic and health characteristics of older Chinese on admission to a nursing home: A cross-racial/ethnic study. *J Am Geriatr Soc*, 51(3), 404-409. <https://doi.org/10.1046/j.1532-5415.2003.51116.x>
- Hugman, R. (2000). East-West dialogue in social work for older people and their families. *Asia Pacific Journal of Social Work*, 10(1), 59-76.
- Hwang, K. K. (2012). Face and morality in Confucian Society. *Foundations of Chinese Psychology: Confucian Social Relations, International and Cultural Psychology* (pp 265-295). New York, US: Springer.
- Ife, J. (1997). *Rethinking social work: Toward critical practice*. South Melbourne, Australia: Longman.
- Immigration New Zealand. (2017). *Parent category questions and answers*. Retrieved August 21, 2017, from <https://www.immigration.govt.nz/about-us/media->

- Institute of Linguistics. (1978-2012). *5th modern Chinese dictionary*. Retrieved from <https://baike.baidu.com/item/%E7%8E%B0%E4%BB%A3%E6%B1%89%E8%AF%AD%E8%AF%8D%E5%85%B8%28%E7%AC%AC5%E7%89%88%29>
- Ip, D., Lui, C. W., & Chui, W. H. (2007). Veiled entrapment: A study of social isolation of older Chinese migrants in Brisbane, Queensland. *Ageing and Society*, 27(5), 719-738. <https://doi.org/10.1017/s0144686x07006083>
- Ip, L. K. R., & Chui, W. H. (2002). Resettlement experiences of five Chinese skilled women migrants to Australia. *Asian and Pacific Migration Journal*, 11(3), 333-355.
- Ip, M. Y., & Pang, D. (2005). New Zealand Chinese identity: Sojourners, model minority and multiple identities. In J. H. Liu, T. McCreanor, T. McIntosh, & T. Teaiwa (Eds.), *New Zealand identities: Departures and destinations*. Wellington, New Zealand: Victoria University of Wellington.
- Ishii-Kuntz, M. (1997). Intergenerational relationships among Chinese, Japanese, and Korean Americans. *Family Relations*, 46, 23-32.
- Ivankova, N., & Kawamura, Y. (2010). Emerging trends in the utilization of integrated designs in the social, behavioral, and health sciences. In A. Tashakkori & C. Teddlie (Eds.), *Sage handbook of mixed methods in social & behavioral research* (pp. 581-612). Thousand Oaks, CA: Sage.
- James, W. (1909). *The meaning of truth*. Retrieved from <https://www.gutenberg.org/files/5117/5117-h/5117-h.htm>
- Jamieson, H. A., Gibson, H. M., Abey-Nesbit, R., Ahuriri-Driscoll, A., Keeling, S., & Schluter, P. (2017). Profile of ethnicity, living arrangements and loneliness amongst older adults in Aotearoa New Zealand: A national cross-sectional study. *Australasian Journal on Ageing*, 37(1), 68-73. <https://doi.org/10.1111/ajag.12496>
- Ji, S. J. (2000). 'Face' and polite verbal behaviors in Chinese culture. *Journal of Pragmatics*, 32(7), 1059-1062.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 37(7), 14-26. <https://doi/10.3102/0013189X033007014>
- Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Towards a definition of mixed methods research. *Journal of Mixed Methods Research*, 1(2), 112-133. <http://doi/10.1177/1558689806298224>
- Johnson, S., Bacsu, J., McIntosh, T., Jeffery, B., & Novik, N. (2019). Social isolation and loneliness among immigrant and refugee seniors in Canada: A scoping review. *International Journal of Migration, Health and Social Care*, 15(3), 177-190. <https://doi.org/10.1108/IJMHS-10-2018-0067>
- Jones, D. A., Victor, C. R., & Vetter, N. J. (2009). The problem of loneliness in the elderly community: Characteristics of those who lonely and the factors related to loneliness. *Journal of the Royal College of General Practitioners*, 35(272), 136-139.
- Jones, M. A. (2014). *Participation for Aotearoa New Zealand children after traumatic brain injury: An integrated approach*. (Unpublished doctoral thesis). Auckland University of Technology, Auckland, New Zealand.
- Katherine, C., & Saissy, M. D. (2009). Acculturation, self-efficacy and social support among Chinese immigrants in Northern Ireland. *International Journal of*



- Intercultural Relations*, 33(4), 291-300.  
<https://doi.org/10.1016/j.ijintrel.2009.04.002>
- Kawachi, I., Kim, D., Coutts, A., & Subramanian, S. V. (2004). Commentary: Reconciling the three accounts of social capital. *International Journal of Epidemiology*, 33(2004), 682-690. <https://doi.org/10.1093/ije/dyh177>
- Kemmis, S. (2008). Critical theory and participatory action research. In P. Reason & H. Bradbury (Eds.), *Handbook of action research* (2nd ed., pp. 121-139). Thousand Oaks, CA: Sage.
- Kemmis, S., McTaggart, R., & Nixon, R. (2014). *The action research planner*. Singapore: Springer.
- Kim, J. S., & Lee, E. H. (2003). Cultural and noncultural predictors of health outcomes in Korean daughter and daughter-in-law caregivers. *Public Health Nursing*, 20(2), 111-119. <https://doi.org/10.1046/j.1525-1446.2003.20205.x>
- Kim, O. (1999). Predictors of loneliness in elderly Korean immigrant women living in the United States of America. *Journal of Advanced Nursing*, 29(5), 1082-1088. <https://doi.org/10.1046/j.1365-2648.1999.00993.x>
- Kleinman, A. (1996). Sociosomatics: How the social world affects bodily processes. *Psychiatria et Neurologia Japonica*, 98(8), 523-532.
- Kleinman, A. (1998). Experience and its moral modes: Culture, human conditions, and disorder. In G. B. Peterson (Ed.), *The Tanner lectures on human values* (pp. 357-420). Salt Lake City, UT: University of Utah Press.
- Kleinman, A. (2010). Four social theories for global health. *The Lancet*, 375(9725), 1518-1519. [https://doi.org/10.1016/S0140-6736\(10\)60646-0](https://doi.org/10.1016/S0140-6736(10)60646-0)
- Kleinman, A., & Kleinman, J. (1991). Suffering and its professional transformation. *Culture, Medicine and Psychiatry*, 15(3), 175-173-171.
- Kleinman, A., & Kleinman, J. (1993). Face, favor and families: The social course of mental health problems in Chinese and American societies. *Chinese Journal of Mental Health*, 6, 37-47.
- Kleinman, A., & Kleinman, J. (1997). Moral transformation of health and suffering in Chinese society. In A. M. Brandt, Rozin, P. (Ed.), *Morality and Health* (pp. 109-119). New York, NY: Routledge.
- Kleinman, A., Yunxiang, Y., Jing, J., Sing, L., & Zhang, E. (2011). *Deep China: The moral life of the person, what anthropology and psychiatry tell us about China today*. Berkeley, CA: University of California Press.
- Koren, C. (2014). Together and apart: A typology of re-partnering in old age. *International Psychogeriatrics*, 26(8), 1327-1350. <https://doi.org/10.1017/S1041610214000738>.
- Krause, N. (2002). Church-based social support and health in old age; exploring variations by race. *Journal of Gerontology B Psychological Sciences and Social Sciences*, 57(6), S332-S347. <https://doi.org/10.1093/geronb/57.6.S332>
- Kuhn, T. S. (1970). *The structure of scientific revolutions* (2<sup>nd</sup> ed.). Chicago, IL: University of Chicago press.
- Kwong, E. W., & Kwan, A. Y. (2004). Stress-management methods of the community-dwelling elderly in Hong Kong: Implications for tailoring a stress-reduction program. *Geriatric Nursing*, 25(2), 102-106. <https://doi.org/10.1016/j.gerinurse.2004.02.007>
- Lai, D. W. L. (2010). Filial piety, caregiving appraisal, and caregiving burden. *Research on Aging*, 32(2). <https://doi.org/10.1177/0164027509351475>

- Lai, D. W. L., & Chau, B. Y. (2007). Predictors of health services barriers for older Chinese immigrants in Canada. *Health & Social Work, 32*(1), 57-65.  
<https://doi.org/10.1093/hsw/32.1.57>
- Langlois, S., Goudreau, J., & Lalonde, L. (2014). Scientific rigour and innovations in participatory action research investigating workplace learning in continuing interprofessional education. *Journal of Interprofessional Care, 28*(3), 226-231.  
<https://doi.org/10.3109/13561820.2014.885003>
- Lau, S., & Gruen, G. E. (1992). The social stigma of loneliness: Effect of target person's and perceiver's sex. *SAGE Social Science Collections, 18*(2), 182-189.
- Lawton, M. P., & Brody, E. M. (1969). Assessment of older people: Self-maintaining and instrumental activities of daily living. *Gerontologist, 9*, 179-186.
- Lee, W. K. (2004). Living arrangements and informal support for the elderly: alteration to intergenerational relationships in Hong Kong. *Journal of Intergenerational Relationships, 2*(2), 27-49. [https://doi.org/10.1300/J194v02n02\\_03](https://doi.org/10.1300/J194v02n02_03)
- Legge, J. (1960). The Chinese classics. In *The works of Mencius* (Vol. 2). Hong Kong: Hong Kong University Press.
- Leung, G. T., de Jong Gierveld, J., & Lam, L. C. (2008). Validation of the Chinese translation of the 6-item De Jong Gierveld Loneliness Scale in elderly Chinese. *International Psychogeriatrics, 20*(6), 1262-1272.  
<https://doi.org/10.1017/S1041610208007552>
- Leung, K. (1987). Some determinants of reactions to procedural models for conflict resolution: A crossnational study. *Journal of Personality of Social Psychology, 53*(5), 898-908.
- Li, S. Y., & Lin, S. L. (2016). Population aging and China's social security reforms. *Journal of Policy Modelling, 38*(1), 65-95.  
<https://doi.org/10.1016/j.jpolmod.2015.10.001>
- Li, W. W. (2011). Filial piety, parental piety and community piety: Changing cultural practices of elder support among Chinese migrants' families in New Zealand. *Journal of Multicultural Society, 2*, 1-30.
- Li, W. W. (2012). Art in health and identity: Visual narratives of older Chinese immigrants to New Zealand. *Arts & Health, 4*(2), 109-123.  
<https://doi.org/10.1080/17533015.2011.584886>
- Li, W. W., Hodgetts, D., & Ho, E. (2010). Gardens, transitions and identity reconstruction among older Chinese immigrants to New Zealand. *Journal of Health Psychology, 15*(5), 786-796.  
<https://doi.org/10.1177/1359105310368179>
- Lin, H., Zhang, T. H., Tang, H., Wang, C. B., Liu, N., & Zhang, X. P. (2002). Analysis of influential factors of activities of daily life of the elderly. *The Chinese Health Service Management, 18*, 495-497.
- Lin, X., Bryant, C., Boldero, J., & Dow, B. (2016). Psychological well-being of older Chinese immigrants living in Australia: A comparison with older Caucasians. *International Psychogeriatrics, 28*(10), 1671-1679.  
<https://doi.org/10.1017/S1041610216001010>
- Lin, X. P., Bryant, C., Boldero, J., & Dow, B. (2015). Older Chinese immigrants' relationships with their children: A literature review from a solidarity-conflict perspective. *Gerontologist, 55*(6), 990-1005.  
<https://doi.org/10.1093/geront/gnu004>
- Lincoln, Y. S., Lynham, S. A., & Guba, E. G. (2011). Paradigmatic controversies, contradictions and emerging confluences, revisited. In N. K. Denzin & Y. S.

- Lincoln (Eds.), *The Sage handbook of qualitative research* (pp. 97-128). Thousand Oaks, CA: Sage.
- Liu, D., Hinton, L., Tran, C., Hinton, D., & Barker, J. C. (2008). Reexamining the relationships among dementia, stigma, and aging in immigrant Chinese and Vietnamese family caregivers. *Journal of Cross Cultural Gerontology*, 23, 283-299. <https://doi.org/10.1007/s10823-008-9075-5>
- Liu, L. N. S. (2011). New Zealand case study of PRC transnational migration: Returnees and Trans-Tasman migrants. In Manying IP (Ed.), *Transmigration and the New Chinese: Theories and practices from the New Zealand experience* (pp. 57-101). Hong Kong: Centre of Asian Studies, the University of Hong Kong.
- Liu, W.L. (2013). The Three Cardinal Guides and the Five Constant Virtues" and the Culture Codes-The relationships reflected in Chinese characters between emperor and minister, father and son, husband and wife. *Journal of Inner Mongolia Normal University (Philosophy and Social Sciences Edition)*. 3, 12-13.
- Lo, M. H., & Russell, C. (2007). Family care: An exploratory study of experience and expectations among older Chinese immigrants in Australia. *Contemporary Nurse*, 25(1-2), 31-38. <https://doi.org/10.5172/conu.2007.25.1-2.31>
- López, M. J., Lapena, C., Sánchez, A., Continente, X., & Fernández, O. (2019). Community intervention to reduce social isolation in older adults in disadvantaged urban areas: Study protocol for a mixed methods multi-approach evaluation. *BMC Geriatrics*, 19(44). <https://doi.org/10.1186/s12877-019-1055-9>
- Lou, V. W. Q., & Ng, J. W. (2012). Chinese older adults' resilience to the loneliness of living alone: A qualitative study. *Aging & Mental Health*, 16(8), 1039-1046. <https://doi.org/10.1080/13607863.2012.692764>
- Luanaigh, C., & Lawlor, B. A. (2008). Loneliness and the health of older people. *International Journal of Geriatric Psychiatry*, 23(12), 1212-1221. <https://doi.org/10.1002/gps.2054>
- Mackinnon, M. E., Gien, L., & Durst, D. (1996). Chinese elders speak out: Implications for caregivers. *Clinical Nursing Research*, 5, 326-342. <https://doi.org/10.1177/105477389600500307>
- Matsudaira, T. (2003). Cultural influences on the use of social support by Chinese immigrants in Japan: "Face" as a keyword. *Qualitative Health Research*, 13(3), 343-357. <https://doi.org/10.1177/1049732302250130>
- Maxwell, J. A., & Mittapali, K. (2010). Realism as a stance for mixed methods work. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 193-215). Thousand Oaks, CA: Sage.
- McNiff, J., & Whitehead, J. (2011). *All you need to know about action research* (2<sup>nd</sup> ed.). Thousand Oak, CA: Sage.
- Meis, M. (1985). Loneliness in the elderly. *Orthopedic Nursing*, 4, 63-66.
- Meng, X., & Gregory, R. G. (2002). The impact of interrupted education on subsequent educational attainment: A cost of the Chinese Cultural Revolution. *TEconomic Development and Cultural Change*, 50(4), 935-959. <https://doi.org/10.1086/342761>
- Mertens, D. M. (2007). Transformative paradigm: Mixed methods and social justice. *Journal of Mixed Methods Research*, 1(3), 212-225. <https://doi.org/10.1177/1558689807302811>
- Mertens, D. M., Bledsoe, K. L., Sullivan, M., & Wilson, A. (2010). Utilization of mixed methods for transformative purposes. In A. Tashakkori & C. Teddlie (Eds.),

- Handbook of mixed methods in social and behavioral research* (pp. 193-215). Thousand Oaks, CA: Sage.
- Ministry of Health. (2017). *Summary of public consultation on the update of the Health of Older People Strategy*. Wellington, New Zealand: Author.
- Ministry of Social Development. (2016). *The Social Report 2016: Te Purongo Oranga Tangata*. Wellington, New Zealand: Author.
- Ministry of Social Development. (2019a). *Demand for housing*. Retrieved August 16, 2019, from <https://www.msd.govt.nz/about-msd-and-our-work/work-programmes/social-housing/demand-for-housing.html>
- Ministry of Social Development. (2019b). *Public housing*. Retrieved August 1, 2019, from <http://housing.msd.govt.nz/housing-options/social-housing/index.html>
- Minkler, M. (2000). Using participatory research to build healthy communities. *Public Health Reports*, 115(2-3), 191-197. <https://doi.org/10.1093/phr/115.2.191>
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & Group., T. P. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PloS Med*, 6(7), e1000097. <https://doi.org/10.1371/journal.pmed.1000097>
- Montayre, J., Neville, S., & Holroyd, E. (2017). Moving backwards and moving forward: The experiences of older Filipino migrants adjusting to life in New Zealand. *International Journal of Qualitative Studies on Health and Well-Being*, 12. <https://doi.org/10.1080/17482631.2017.13470>
- Montayre, J., Neville, S., Wright-St Clair, V., Holroyd, E., & Adams, J. (2018). Late-life living and care arrangements of older Filipino New Zealanders. *Journal of Clinical Nursing*, 28(3-4), 480-488. <https://doi.org/10.1111/jocn.14625>
- Morgan, T., Wiles, J., Moeke-Maxwell, T., Black, S., Park, H. J., Dewes, O., . . . Gott, M. (2019). 'People haven't got that close connection': meanings of loneliness and social isolation to culturally diverse older people. *Ageing & Mental Health*, 1-9. <https://doi.org/10.1080/13607863.2019.1633619>
- Motahari, A. A., & Rahgozar, S. (2011). Inhibitory role of emotional intelligence in committing suicide. *Indian Journal of Science and Technology*, 4(11), 1561-1566. <https://doi.org/10.17485/ijst/2011/v4i11/30293>
- Mui, A. C., Kang, S. Y., Kang, D., & Domanski, M. D. (2007). English language proficiency and health-related quality of life among Chinese and Korean immigrant eElders. *Health & Social Work*, 32(2), 119-127. <https://doi.org/10.1093/hsw/32.2.119>
- Nagarkar, A., & Kashikar, Y. (2017). Predictors of functional disability with focus on activities of daily living: A community based follow-up study in older adults in India. *Archives of Gerontology and Geriatrics*, 69, 151-155. <https://doi.org/10.1016/j.archger.2016.11.015>
- Nicholson, N. R. (2012). A review of social isolation: An important but underassessed condition in older adults. *Journal of Primary Prevention*, 33(2-3), 137-152. <https://doi.org/10.1007/s10935-012-0271-2>
- Nuyen, A. T. (2004). The contemporary relevance of the Confucian idea of filial piety. *Journal of Chinese Philosophy*, 31(4), 433-450. <https://doi.org/10.1111/j.1540-6253.2004.00164.x>
- O'cathain, A., Murphy, E., & Nicholl, J. (2008). The quality of mixed methods studies in health services research. *Journal of Health Services Research & Policy*, 13(2), 92-98. <https://doi.org/10.1258/jhsrp.2007.007074>
- Oetzel, J., Ting-Toomey, S., Masumoto, T., & Yokochi, Y. (2001). Face and facework in conflict: A cross-cultural comparison of China, Germany, Japan, and the United

- States. *Communication Monographs*, 68(3), 235-258.  
<https://doi.org/10.1080/03637750128061>
- Office for Senior Citizens. (2015). *2014 Report on the Positive Ageing Strategy*. Wellington, New Zealand: Author.
- Onwuegbuzie, A. J., Collins, K. M. T., & Frels, R. K. (2013). Towards a new research philosophy for addressing social justice issues: Critical dialectical pluralism 1.0. *International Journal of Multiple Research Approaches*, 7(1), 9-26.  
<https://doi.org/10.5172/mra.2013.7.1.9>
- Peplau, L. A., & Perlman, D. (1982). Perspectives on loneliness. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A source book of current theory, research and therapy* (pp. 1-18). New York, NY: Wiley
- Petermann, S., & Schonwalder, K. (2014). Immigration and social interaction. *European Societies*, 16(4), 500-5221. <https://doi.org/10.1080/14616696.2013.865064>
- Piro, F. N., Noss, O., & Claussen, B. (2006). Physical activity among elderly people in a city population: The influence of neighbourhood level violence and self perceived safety. *Journal of Epidemiology and Community Health*, 60(7), 626-632. <https://doi.org/10.1136/jech.2005.042697>
- Pitkala, K. H., Routasalo, P., Kautiainen, H., & Tilvis, R. (2009). Effects of psychosocial group rehabilitation on health, use of health care services, and mortality of older persons suffering from loneliness: A randomized, controlled trial. *Journal of Gerontology A: Biological Sciences and Medical Sciences*, 64(7), 792-800.  
<https://doi.org/10.1093/gerona/glp011>
- Ran, L., Jiang, X., Li, B., Kong, H., Du, M., Wang, X., . . . Liu, Q. (2017). Association among activities of daily living, instrumental activities of daily living and health-related quality of life in elderly Yi ethnic minority. *BMC Geriatrics*, 17(1), 74.  
<https://doi.org/10.1186/s12877-017-0455-y>
- Reason, P., & Bradbury, H. (2008). *Sage handbook of action research: Participative inquiry and practice* (2nd ed.). London, UK: Sage.
- Roberto, L. F., & Arthur, K. (1994). Culture, personality, and psychopathology. *Journal of Abnormal Psychology*, 103(1), 67-71.
- Ronald, A. J., Jacqueline, A. L., Lee, G.-Y., & Kyriakos, M. S. (1999). Age at migration and family dependency among older Mexican immigrants: Recent evidence from the Mexican American EPESE. *The Gerontologist*, 39(1), 59-65.  
<https://doi.org/10.1093/geront/39.1.59>
- Ross, F., Donovan, S., Brearley, S., Victor, C., Cottee, M., Crowther, P., & Clark, E. (2005). Involving older people in research: methodological issues. *Health and Social Care in the Community*, 13(3), 268-275. <https://doi.org/10.1111/j.1365-2524.2005.00560.x>
- Rote, S., Hill, T. D., & Ellison, C. G. (2012). Religious attendance and loneliness in later life. *The Gerontologist*, 53(1), 39-50. <https://doi.org/10.1093/geront/gns063>
- Ryan, M. C. (1998). The relationship between loneliness, social support, and decline in cognitive function in the hospitalized elderly. *Journal of Gerontological Nursing*, 24(3), 19-27.
- Sale, J., & Brazil, K. A. (2004). A strategy to identify critical appraisal criteria for primary mixed method studies. *Quality and Quantity*, 38(4), 351-365.  
<https://doi.org/10.1023/b:ququ.0000043126.25329.85>
- Sandelowski, M. (1995). Qualitative analysis: What it is and how to begin. *Research in Nursing and Health*, 18(4), 371-375. <https://doi.org/10.1002/nur.4770180411>



- Sandelowski, M. (2000). Whatever happened to qualitative description? *Research in Nursing and Health*, 23, 334-340. [https://doi.org/10.1002/1098-240X\(200008\)23:4<334::AID-NUR9>3.0.CO;2-G](https://doi.org/10.1002/1098-240X(200008)23:4<334::AID-NUR9>3.0.CO;2-G)
- Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., . . . Jinks, C. (2018). Saturation in qualitative research: Exploring its conceptualization and operationalization. *Quality and Quantity*, 52, 1893-1907. <https://doi.org/10.1007/s11135-017-0574-8>
- Schwartz, S. J., Unger, J. B., Zamboanga, B. L., & Szapocznik, J. (2010). Rethinking the concept of acculturation: Implications for theory and research. *American Psychologist*, 65(4), 237-251. <https://doi.org/10.1037/a0019330>
- Shank, K. H. (2013). Mixed methods and pragmatism for research on occupation. In M. P. Cutchin & V. A. Dickie (Eds.), *Transactional perspective on occupation* (pp. 183-198). New York, NY: Springer.
- Shankar, A., McMunn, A., Demakakos, P., Hamer, M., & Steptoe, A. (2017). Social isolation and loneliness: Prospective associations with functional status in older adults. *Health and Psychology*, 36(2), 179-187. <https://doi.org/10.1037/hea0000437>
- Sheikholeslami, F., Masole, S. R., Rafati, P., Vardanjani, S. A. E., Talami, M. A. Y., & Khodadadi, N. (2012). The relationship between the religious beliefs and the feeling of loneliness in elderly. *Indian Journal of Science and Technology*, 5(3), 2411-2416.
- Simon, M. A., Chang, E. S., Zhang, M., Ruan, J., & Dong, X. (2014). The prevalence of loneliness among U.S. Chinese older adults. *Journal of Aging and Health*, 26(7), 1172-1188. <https://doi.org/10.1177/0898264314533722>
- Smith, J. K. (1983). Quantitative versus qualitative research: An attempt to clarify the issue. *Educational Researcher*, 12, 6-13.
- Spoonley, P. (2013). New Zealand, migration 19th century to the present. *The Encyclopedia of Global Human Migration*. <https://doi.org/10.1002/9781444351071.wbeghm391>
- Stanley, M. (2015). Qualitative description: A very good place to start. In S. Nayar & M. Stanley (Eds.), *Qualitative research methodologies in occupational science and therapy* (pp. 21-36). Oxon, UK: Routledge.
- Statistics New Zealand. (2009). *New Zealand General Social Survey: 2008*. Retrieved from [www.stats.govt.nz](http://www.stats.govt.nz).
- Statistics New Zealand. (2011). *New Zealand General Social Survey: 2010*. Retrieved from [www.stats.govt.nz](http://www.stats.govt.nz).
- Statistics New Zealand. (2013a). *2013 Census of population and dwellings*. Retrieved February 19, 2016, from <http://www.stats.govt.nz>
- Statistics New Zealand. (2013b). *Languages spoken (total responses) by birthplace (broad geographic area), for the census usually resident population count, 2001, 2006, and 2013 Censuses (RC, TA, AU)*. Retrieved June 23, 2017, from <http://nzdotstat.stats.govt.nz/wbos/>
- Statistics New Zealand. (2015). *2013 Census QuickStats about people aged 65 and over*. Wellington, New Zealand: Author. Retrieved from <http://www.stats.govt.nz>
- Statistics New Zealand. (2016a). *2016 Census of population and dwellings*. Retrieved February 19, 2016, from <http://www.stats.govt.nz/searchresults.aspx?q=2013%20Census%20of%20Population%20and%20Dwellings>

- Statistics New Zealand. (2016b). *New Zealand General Social Survey (GSS) – information for participants*. Retrieved November 2, 2017, from <http://www.stats.govt.nz/survey-participants/a-z-of-our-surveys/general-social-survey.aspx>
- Statistics New Zealand. (2016c). *New Zealand General Social Survey: 2014*. Retrieved October 4, 2017, from <http://nzdotstat.stats.govt.nz>
- Statistics New Zealand. (2019). *2018 Census totals by topic – national highlights*. Retrieved November 21, 2019, from <https://www.stats.govt.nz/information-releases/2018-census-totals-by-topic-national-highlights>
- Staudinger, U., Marsiske, M., & Baltes, P. (1993). Resilience and levels of reserve capacity in later adulthood: Perspectives from life-span theory. *Development and Psychopathology*, 5(4), 541-566.  
<https://doi.org/10.1017/S0954579400006155>
- Stauffer, J. (2015). *Ethical loneliness: The justice of not being heard*. New York, NY: Columbia University Press.
- Steffen, D. C. (2007). Spiritual consideration in suicide and depression among the elderly. *Southern Medical Association* 100(7), 211-219.  
<https://doi.org/10.1097/SMJ.0b013e318073c7c6>
- Stephens, C., Alpass, F., Towers, A., & Stevenson, B. (2011). The effects of types of social networks, perceived social support, and loneliness on the health of older people: Accounting for the social context. *Journal of Aging and Health*, 23(6), 887-911. <https://doi.org/10.1177/0898264311400189>
- Step toe, A., Shankar, A., Demakakos, P., & Wardle, J. (2013). Social isolation, loneliness, and all-cause mortality in older men and women. *Proceedings of the National Academy of the Sciences of the United States of America*, 110(15), 5797-5801.  
<https://doi.org/10.1073/pnas.1219686110>
- Stewart, M., Shizha, E., Makwarimba, E., Spitzer, D., Khalema, E. N., & Nsaliwa, C. D. (2011). Challenges and barriers to services for immigrant seniors in Canada: “You are among others but you feel alone”. *International Journal of Migration, Health and Social Care*, 7(1), 16-32.  
<https://doi.org/10.1108/17479891111176278>
- Sturgis, P., Patulny, R., Allum, N., & Buscha, F. (2015). Social connectedness and generalized trust: A longitudinal perspective. In Y. J. Li (Ed.), *Handbook of research methods and applications in social capital* (pp. 76-90). Cheltenham, UK: Edward Elger Publishing.
- Suh, E. E., Kagan, S., & Strumpf, N. (2009). Cultural competence in qualitative interview methods with Asian immigrants. *Journal of Transcultural Nursing*, 20(2), 194-201. <https://doi.org/10.1177/1043659608330059>
- Sun, C. T.-L. (2008). *Themes in Chinese psychology*. Singapore: Cengage Learning Asia.
- Sung, K. T. (2001). Elder respect: Exploration of ideals and forms in East Asia. *Journal of Aging Studies*, 15(1), 13-16. [https://doi.org/10.1016/S0890-4065\(00\)00014-1](https://doi.org/10.1016/S0890-4065(00)00014-1)
- Tang, A. (2017). *What are the experiences of older Mandarin-speaking migrants in Auckland when accessing health and support services in New Zealand?* Auckland, New Zealand: Auckland University of Technology.
- Tang, S., & Chow, A. Y. M. (2017). How do risk factors affect bereavement outcomes in later life? An exploration of the mediating role of dual process coping. *Psychiatry Research*, 255, 297-303.  
<https://doi.org/10.1016/j.psychres.2017.06.001>

- Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.
- Tashakkori, A., & Teddlie, C. (2003). *Handbook of mixed methods in social & behavioral research*. Thousand Oaks, CA: Sage.
- Taube, E., Jakobsson, U., Midlov, P., & Kristensson, J. (2015). Being in a bubble: The experience of loneliness among frail older people. *Journal of Advanced Nursing* 72, 631-640. <https://doi.org/10.1111/jan.12853>
- Teddlie, C., & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Thousand Oaks, CA: Sage.
- Teddlie, C., & Tashakkori, A. (2011). Mixed methods research: Contemporary issues in an emerging field. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (4<sup>th</sup> ed., pp. 285-300). Los Angeles, CA: Sage.
- Terry, G., Hayfield, N., Clarke, V., & Braun, V. (2017). Thematic analysis. In C. Willig & W. S. Rogers (Eds.), *The SAGE handbook of qualitative research in psychology* (Chapt. 2). London, UK: Sage.
- The Office for Seniors. (2019). *Better later life-He oranga kaumatua 2019 to 2034*. Wellington, New Zealand: Author. Retrieved from [www.superseniors.msd.govt.nz](http://www.superseniors.msd.govt.nz)
- The WHOQOL Group. (1998). Development of the world health organization WHOQOL-BREF quality of life assessment. *Psychology Medicine*, 28, 551-558. <https://doi.org/10.1017/s0033291798006667>
- Tong, H. M., Lai, D. W. L., Zeng, Q., & Xu, W. Y. (2011). Effects of social exclusion on depressive symptoms: Elderly Chinese living alone in Shanghai, China. *Journal of Cross-Cultural Gerontology*, 26(4), 349-364. <https://doi.org/10.1007/s10823-011-9150-1>
- Travers, K. D. (1997). Reducing inequities through participatory research and community empowerment. *Health Education & Behaviour*, 24(3), 344-356. <https://doi.org/10.1177/109019819702400307>
- Treas, J., & Batlova, J. (2009). Immigrants and aging. In P. Uhlenberg (Ed.), *International handbook of population aging*. (pp. 365-394). Chapel Hill, NC: Springer.
- Tsai, D. T., & Lopez, R. A. (1998). The use of social supports by elderly Chinese immigrants. *Journal of Gerontological Social Work*, 29(1), 77-94. [https://doi.org/10.1300/J083v29n01\\_06](https://doi.org/10.1300/J083v29n01_06)
- United Nations Economic Commission for Europe (UNECE). (2003). The loneliness of the elderly. *Bulleting of the Ageing*, 3.
- Victor, C. R., Burholt, V., & Martin, W. (2012). Loneliness and ethnic minority elders in Great Britain: An exploratory study. *Journal of Cross Cultural Gerontology*, 27(1), 65-78. <https://doi.org/10.1007/s10823-012-9161-6>
- Wallerstein, N. (2006). Using community-based participatory research to address health disparities. *Health Promotion Practice*, 7(3), 312-323. <https://doi.org/10.1177/1524839906289376>
- Wallerstein, N. (2010). Community-based participatory research contributions to intervention research: The intersection of science and practice to improve health equity. *American Journal of Public Health*, 100(S1), S40-S46. <https://doi.org/10.2105/AJPH.2009.184036>
- Wallerstein, N., & Duran, B. (2008). The theoretical, historical, and practice roots of CBPR. In M. Minkler & N. Wallerstein (Eds.), *Community-based participatory*



- research for health: From process to outcomes* (Chapter. 2). San Francisco, CA: Jossey-Bass.
- Walsh, K., Scharf, T., & Keating, N. (2017). Social exclusion of older persons: a scoping review and conceptual framework. *European Journal of Ageing*, 14, 81-98. <https://doi.org/10.1007/s10433-018-0483-2>
- Walters, W. H. (2002). Later-life migration in the United States: A review of recent research. *Journal of Planning Literature*, 17(1), 37-66. <https://doi.org/10.1177/088541220201700103>
- Wang, S., & Kim, B. S. K. (2010). Therapist multicultural competence, Asian American participants' cultural values, and counselling process. *Journal of Counselling Psychology*, 57(4), 394-401. <https://doi.org/10.1037/a0020359>
- Ward, C., & Lin, E. Y. (2005). Immigration, acculturation and national identity. In T. M. Liu, T. McIntosh, & T. Teaiwa (Eds.), *New Zealand Identities: Departures and destinations* (pp. 155-173). Wellington, New Zealand: New Zealand: Victoria University Press.
- Weiss, R. S. (1973). *Loneliness: The experience of emotional ad social isolation*. Cambridge, MA: MIT Press.
- Whittemore, R., Chase, S. K., & Mandle, C. L. (2011). Validity in quality research. *Qualitative Health Research*, 11(4), 522-537. <https://doi.org/10.1177/104973201129119299>
- Wilson, R. S., Krueger, K. R., Arnold, S. E., Schneider, J. A., Kelly, J. F., & Barnes, L. L. (2007). Loneliness and risk of Alzheimer's disease. *Archives of General Psychiatry*, 64(2), 234-240. <https://doi.org/10.1001/archpsyc.64.2.234>
- Wittink, M. N., Barg, F. K., & Gallo, J. J. (2006). Unwritten rules of talking to doctors about depression: Integrating qualitative and quantitative methods. *Annals of Family Medicine*, 4(4), 302-309. <https://doi.org/10.1370/afm.558>
- Wong, A. (2015). *Challenges for Asian health and Asian health promotion in New Zealand*. Auckland, New Zealand: Auckland Health Promotion Forum of New Zealand
- Wong, A., Chau, A. K. C., Fang, Y., & Woo, J. (2017). Illuminating the psychological experience of elderly loneliness from a societal perspective: A qualitative study of alienation between older people and society. *International Journal of Environmental Research and Public Health*, 14(7), 824. <https://doi.org/10.3390/ijerph14070824>
- Wong, R. (2001). International migration in old age: Migration and socioeconomic conditions in the older age groups. *Demos*, 14, 16-17.
- Wong, S. T., Yoo, G., & Stewart, A. (2005). Examining types of social support and actual sources of support in older Chinese and Korean immigrants. *International Journal of Health and Human Development*, 61(2), 105-121. <https://doi.org/10.2190/AJ62-QQKT-YJ47-B1T8>
- Work and Income. (2019). *Social security agreements and special arrangements with Pacific countries*. Retrieved August 24, 2019, from <https://www.workandincome.govt.nz/pensions/travelling-or-moving/social-security-agreements/index.html>
- World Health Organization. (1996). *WHOQOL-BREF introduction, administration, scoring and generic version of the assessment*. Geneva, Switzerland: Author.
- World Health Organization. (2001). *International classification of functioning disability and health. ICF*. Retrieved from [http://psychiatr.ru/download/1313?view=name=CF\\_18](http://psychiatr.ru/download/1313?view=name=CF_18). pdf.

- World Health Organization. (n.d.). *WHOQOL: Measuring quality of life*. Retrieved July 24, 2017, from <http://www.who.int/healthinfo/survey/whoqol-qualityoflife/en/>
- Wright-St Clair, V. A., & Nayar, S. (2016). Older Asian immigrants' participation as cultural enfranchisement. *Journal of Occupational Science*, 24(1), 64-75. <https://doi.org/10.1080/14427591.2016.1214168>
- Wright-St Clair, V. A., & Nayar, S. (2019). Resettling amidst a mood of loneliness: Later-life Chinese, Indian and Korean immigrants in New Zealand. *Ageing & Society*, 1-17. <https://doi.org/10.1017/S0144686X19000655>
- Wright-St Clair, V. A., Neville, S., Forsyth, V., White, L., & Napier, S. (2017). Integrative review of older adult loneliness and social isolation in Aotearoa/New Zealand. *Australasian Journal of Ageing*, 36(2), 114-123. <https://doi.org/10.1111/ajag.12379>
- Wu, Z., & Penning, M. (2013). Immigration and loneliness in later life. *Ageing and Society*, 35(01), 64-95. <https://doi.org/10.1017/s0144686x13000470>
- Xiao, S. Y. (1994). Theoretical basis and clinical application of Social Support Rating Scale (SSRS). *Journal of Clinical Psychiatry*, 4(2), 98-100.
- Yang, K. S., Hwang, K. K., Pedersen, P., & Baibo, I. (2003). Progress in Asian Social Psychology: conceptual and empirical contributions. *The Academy of Management Review*, 29(3), 518-520.
- Yang, K. S., & Yeh, K. H. (1995). Psychological research on filial piety: Theories, methods and findings. In K. S. Yang & C. F. Yang (Eds.), *Chinese people, Chinese heart: Traditions*. Taipei: Yuan Li Publishing.
- Yang, L. H., & Kleinman, A. (2008). 'Face' and the embodiment of stigma: Schizophrenia and AIDS in China. *Social Science & Medicine*, 67(3), 398-408. <https://doi.org/10.1016/j.socscimed.2008.03.011>
- Yang, L. H., Kleinman, A., Link, B. G., Phelan, J. C., Lee, S., & Good, B. (2007). Culture and stigma: Adding moral experience to stigma theory. *Social Science & Medicine*, 64(7), 1524-1535. <https://doi.org/10.1016/j.socscimed.2006.11.013>
- Yee Hong Centre for Geriatric Care. (2013). *The changing needs of Chinese seniors in the greater Toronto area*. Retrieved June 25, 2017, from [http://www.yeehong.com/centre/eLibrary/Needs\\_Study\\_Report.html](http://www.yeehong.com/centre/eLibrary/Needs_Study_Report.html)
- Yeh, K. H. (1999). Parent-child conflicts and filial piety: A preliminary study in Taiwan. *Third Conference of the Asian Association for Social Psychology, held in Academia Sinica, Taipei, Taiwan on August, 4-7*.
- Yeh, K. H., Yi, C. C., & Tsao, W. C. Filial piety in contemporary Chinese societies: A comparative study of Taiwan, Hong Kong, and China. *International Sociology*, 28 (3), 277-296.
- Yeh, K. H., & Bedford, O. (2004). Filial belief and parent-child conflict. *International Journal of Psychology*, 39(2), 132-144. <https://doi.org/10.1080/00207590344000312>
- Yu, Z., Gu, Y., Xiao, S., Hu, M., & Zhou, L. (2017). Association between loneliness and risks of depressive episode among rural older people. *Zhong Nan Da Xue Xue Bao Yi Xue Ban*, 42(3), 298-302. <https://doi.org/10.11817/j.issn.1672-7347.2017.03.010>
- Yung, J. W. (2018). *Participatory action research with Chinese co-researchers who have serious mental illness diagnoses*. (Unpublished doctoral thesis). Columbia University, New York, NY.

- Zachariadis, M., Scott, S., & Barrett, M. (2013). Methodological implications of critical realism for mixed methods research. *MIS Quarterly*, 37, 855-879.  
<https://doi.org/10.25300/MISQ/2013/37.3.09>
- Zhang, J. (2014). Elderly Chinese migrants, intergenerational reciprocity, and quality of life. *New Zealand Sociology*, 29(2), 11-30.
- Zhang, Y. B., Harwood, J., & Hummert, M. L. (2005). Perceptions of conflict management styles in Chinese intergenerational dyads. *Communication Monographs*, 72(1), 71-91. <https://doi.org/10.1080/0363775052000342535>
- Zhao, Y., Hu, C., Feng, F., Gong, F., Lu, S., Qian, Z., & Sun, Y. (2017). Associations of self-neglect with quality of life in older people in rural China: A cross-sectional study. *International Psychogeriatrics*, 29(6), 1015-1026.  
<https://doi.org/10.1017/S1041610217000229>
- Zhu, Z. Q. (1927). Moonlight of the Lotus Pond. In *Zhu Zi Qing San Wen Jing Xuan* (pp. 51). Beijing, China: Nanjing University.

## Glossary

Glossary	Definition
Kiwi	The nickname used internationally for people from New Zealand, as well as being a relatively common self-reference. The name derives from the kiwi, a native flightless bird, which is a national symbol of New Zealand (Dictionary,1995).

## Appendices

### Appendix A: AUTECH approval for Phase One of the research on 20 June 2017 - reference 17/55



**AUTECH Secretariat**  
Auckland University of Technology  
D-88, WJ406 Level 4 WJ Building City Campus  
T: +64 9 921 9999 ext. 8316  
E: [ethics@aut.ac.nz](mailto:ethics@aut.ac.nz)  
[www.aut.ac.nz/researchethics](http://www.aut.ac.nz/researchethics)

20 June 2017  
Valerie Wright-St Clair  
Faculty of Health and Environmental Sciences

Dear Valerie

Re Ethics Application: **17/55 Identifying and reducing loneliness among older Chinese immigrants in New Zealand**

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTECH).

Your ethics application has been approved for three years until 20 June 2020.

**Standard Conditions of Approval**

1. A progress report is due annually on the anniversary of the approval date, using form EA2, which is available online through <http://www.aut.ac.nz/researchethics>.
2. A final report is due at the expiration of the approval period, or, upon completion of project, using form EA3, which is available online through <http://www.aut.ac.nz/researchethics>.
3. Any amendments to the project must be approved by AUTECH prior to being implemented. Amendments can be requested using the EA2 form: <http://www.aut.ac.nz/researchethics>.
4. Any serious or unexpected adverse events must be reported to AUTECH Secretariat as a matter of priority.
5. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTECH Secretariat as a matter of priority.

**Non-Standard Conditions of Approval**

Please quote the application number and title on all future correspondence related to this project.

AUTECH grants ethical approval only. If you require management approval for access for your research from another institution or organisation then you are responsible for obtaining it. You are reminded that it is your responsibility to ensure that the spelling and grammar of documents being provided to participants or external organisations is of a high standard.

For any enquiries, please contact [ethics@aut.ac.nz](mailto:ethics@aut.ac.nz)

Yours sincerely,



Kate O'Connor  
Executive Manager  
Auckland University of Technology Ethics Committee

Cc: [zhaoyan-1005@hotmail.com](mailto:zhaoyan-1005@hotmail.com); Stephen Neville; [nick.garrett@aut.ac.nz](mailto:nick.garrett@aut.ac.nz)

## Appendix B: AUTC approval of amendments granted on 12 March 2018 - reference 17/55



**AUTC Secretariat**

Auckland University of Technology  
D-B8, WU406 Level 4 WU Building City Campus  
T: +64 9 921 9999 ext. 8316  
E: [ethics@aut.ac.nz](mailto:ethics@aut.ac.nz)  
[www.aut.ac.nz/researchethics](http://www.aut.ac.nz/researchethics)

12 March 2018

Valerie Wright-St Clair  
Faculty of Health and Environmental Sciences

Dear Valerie

Re: Ethics Application: **17/55 Identifying and reducing loneliness among Chinese late-life immigrants in New Zealand**

Thank you for your request for approval of amendments to your ethics application.

The minor amendments to the inclusion criteria and data collection protocols is approved. The change in title has been noted.

I remind you of the Standard Conditions of Approval.

1. A progress report is due annually on the anniversary of the approval date, using form EA2, which is available online through <http://www.aut.ac.nz/researchethics>.
2. A final report is due at the expiration of the approval period, or, upon completion of project, using form EA3, which is available online through <http://www.aut.ac.nz/researchethics>.
3. Any amendments to the project must be approved by AUTC prior to being implemented. Amendments can be requested using the EA2 form: <http://www.aut.ac.nz/researchethics>.
4. Any serious or unexpected adverse events must be reported to AUTC Secretariat as a matter of priority.
5. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTC Secretariat as a matter of priority.

Please quote the application number and title on all future correspondence related to this project.

AUTC grants ethical approval only. If you require management approval for access for your research from another institution or organisation then you are responsible for obtaining it. If the research is undertaken outside New Zealand, you need to meet all locality legal and ethical obligations and requirements.

For any enquiries please contact [ethics@aut.ac.nz](mailto:ethics@aut.ac.nz)

Yours sincerely,



Kate O'Connor  
Executive Manager  
Auckland University of Technology Ethics Committee

Cc: zhaoyan-1005@hotmail.com; Stephen Neville; nick.garrett@aut.ac.nz



## Appendix C: AUTC approval of Phase Two granted on 6 November 2018 - reference 18/364



TE WĀNANGA ARONUI  
O TĀMAKI MAKAU RAU

**Auckland-University-of-Technology-Ethics-Committee-(AUTC)**

Auckland-University-of-Technology  
D-88, Private Bag 92006, Auckland-1142, NZ  
T: +64-9-921-9999 ext. 8316  
E: [ethics@aut.ac.nz](mailto:ethics@aut.ac.nz)  
[www.aut.ac.nz/researchethics](http://www.aut.ac.nz/researchethics)

6-November-2018

Valerie-Wright-St-Clair  
Faculty-of-Health-and-Environmental-Sciences

Dear-Valerie

Re-Ethics-Application: → 18/364-Identifying-and-reducing-loneliness-among-Chinese-late-life-immigrants-in-New-Zealand

Thank-you-for-providing-evidence-as-requested,which-satisfies-the-points-raised-by-the-Auckland-University-of-Technology-Ethics-Committee-(AUTC).

Your-ethics-application-has-been-approved-for-three-years-until-6-November-2021.

**Non-Standard-Conditions-of-Approval**

1.→ Provision-of-the-translations-once-completed.

Non-standard-conditions-must-be-completed-before-commencing-your-study..Non-standard-conditions-do-not-need-to-be-submitted-to-or-reviewed-by-AUTC-before-commencing-your-study.

**Standard-Conditions-of-Approval**

1.→ A-progress-report-is-due-annually-on-the-anniversary-of-the-approval-date,using-form-EA2,which-is-available-online-through-<http://www.aut.ac.nz/research/researchethics>.

2.→ A-final-report-is-due-at-the-expiration-of-the-approval-period,or,upon-completion-of-project,using-form-EA3,which-is-available-online-through-<http://www.aut.ac.nz/research/researchethics>.

3.→ Any-amendments-to-the-project-must-be-approved-by-AUTC-prior-to-being-implemented..Amendments-can-be-requested-using-the-EA2-form-<http://www.aut.ac.nz/research/researchethics>.

4.→ Any-serious-or-unexpected-adverse-events-must-be-reported-to-AUTC-Secretariat-as-a-matter-of-priority.

5.→ Any-unforeseen-events-that-might-affect-continued-ethical-acceptability-of-the-project-should-also-be-reported-to-the-AUTC-Secretariat-as-a-matter-of-priority.

Please-quote-the-application-number-and-title-on-all-future-correspondence-related-to-this-project.

AUTC-grants-ethical-approval-only..If-you-require-management-approval-for-access-for-your-research-from-another-institution-or-organisation,then-you-are-responsible-for-obtaining-it..If-the-research-is-undertaken-outside-New-Zealand,you-need-to-meet-all-locality-legal-and-ethical-obligations-and-requirements..You-are-reminded-that-it-is-your-responsibility-to-ensure-that-the-spelling-and-grammar-of-documents-being-provided-to-participants-or-external-organisations-is-of-a-high-standard.

For-any-enquiries,please-contact-[ethics@aut.ac.nz](mailto:ethics@aut.ac.nz)

Yours-sincerely,



Kate-O'Connor  
Executive-Manager  
Auckland-University-of-Technology-Ethics-Committee

Cc: → zhaoyan-1005@hotmail.com;Stephen-Neville;nick.garrett@aut.ac.nz

## Appendix D: Chinese-language advertisement

AUT

TE WĀNANGA ARONUI  
O TĀMAKI MAKAU RAU

### 招募来自中国讲中文普通话的移民长者

一项评价并改善中国移民长者孤独状况的科学研究需要邀请讲中文普通话的中国移民长者参加

- ❖ 如果您移民到新西兰时已经是 60 岁或者以上
- ❖ 如果您在新西兰居住已经一年以上

阶段一，参与的长者将与研究人员一起完成一些问卷，大约需要 1 小时

其中一些长者将被邀请参加第二阶段的一对一访谈，大约需要 1.5 小时



如果您对本研究有任何疑问或者需要更多信息，请随时联系：


赵妍  
(奥克兰理工大学 AUT 博士生)  
电话: 022 197 2891  
电邮: zhaoyan-1005@hotmail.com

或者  
Valerie Wright-St Clair 博士  
(本研究导师)  
电话: 09 921 9999 或 06 7736  
电邮: [vwright@aut.ac.nz](mailto:vwright@aut.ac.nz)

2 July 2015 Photograph taken by Yan Zhao, printed with permission page 1 of 1 This version was last edited in June 2016



## Appendix E: Information sheet and consent form - Phase One



### 参与者信息表

**信息表日期:**  
2017 年 2 月 4 日

**项目名称:**  
评价及改善在新西兰的老年中国移民孤独状况

**一份邀请**

我叫赵妍，是奥克兰理工大学 AUT 的一名博士生，我对研究老年移民的健康以及在新西兰生活的中国移民长者的孤独情况和原因非常感兴趣。我的导师 Valerie Wright-St Clair 博士，Stephen Neville 博士以及 Nick Garrett 博士对于为老年人提供更优化的社区生活以及改善老年移民孤独状况也有很大的兴趣。

我们邀请您参加此关于评价中国移民长者孤独的研究，我们将根据本研究得出的结果设计改善孤独状况的干预措施，并对此措施的效果做出评价。您参加本研究是完全自愿的，您可以在任何时候无需提供任何理由而退出本研究。研究人员与社区以及健康机构没有任何关系，这意味着您的权益不会因为是否参加本研究受到任何影响。

**本研究得目的是什么?**

本研究旨在评估孤独在老年中国移民中出现的普遍性，孤独的严重程度，以及孤独与社交网络，社会隔离，生活质量，身体、精神健康以及社会参与度的相关性。

**我将如何被联系到并且受邀参加本研究?**

您可以直接回复中文报纸、老年活动中心以及教会宣传板上关于本研究的广告或者您可以在本研究举办的信息宣讲会上获得相关信息。

如果您来自中国，可以使用中文普通话进行交流；您来到新西兰的时候已经 60 岁或者以上；您在新西兰生活至少满一年；您愿意回忆并分享您任何的孤独感受，能够回答评估您在新西兰生活和健康的中文问卷，您就符合参与本研究的要求。如果您是本研究研究人员的直系亲属，那么抱歉，您将无法参加本研究。

**我如何参加此研究?**

如果您愿意参加本研究，您只需直接以电话或者电邮的方式联系我，联系方式请参见本表格下方。在我们初次访谈前，我们会邀请您签署一份知情同意书。如果您希望有亲友出席，您的亲友也会被邀请签署一份保密协议。

**我在这个研究中需要做什么?**

研究者会提前跟您约定一个您方便的时间和地点，陪您一起完成 6 个中文问卷。ADL 量表是六个问卷中的一个，用于评估您的身体状况，旨在了解自理能力与孤独的相关性。有研究指出有较低 ADL 评分的人更需要与社会隔离。整个问卷回答过程大概需要 1 小时。

基于您在回答孤独问卷中得出的分数，我们可能会邀请您参加第二阶段的一对一访谈。研究者希望与您讨论您日常生活中的孤独经历，以及您认为可以改善孤独的方法和资源。此次访谈可能需要一个半小时，访谈的内容会被录音，文字翻译后进行研究分析。访谈中，您可以选择有家人或者朋友出席。

整个研究全部使用中文普通话交流，您不需要担心语言问题。

12 March 2020

page 1 of 2

This version was edited in July 2016

#### 研究会给我带来哪些不适和危险?

本研究不会让您感到任何的不舒服或者尴尬,我们也不会提出任何让您感到不适的问题。但是,在谈到作为一位老年中国移民,孤独对您意味着什么,您生活中遇到了哪些困难,您的社会及团体参与情况,您的健康状况,回忆一些您在新西兰无法进行的家庭活动,以及您怀念的事情时,可能会让您感到些许情绪上的失落。不论如何,没有一个问卷或者提问设计是为了让您感到不舒服的。您的本次参与会给中国老年移民在新西兰的生活带来积极的影响。

#### 出现不舒服感或者危险要如何处理?

我会实时留意您任何不适或者尴尬的迹象,您在任何时候都可以选择不回答或者在您感到不舒服的时候随时选择中止谈话。

#### 参加研究会带来什么好处?

问卷评估的结果可能会给您一些了解自身状况的参考信息,表达您对改善孤独,促进健康的期望与需求也有助于我们反映社会实际情况让您获益。您的贡献可能会给新西兰老年移民的状况带来积极影响。

本研究结果更广的好处是可能会为政府健康部门提供更多参考信息。

完成这个研究,我本人将获得博士学位。

#### 我的隐私将如何被保护?

对于我来说,保护好您的隐私是最重要的。在录制访谈内容以及在未来的研究报告,会议演讲和出版文章中应用到的研究信息,我都会使用假名。本研究的任何报告都不会要求您提供任何关于您身份的资料。任何可能识别到您身份的信息都会做保密处理。

您提供给本研究的所有信息,包括您的联系方式,访谈录音会被存放在研究者在学校办公室带锁的柜子里。柜子会随时锁定,6年后所有资料将被销毁。在研究过程中,只有研究人员可以看到相关信息。

#### 参加本次研究有什么花费?

参加本次研究完全免费。参与者可能需要花费最多3个小时时间,包括约1小时回答问卷的时间,1.5小时访谈的时间(如果参与第二阶段访谈的话)以及之后阅读研究结果小结的时间。

#### 我是否随时考虑是否参加?

您会有两周的时间来考虑是否参加本研究。在此期间,您有任何问题或者准备参加,都可以随时联系我。

#### 你们会提供研究的结果反馈吗?

会的,您会收到问卷的评估结果以及在研究结束后整个研究结果的小结。

#### 如果我对研究有疑惑,还可以联系谁?

对研究的性质有任何问题也可以直接联系研究导师 Wright-St Clair 博士,邮箱地址: [vwright@aut.ac.nz](mailto:vwright@aut.ac.nz), 座机: 09) 921 9999 ext. 7736, 手机: 021 773 738

对研究过程有任何建议,请直接联系 AUT 伦理委员会秘书 Kate O'Connor, [ethics@aut.ac.nz](mailto:ethics@aut.ac.nz), 921 9999 ext. 6038.

#### 我需要研究的更多信息可以联系谁?

##### 研究者联系方式:

赵妍, [zhaoyan-1005@hotmail.com](mailto:zhaoyan-1005@hotmail.com), 手机: 022 197 2891

##### 研究导师联系方式:

Valerie Wright-St Clair 博士, [vwright@aut.ac.nz](mailto:vwright@aut.ac.nz), 09) 921 9999 ext. 7736, 手机: 021 773 738.

## 知情同意书

此知情同意书有中英文版本

项目名称: 评估及改善晚年移民新西兰的中国长者孤独状况

项目导师: Valerie Wright-St Clair 博士, Stephen Neville 博士 &amp; Nick Garret 博士

研究者: 赵妍

- ☐ 我已经阅读并理解信息表(日期: \_\_\_\_\_)中提供的关于本研究项目所有信息。
- ☐ 我已经获得提问的机会并且所有问题得到了解答。
- ☐ 我理解如果我选择粤语访谈, 会由一位讲粤语的义工访谈我。
- ☐ 我理解在完成问卷后, 我可能会被邀请参加与研究者的配对访谈。
- ☐ 我理解我将跟研究者一起完成一些问卷。
- ☐ 我理解一对一访谈中的谈话内容会被录音并翻译。
- ☐ 我理解我参加这项研究是完全自愿的, 我可以选择在任何时候退出研究, 并不会受到任何负面影响。
- ☐ 我理解如果我退出研究, 对于可识别的属于我的信息, 我需要选择删除或者允许被继续使用。然而, 一旦调查结果已经产生, 我的数据将不可能再被删除。
- ☐ 我同意参加这项研究。
- ☐ 我希望邀请一位支持者出席一对一的访谈(请选择): 是 ☐ 否 ☐
- ☐ 我希望用粤语进行访谈(请选择): 是 ☐ 否 ☐
- ☐ 我希望获得一份研究结果的小结(请选择): 是 ☐ 否 ☐

参与者姓名: \_\_\_\_\_

参与者(正楷)全名: \_\_\_\_\_

参与者联系信息(如适用):

地址: \_\_\_\_\_

\_\_\_\_\_


电话号码: \_\_\_\_\_

日期:

奥克兰理工大学伦理委员会批准日期: 12 March 2018 奥克兰理工大学伦理委员会批准号: 17/55

备注: 参与者需要保留一份复印件。

## Appendix F: Information sheet and consent form - Phase Two



TE WĀHANGA ARONUI  
O TĀMAKI MAKAU RAU

### 知情同意书

此知情同意书有中英文版本

项目名称: **评估及改善晚年移民新西兰的华人长者孤独状况: 第二阶段**

项目导师: **Valerie Wright-St Clair 教授, Stephen Neville 教授 & Nick Garret 博士**

研究者: **赵妍**

- ☐ 我已阅读并理解信息表(日期: \_\_\_\_\_)中提供的关于本研究阶段所有信息。
- ☐ 我已获得提问的机会并且所有问题得到了解答。
- ☐ 我理解在小组讨论期间的讨论内容将会被录音, 转录和翻译。
- ☐ 我理解小组讨论的内容都是保密的, 讨论结束后我不会与任何人讨论。
- ☐ 我理解我参加这项研究是完全自愿的(我自己的选择), 我可以选择在任何时候退出研究, 并不会受到任何负面影响。
- ☐ 我理解如果我退出, 我在小组讨论中的贡献无法被删除。
- ☐ 我同意参加这项研究。

参与者姓名: \_\_\_\_\_

参与者(正楷)全名: \_\_\_\_\_

参与者联系信息(只有在您参加第一阶段后信息发生变更):

地址 \_\_\_\_\_

\_\_\_\_\_

电话号码 \_\_\_\_\_

日期: \_\_\_\_\_

**奥克兰理工大学伦理委员会批准日期 6 November 2018 奥克兰理工大学伦理委员会批准号 18/364**

备注: 参与者需要保留一份复印件。

2 July 2015

page 1 of 1

This version was last edited in June 2016

## 参与者信息表

### 信息表日期:

2018 年 11 月 1 日

### 项目名称:

评估及改善晚年移民新西兰的华人长者孤独状况：第二阶段

### 一份邀请

在本研究的第二阶段，我们从第一阶段中选取了 10 位具有不同生活情况以及在孤独量表中有不同得分的参与者，他们将跟我一起通过一系列的小组讨论共同设计可能有用的社会资源。我邀请您作为 10 位参与者之一，参加第二阶段的研究。

### 本研究第二阶段的目的是什么？

在第二阶段，您将和我以及其他被选定的参与者一起审查第一阶段的结果，并共同设计任何相关的社区资源，旨在改善晚年移民新西兰的华人长者的孤独情况。潜在的资源可能是为华人社会服务工作者提供一份工作手册或指南，或者提供给人子女一份参考说明，又或者是以家庭为中心的服务。开发的任何资源都是社会资产，任何一方都没有经济利益。这些资源将在社区免费提供，以帮助晚年移民的华人长者增加社会联接并改善孤独感。

### 我如何参加此共同设计小组讨论？

在参与共同设计过程之前，您将通过签署同意书（附件）表明您愿意参加。您参与的小组讨论是自愿的；这是您的选择。如果您选择不参加第二阶段，您将不会有任何形式的损失。如果您选择参加，您可以随时退出小组讨论。但是，如果您选择退出小组讨论，您对小组讨论的贡献将无法从研究中删除。

### 我在研究阶段二中需要做什么？

10 位参与者将在一个便利的社区场所与我一起开会，最多四次，或总共八小时。每次会议都会使用普通话。下面的图表说明了小组开会时会发生什么。小组讨论将录音，讨论的关键内容将做中文的逐字转录。



**第一次会议:** 讨论第一阶段的定性访谈结果并解释它们意味着什么, 写下结果摘要。

☞ 对下一次的会议计划达成一致。

**第一次会议:** 探索和理解现有的社区的资源/服务, 并找出差距, 确定社区主要的利益相关者。

☞ 对下一次的会议计划达成一致。

**第二次会议:** 探索和设计与文化相关的资源, 包括活动项目或服务, 旨在改善华人长者的孤独感, 讨论我们如何评估结果。

☞ 对下一次的会议计划达成一致。

**后续联系:** 审查共同设计的资源, 活动项目或服务以及评估工具, 确定实施的后续步骤, 为主要利益相关者提供报告。

#### 研究会给我带来哪些不适和危险?

预计您不会遇到任何明显的不适, 尴尬或无能力。

#### 参加本研究会带来什么好处?

您参与这个共同设计阶段可能会令晚年移民的华人长者从设计的资源中受益。如果您选择使用任何旨在减少晚年移民华人孤独感的资源, 您也可能受益。完成这个研究, 主要研究者将获得博士学位。

#### 我的隐私将如何被保护?

我们将在任何打印的材料或出版物中使用假名而非您的真实姓名来保护您自己的隐私。该小组的所有参与者都同意将小组讨论的内容保密。我也会在每个小组的开头提醒参与者。

#### 参加本次研究有什么花费?

您参加本研究将完全免费。但是, 总共需要花费您 8 个小时的时间。出席小组讨论的相关差旅费可以报销。

#### 如果我对研究有疑虑, 还可以联系谁?

对研究的性质有任何问题也可以直接联系研究导师 Wright-St Clair 教授, 邮箱地址: [vwright@aut.ac.nz](mailto:vwright@aut.ac.nz), 座机: 09) 921 9999 ext.7736, 手机: 021 773 738

对研究过程有任何建议, 请直接联系 AUT 伦理委员会行政助理 Kate O'Connor, [ethics@aut.ac.nz](mailto:ethics@aut.ac.nz), 921 9999 ext.6038。

#### 我需要研究的更多信息可以联系谁?

研究者联系方式: 赵妍, [zhaoyan-1005@hotmail.com](mailto:zhaoyan-1005@hotmail.com), 手机: 022 197 2891

研究导师联系方式: Valerie Wright-St Clair 教授, [vwright@aut.ac.nz](mailto:vwright@aut.ac.nz), 09) 921 9999 ext.7736, 手机: 021 773 738。

## Appendix G: Permission letter from Age Concern to use their Chinese booklet for Phase Two



## Appendix H: Kāinga Ora Intranet article from Housing New Zealand regards my consultations in Phase Two

Identifying and reducing loneliness among Chinese late-life immigrants in New Zealand

- Page published: 04 Oct 2019
- Page updated: 14 Oct 2019

Earlier this year student researcher Yan (Ivy) Zhao visited our Greenlane office to present her study into loneliness and discuss her findings.



Professor Valerie Wright-St Clair (left), director of AUT's Centre for Active Aging (left) and research student Yan (Ivy) Zhao (right)

Her work is being supervised by Professors Valerie Wright-St Clair, Stephen Neville, and Dr Nick Garret, from AUT's Centre for Active Aging.

Ivy has almost completed Phase 1 of the study which looked at the available data measuring the prevalence of loneliness for the national population, followed by qualitative surveying using the DeJong Loneliness Scale (Chinese version), and individual interviews of a small participatory group of Chinese late-life immigrants (which included Kāinga Ora tenants).

Phase 2 of her study will delve deeper into participatory action research methodology to co-design applied and community-based resources and services that can reduce and prevent loneliness.

The research has defined loneliness as being “an unpleasant experience which happens when there is a deficiency in an expected number, or perceived quality, of social relationships” (Fokkema, De Jong Gierveld, & Dykstra, 2012; Peplau & Perlman, 1982).

Loneliness can also be experienced in two forms; emotional loneliness which is the absence of a close, intimate attachment; and social loneliness - the absence of an accessible social network (Weiss, 1973; Institute of Linguistics, 1978-2012).

Overall findings include –

Length of time in New Zealand influenced prevalence of loneliness:



- Older Chinese recent immigrants (<5yrs) were *more likely to feel lonely* than older Chinese long-term immigrants (≥ 5yrs) and older NZ born Chinese.

Key determinants of loneliness are:

- conflicts with adult children,
- lack of intimate attachment, social contacts and social activities
- living arrangements
- language and cultural barriers
- perceived stress

The negative effects of lonely include:

- stress, depressive emotions and anxiety
- low quality of sleep
- health effects of chest distress, high blood pressure; medical treatment and poor health behavior
- decreased self-identity and self-confidence

Some of the key themes Ivy identified in her research which she felt would be important considerations for Housing New Zealand include:

- hard to communicate with services (including us)
- strange neighbourhood
- living isolated, less opportunity to connect with neighbours

At Kāinga Ora we need to think about how we can support Phase 2 of this research by applying the findings from Phase 1 to our activities, services and our general interactions our customers. This could include practical on-the-ground solutions to reduce and prevent loneliness.

The AUT Centre for Active Aging (ACAA) is committed to working with older people to live well, regardless of people's capacities or places of residence. We are focused on enabling diverse, inclusive communities, participation in community and social life, liveable spaces and places, and negotiating health issues.

The AACA team includes University researchers from diverse health, sports, and social science disciplines, postgraduate student researchers, as well as research affiliates from other Universities, and community members as community affiliates. Professor Valerie Wright-St Clair is a director of AACA and is a leading researcher in older adults.

For more information contact Megan Somerville-Ryan.