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**NAVIGATING NEW ENVIRONMENTS: THE ROLE OF SOCIAL
CAPITAL IN ADAPTATION, WELL-BEING, AND SETTLEMENT
INTENTIONS AMONG OLDER INTERNAL MIGRANTS
RELOCATING TO UNITE WITH ADULT CHILDREN IN URBAN
CHINA**

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2026

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**Navigating New Environments: The Role of Social Capital in
Adaptation, Well-being, and Settlement Intentions among Older
Internal Migrants Relocating to Unite with Adult Children in Urban
China**

Kang Rui

A thesis submitted in partial fulfillment of the requirements for the degree
of Doctor of Philosophy

August 2025

CERTIFICATE OF ORIGINALITY

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Kang Rui (Name of Student)

Abstract

Background: Late-life migration for family reasons has increased in urban China. Although such migration facilitates family reunion, it presents challenges. How older migrants establish and mobilise social capital to support adaptation, well-being, and settlement intentions within the host environment remains poorly understood.

Objectives: The objectives of this study were to quantify the effect sizes of social capital on the well-being of older migrants, identify distinct social capital profiles differentiating between hometown and local connections, examine the determinants of these profiles and their associations with adaptation and well-being, evaluate how family social capital influences adaptation and well-being through community structural and cognitive social capital pathways, and assess the mediating and moderating effects of place attachment and family enabling factors on the association between social capital and permanent settlement intention in host cities among older internal migrants in China.

Methods: Empirical data were collected from 721 older migrants who relocated to their adult children in Shenzhen ($n = 406$) and Guangzhou ($n = 315$). A meta-analysis of 32 studies was first conducted to estimate the overall effect sizes of social capital on well-being among older migrants and to examine the factors moderating these effects. Moreover, latent profile analysis, logistic regression, and multiple linear regression were conducted to identify the older migrants' social capital profiles, reveal their determinants, and assess their associations with adaptation and well-being. Furthermore,

multivariate linear regression, logistic regression and path analysis models were employed to assess the community social capital and place attachment pathways. Moderation analysis was conducted to test whether family enabling factors moderated the indirect pathways from social capital to permanent settlement intention through place attachment.

Results:

- a) The meta-analysis demonstrated significant positive effects of family social capital, community structural social capital, and community cognitive social capital on older migrants' well-being. Internal migrants and those relocating for family reasons particularly benefited from family social capital.
- b) Four distinct social capital profiles emerged, reflecting varying strengths of connection to hometown and local communities. Compared with the Strong Hometown–Weak Local Social Capital type, older migrants with Strong Local–Weak Hometown Social Capital exhibited greater psychological adaptation and fewer depressive symptoms.
- c) Family social capital was positively associated with adaptation and well-being, with community cognitive social capital consistently mediating these associations. Mediation through community structural social capital was marginal for sociocultural adaptation and non-significant for depressive symptoms.
- d) Place attachment mediated the associations between family and community structural social capital and permanent settlement intention. Intended care arrangements were only directly associated with ageing-in-place preference, while

host-city house ownership moderated the indirect pathways.

Conclusions: This thesis clarifies how interactions between hometown and local social capital, as well as between family and community resources, shape adaptation, well-being, and settlement intentions among older internal migrants in China, thereby extending social capital theory. To support older migrants' intentions to permanently settle in host cities, tailored interventions that address their specific care needs and foster social integration are essential for promoting successful ageing and well-being in urban environments.

(494 words)

Publications Arising from the Thesis

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Contents

Abstract	i
Publications Arising from the Thesis	iv
Acknowledgements	v
List of Figures	x
List of Tables	xi
Chapter 1 Introduction	1
1.1 Motivation for the Present Thesis	1
1.2 Research Background	4
1.21 Family-Ties Migration Among Older Adults: International Trends and the Case of China	4
1.22 Challenges Encountered by Older Migrants in Host Cities.....	5
1.23 Social Capital, Ageing, and Migration.....	7
1.3 Research Objectives and Contributions	8
1.4 Thesis Structure.....	11
Chapter 2 A Systematic Review and Meta-Analysis of Social Capital and the Well-being of Older Migrants	15
2.1 Brief Introduction.....	15
2.2 Methods.....	15
2.21 Screening Eligibility and Study Selection.....	16
2.22 Data Extraction and Quality Assessment	18
2.3 Statistical Analysis	19
2.4 Results.....	21
2.41 Characteristics of Selected Studies	21
2.42 Differences Between Older Migrants and Local Residents.....	22
2.43 Association Between Family Social Capital and Well-being of Older Migrants	34
2.44 Association Between Community Structural Social Capital and Well-being of Older Migrants	34
2.45 Association Between Community Cognitive Social Capital and Well-being of Older Migrants	35
2.46 Moderator Analysis	36
2.47 Publication Bias	38
2.5 Discussion	40
2.6 Research Gaps.....	43
2.61 Insufficient Research on the Interconnection Between Hometown and Host City Social Capital in Shaping Older Migrants' Well-being	43
2.62 Insufficient Evidence Regarding the Interplay Between Family and Community Social Capital on Well-being.....	44
2.63 Inadequate Focus on Both Positive and Negative Aspects of Well-being.....	45
Chapter 3 Theoretical Framework	46
3.1 Brief Introduction.....	46
3.2 Theoretical Perspectives: Social Capital	46
3.3 Conceptual Framework	49

3.31 Social Capital Profiles: Differentiating Hometown and Local Ties	50
3.32 Pathways of Community Social Capital.....	52
3.33 Outcomes of Ageing Well: Adaptation and Well-being.....	54
3.34 Pathways of Place Attachment Linking Social Capital to Preferences for Ageing in Place in the Host City.....	55
3.35 Role of Family Enabling Factors	57
3.4 Research Questions and Hypotheses.....	59
Chapter 4 Methodology and Research Design.....	61
4.1 Brief Introduction.....	61
4.2 Rationale for Quantitative Design.....	61
4.3 Research Settings in Guangzhou and Shenzhen.....	62
4.4 Sampling Strategy and Data Collection	63
4.5 Measurements	67
4.6 Analytical Strategy	74
Chapter 5 Unveiling Hometown and Local Networks: Social Capital Profiles, Determinants, and Their Associations with Adaptation and Well-being	77
5.1 Brief Introduction.....	77
5.2 Social Capital Profiles and Their Associations With Well-being	78
5.3 Research Questions	79
5.4 Methods.....	79
5.41 Measurements	79
5.42 Data Analysis	80
5.5 Results.....	82
5.51 Latent Profile Analysis.....	82
5.52 Regression Analysis	91
5.6 Discussion	99
Chapter 6 Tracing the Pathways: How Community Social Capital Bridges Family Social Capital with Adaptation and Well-being.....	105
6.1 Brief Introduction.....	105
6.2 Mediating Role of Community Social Capital.....	106
6.3 Conceptual Framework and Research Questions.....	108
6.4 Methods.....	109
6.41 Measurements	109
6.42 Data Analysis	110
6.5 Results.....	111
6.51 Descriptive Analysis.....	111
6.52 Correlational Analysis.....	113
6.53 Regression Analysis	114
6.54 Path Analysis.....	120
6.6 Discussion	127
Chapter 7 Ageing in Place in the Host City: The Role of Social Capital, Place Attachment, and Family Enabling Factors in Shaping Permanent Settlement Intentions	131
7.1 Brief Introduction.....	131
7.2 Mediating Role of Place Attachment and Moderating Role of Family Enabling Factors	

.....	132
7.3 Conceptual Framework and Research Questions.....	134
7.4 Methods.....	135
7.41 Study Sample	135
7.42 Measurements	135
7.43 Data Analysis	136
7.5 Results.....	137
7.51 Descriptive Analysis.....	137
7.52 Correlational Analysis.....	140
7.53 Regression Analysis	140
7.54 Path Analysis.....	143
7.55 Moderation Analysis	148
7.6 Discussion	151
Chapter 8 Overall Discussion and Conclusions	155
8.1 Summary of Primary Findings and Examination of Hypotheses	155
8.11 Summary of Primary Findings	155
8.12 Examination of Hypotheses	157
8.2 Contributions of Thesis	158
8.21 Theoretical Contributions.....	158
8.22 Empirical Contributions	159
8.23 Policy and Practical Implications.....	161
8.3 Limitations and Directions for Future Research	164
8.4 Conclusions.....	165
Appendix.....	186
Appendix I. Ethical Approval	186
Appendix II. Consent Form.....	187
Appendix III. Questionnaire of Thesis.....	188

List of Figures

Figure 1.1 <i>Caricature of Older Internal Migrants in Chinese Media</i>	3
Figure 1.2. <i>Thesis Outline</i>	14
Figure 2.1. <i>PRISMA Flow Diagram of the Literature Search</i>	18
Figure 2.2. <i>Forest plot of Association Between Family Social Capital and Well-being</i>	34
Figure 2.3. <i>Forest Plot of Association Between Community Structural Social Capital and Well-being</i>	35
Figure 2.4. <i>Forest plot of Association Between Community Cognitive Social Capital and Well-being</i>	36
Figure 2.5. <i>Funnel Plot of the Association Between Family Social Capital and Well-being</i> .	39
Figure 2.6. <i>Funnel Plot of the Association Between Community Structural Social Capital and Well-being</i>	39
Figure 2.7. <i>Funnel Plot of the Association Between Community Cognitive Social Capital and Well-being</i>	40
Figure 3.1. <i>Multidimensional Social Capital Framework for Ageing Well and Ageing in Place</i>	50
Figure 4.1. <i>Surveyed Districts in Shenzhen</i>	64
Figure 4.2. <i>Surveyed Districts in Guangzhou</i>	65
Figure 5.1. <i>Standardised Mean Scores of Variables in the Four Social Capital Profiles</i>	84
Figure 6.1. <i>Framework of Pathway From Family Social Capital to Adaptation Via Community Social Capital</i>	108
Figure 6.2. <i>Framework of Pathway From Family Social Capital to Well-being Via Community Social Capital</i>	109
Figure 6.3. <i>Path Analysis Results for Adaptation</i>	121
Figure 6.4. <i>Path Analysis Results for Well-being</i>	122
Figure 7.1. <i>Framework of the Direct and Indirect Influence of Social Capital on Permanent Settlement Intention</i>	135
Figure 7.2. <i>Path Analysis of Family Social Capital on Permanent Settlement Intention</i>	144
Figure 7.3. <i>Path Analysis of Community Structural Social Capital on Permanent Settlement Intention</i>	144
Figure 7.4. <i>Slope analysis between place attachment and ageing-in-place preference at different statuses of host-city house ownership of the indirect path from family social capital</i>	149
Figure 7.5. <i>Slope analysis between place attachment and ageing-in-place preference at different statuses of host-city house ownership of the indirect path from community structural social capital</i>	150

List of Tables

Table 2.1. <i>Search Terms</i>	16
Table 2.2. <i>Characteristics of Studies Included in the Meta-Analysis</i>	23
Table 2.3. <i>Results of Moderator Analysis of the Associations Between Social Capital and Well-being</i>	37
Table 4.1. <i>Demographic characteristics of the sample (N = 721)</i>	66
Table 5.1. <i>Model Fit Statistics for Selecting the Optimal Number of Classes</i>	82
Table 5.2. <i>Profiles of Social Capital Types</i>	85
Table 5.3. <i>Personal and Family Characteristics and Adaptation and Well-being By Social Capital Types</i>	88
Table 5.4. <i>Logistic Regression Models of Personal and Family Characteristics on Social Capital Profiles</i>	92
Table 5.5. <i>Regression Models of Sociocultural and Psychological Adaptation</i>	94
Table 5.6. <i>Regression Models of Life Satisfaction, Happiness and Depressive Symptoms</i>	97
Table 6.1. <i>Descriptive Statistics of the Samples</i>	111
Table 6.2. <i>Correlation Analysis</i>	113
Table 6.3. <i>Direct Effects of Family Social Capital on Adaptation</i>	115
Table 6.4. <i>Direct Effects of Family Social Capital on Well-being</i>	117
Table 6.5. <i>Direct, Indirect, and Total Effects of Family Social Capital on Adaptation Through Community Social Capital</i>	124
Table 6.6. <i>Direct, Indirect, and Total Effects of Family Social Capital on Well-being Through Community Social Capital</i>	126
Table 7.1. <i>Descriptive Statistics of Study Sample</i>	137
Table 7.2. <i>Correlation Analysis</i>	140
Table 7.3. <i>Regression Results for Permanent Settlement Intention</i>	141
Table 7.4. <i>Direct, Indirect, and Total Effects of Social Capital on Permanent Settlement Intention Through Place Attachment</i>	147
Table 7.5. <i>Standardised coefficients for the moderated indirect path from family social capital to ageing-in-place preference through place attachment</i>	149
Table 7.6. <i>Standardised coefficients for the moderated indirect path from community structural social capital to ageing-in-place preference through place attachment</i>	150
Table 7.7. <i>Conditional indirect effects of social capital on ageing-in-place preference through place attachment at different statuses of house ownership</i>	151
Table 8.1. <i>Summary of Results of Hypothesis Tests</i>	157

Chapter 1 Introduction

1.1 Motivation for the Present Thesis

The experiences of older internal migrants in China first attracted my attention after I read a 2019 report by the Chinese National Health Commission estimating that nearly 9 million older individuals had moved with their adult children to be with family or assist in caring for grandchildren. Media coverage of such internal migration has intensified, highlighting the adaptation challenges, family contributions, and caregiving roles of these older migrants. Visual portrayals, including caricatures, have depicted the discomfort and burdens faced by these older migrants in unfamiliar urban environments.

The experiences of older internal migrants took on greater meaning for me during my fieldwork in a major Chinese city, where I met several older migrants who had relocated to support their adult children by caring for grandchildren. I frequently observed them congregating in community squares and engaged them in conversation. They expressed pride in their children and joy in discussing their grandchildren. However, many voiced concerns about adapting to new environments and securing care through social connections and access to support networks. These interactions prompted me to reflect critically on the psychosocial pressures these migrants endure and the coping strategies they employ.

Through these interactions, I became increasingly interested in how older migrants adapt and pursue well-being following relocation, especially given that their migration is often motivated by family obligations. I began to question the extent to which their

adult children facilitate their integration into the host society, and how the demands placed upon them by their families shape their strategies for navigating daily life in a new environment. Furthermore, I noted that concerns about future care arrangements and preferences for ageing in place were frequently mentioned in their conversations. These observations prompted me to question older migrants' willingness to settle permanently in host cities and the determinants of their settlement intentions.

Understanding these processes is crucial to individual well-being and policy and service planning. As ageing among migrant populations becomes increasingly common in urban China, developing tailored programmes and public services that address their unique needs is imperative. Insight into older migrants' settlement preferences and adaptation strategies can inform balanced and effective public service planning across origin and destination areas. These considerations highlight the urgency of conducting in-depth research on the adaptation and ageing experiences of older internal migrants in urban China.

Although academic interest in such migrants is increasing, research on the processes through which older migrants age well in their host cities is lacking, particularly research regarding the relative contributions of family and community resources to these migrants' adaptation to and well-being in their host cities. Extant studies have yet to clarify which resources most effectively facilitate adaptation or how older migrants establish and access these resources within host cities. Moreover, the interaction between family support, community engagement, and the broader urban environment in shaping adaptation and settlement intentions remains underexplored.

This research gap holds both academic and personal meaning for me. As the only child in my family, I frequently consider the well-being of my parents. Were they to relocate to a city far from my hometown, they might also face similar challenges associated with later-life migration. This perspective has strengthened my commitment to understanding the lived experiences and adaptation strategies of older internal migrants in China.

This study investigated the resources that support overall well-being among older internal migrants in urban settings, with particular attention to family and community support. Additionally, the thesis examined how these resources influence settlement preferences. By addressing these concerns, this thesis can provide insights to inform policy and practice and thus enhance the quality of life and service provision for older internal migrants in China.



Figure 1.1 *Caricature of Older Internal Migrants in Chinese Media*

Source: Sina image, SOHU.com

1.2 Research Background

1.21 Family-Ties Migration Among Older Adults: International Trends and the Case of China

Globally, older individuals are increasingly relocating to join or support their adult children and other close family members. Such migration is driven primarily by intergenerational bonds and caregiving responsibilities rather than economic motives (Baldassar, 2007). Thomas and Dommermuth (2021) identified life events such as the birth of grandchildren or the loss of a partner as catalysts of migration for family reasons, underscoring the dynamic nature of family-ties migration. Similarly, Mulder (2018) demonstrated that family ties are critical drivers of migration decisions that influence preferences for mobility and ageing in place among older parents and their adult children. Subsequent research by Gillespie and Mulder (2020) verified that nonresident family members are a primary motivator of internal migration, particularly among retirees.

In developing countries such as China, the pace of urbanisation has increased markedly since the late 20th century (Kojima, 1995). Since China's economic opening in 1978, urbanisation has increased considerably (Zhang & Lin, 2012). The widening income gap between developed and less developed regions and the greater employment and educational opportunities in urban centres have prompted increasing migration by younger individuals to these developed areas (Zhao et al., 2021). Consequently, migration to megacities such as Guangzhou and Shenzhen is increasing annually

because of the presence of universities, accessible transportation infrastructure, and expanded employment opportunities in these areas.

China's demographic policies have also influenced migration patterns among older adults. The one-child policy of the 1970s and 1980s produced a generation of only children and increased reliance on family-based support. After the subsequent introduction of two- and three-child policies, many older parents relocated to urban areas to live with and care for their adult children's families, promoting family reunification and the children's personal development. China's National Health Commission (2019) estimated the number of older internal migrants at 18 million, with nearly 50% relocating with adult children to care for grandchildren. However, relocation to unfamiliar urban environments presents a major challenge to these older migrants.

1.22 Challenges Encountered by Older Migrants in Host Cities

Research has identified several factors contributing to diminished integration and well-being among older migrants. Age-related declines in health, social cognition, and technological proficiency (Vaillant & Wolff, 2010) could exacerbate challenges such as language barriers (Ma & Xia, 2021), which diminish the ability to follow local cultural norms and communicate effectively with community members, substantially limiting integration into host cities. However, extant studies have not comprehensively examined the adaptation processes of older migrants. Several studies report that older migrants exhibit relatively low levels of overall well-being (Livingston & Sembhi, 2003;

Silveira & Ebrahim, 1998). Migration, particularly in later life, is assumed as a stressful event that can precipitate depression. Li et al. (2017) revealed that older internal migrants in China have poorer mental health than local residents do because they struggle to develop a sense of belonging and trust in host cities. Additionally, older migrants may be regarded as burdens on urban resources or perceived as threats to social stability (Keung Wong et al., 2007). Stigmatisation and discrimination by local residents against such migrants adversely affect these migrants' well-being (Jiang & Renema, 2021; Zhu et al., 2019). The loss of familiar hometown social networks and the unfamiliarity of new environments may worsen mental health outcomes among older migrants (Liu, 2016).

After relocation, older migrants' preferences for permanent settlement in host cities raise critical policy concerns, highlighting the need for integrated strategies that address their complex care needs and foster social inclusion. Studies have demonstrated that social integration substantially strengthens place attachment, thereby increasing migrants' intentions to settle permanently (Huang et al., 2018; Lu et al., 2024). For ageing migrants, care needs intensify as many rely heavily on adult children for prolonged personal care due to limited public healthcare resources and weaker spousal support (Ansari-Thomas, 2022). Permanent settlement intentions are also reinforced by secure housing ownership and proximity to adult children (Clark et al., 2024). In China, studies revealed that older parents exhibit a strong preference for living with their adult children in later life, driven by cultural values of family cohesion and pragmatic considerations of receiving care (Chen, 2019). Therefore, identifying the factors that

influence permanent settlement intentions is essential to developing effective policies that support their overall well-being in the host society during late life.

1.23 Social Capital, Ageing, and Migration

Social capital is a critical resource that influences the well-being and integration of older migrants. Social capital generally refers to the networks, norms, and trust that facilitate cooperation and support; it mitigates the adverse effects of migration-related stress among older adults (Berkman, 2000; Lin, 2017; Wang & Lai, 2022). In their systematic review, Nyqvist et al. (2012) identified intimate networks of family and friends as the most influential factors contributing to older adults' mental well-being. Wang and Lai (2022) similarly emphasised the importance of family and community resources in sustaining the mental health of older parents who relocate to live with adult children. Further systematic reviews and meta-analyses are needed to quantify the effect sizes of social capital on older migrants' well-being.

Empirical studies have further demonstrated that strong social support and high-quality relationships enhance well-being among older migrants (Tian et al., 2021; Zhou et al., 2022). However, the distinction between family and community social capital requires further clarification, and their differential impacts on older migrants' well-being warrant additional investigation. Furthermore, limited studies demonstrated that maintaining hometown ties plays a major and positive role in enhancing older migrants' well-being in the host environments (Heikkinen & Lumme-Sandt, 2013; Buffel, 2017), but the interplay between hometown and local connections remains underexplored.

Social capital originates from social networks and facilitates the transmission of norms, knowledge, and information essential for integration (Berkman, 2000; Lin, 2017). Early evidence indicated that social capital supports older migrants' adaptation to urban environments by providing emotional support, practical assistance, and access to information, thereby fostering social integration and a sense of belonging (e.g., Liu et al., 2017). Qualitative studies further revealed that social connections strengthen psychological identification and encourage engagement with local customs (Chiu & Ho, 2022; Qi, 2018), yet empirical research on these adaptive mechanisms remains limited. Social capital is also associated with older migrants' intentions to settle permanently in host cities, a phenomenon termed ageing-in-place preference in the host society. Strong social networks and active community engagement strengthen place attachment and reinforce preferences to remain in host environments (Xiang, 2025). The influence of social capital on permanent settlement intentions or preferences for ageing in place in the host cities among older internal migrants warrants further examination.

1.3 Research Objectives and Contributions

This study investigated the processes through which older parents who relocate to live with their adult children in China age well in the host society. Employing a primarily cross-sectional research design along with a systematic review of the literature, this thesis investigated complex associations among social capital, adaptation, well-being, and permanent settlement intentions. Grounded in social capital theory and supported by complementary perspectives, the key objectives are outlined as follows:

- (1) To quantify the effect sizes of family social capital and community social capital on the well-being of older migrants, and to identify moderators contributing to the heterogeneity of these effects.
- (2) To identify and characterise social capital profiles among older migrants by differentiating between hometown and local connections and to analyse their determinants and the associations of these profiles with adaptation and well-being.
- (3) To examine the direct and indirect influences of family social capital in relation to adaptation and well-being through community structural and community cognitive social capital pathways.
- (4) To explore how place attachment links social capital to permanent settlement intentions among older internal migrants in China, and to assess the direct and moderating effects of the family enabling factors.

In terms of knowledge building, first, this thesis presents a systematic review and meta-analysis to quantify the effects of various dimensions of social capital on well-being among older migrants in China. It determined significant heterogeneity among the reviewed studies and revealed research gaps. Second, the thesis employed comprehensive metrics to identify distinct social capital profiles among older migrants and explored how personal and family characteristics shape these profiles. Additionally, the differential associations of these profiles with adaptation and well-being were evaluated by distinguishing between social capital in the hometown and the host city, providing a more comprehensive understanding of older migrants' experiences. Third, this study examined the pathways through which family social capital affects adaptation

and well-being through community social capital. By incorporating psychological and sociocultural dimensions of adaptation and measuring positive and negative aspects of well-being, this thesis offers a comprehensive picture of the process of ageing well among older internal migrants in host cities. Finally, this study explored the factors influencing permanent settlement intentions (preferences for ageing in place in the host city) among older migrants. By integrating social capital theory, place attachment, and family ties perspectives, this study revealed the complexity of older Chinese internal migrants' settlement intentions and highlighted the critical role of family enabling factors in influencing the late-life migration process.

At the theoretical level, this thesis was grounded in social capital theory, and was informed by the convoy model with a life span perspective, the ecology of ageing perspectives, and the family ties perspective on migration, to better understand how resources help older parents age well in the context of migration. This thesis examines the pathways of community social capital, it further tests the intergenerational transmission of social capital from Coleman's (1988) idea. It advances social capital measurement by integrating temporal and spatial dimensions through a life-course lens and expands the family ties perspective on migration to encompass the whole migration and settlement process.

The findings of this thesis have practical implications for policymakers and service providers. For example, the identification of distinct social capital profiles among older migrants, along with their differential impacts on adaptation and well-being, underscores the need for tailored services that address the diverse needs of these groups.

Designing targeted interventions can facilitate access to effective resources, enabling older migrants to age well within host cities. Moreover, the mechanisms underlying the influence of family social capital on adaptation and well-being through community social capital provide a strategic direction for enhancing family cohesion. Initiatives to enhance family cohesion can strengthen the connections between older migrants and local community resources, enhancing adaptation and well-being. Furthermore, analysing the determinants of permanent settlement intentions can inform policies that foster comprehensive, integrated care systems. These findings can support the development of programmes that enhance the overall well-being of older migrants who choose to remain in host societies during later lives.

1.4 Thesis Structure

This thesis comprises eight chapters (Figure 1.2). **Chapter 1** introduces the research context and establishes the relevance of social capital to ageing and late-life migration among older adults. This chapter also defines the objectives and contributions of this thesis. **Chapter 2** presents the results of a systematic review and meta-analysis of the effect sizes of social capital on older migrants' well-being. The analysis results revealed the moderators contributing to the heterogeneity in the measured effect sizes, underscoring the need for further investigation of how social capital influences adaptation and well-being, particularly in family-motivated relocation. Finally, this chapter identifies key gaps in the literature. **Chapter 3** outlines the theoretical foundations of social capital and complementary perspectives and introduces the

conceptual framework of the Multidimensional Social Capital Framework for Ageing Well and Ageing in Place. This chapter also presents the principal research questions and corresponding hypotheses. **Chapter 4** details the methods. This chapter describes the rationale for the use of a quantitative approach and provides background information on the research sites in Shenzhen and Guangzhou, the sampling strategy and data collection procedures employed, the variables measured, and the analytical strategy applied in subsequent chapters.

Chapter 5 identifies four social capital profiles of older migrants. It presents analyses of the determinants of these profiles based on personal and family characteristics. This chapter also describes assessments of the influence of these profiles on adaptation and well-being. Moreover, the chapter describes how this study distinguished between hometown and host society networks to develop a comprehensive framework for profiling older internal migrants' social capital in urban China. **Chapter 6** describes analyses of adaptation and well-being processes among older migrants. According to the findings, family social capital influences psychological adaptation and positive well-being both directly and indirectly through community structural and cognitive social capital. The analysis results highlight the role of family in facilitating access to community resources, linking family and community in the process of ageing well. **Chapter 7** investigates the permanent settlement intention (preferences for ageing in place) in the host city among older migrants. As described in this chapter, this study integrated social capital theory, place attachment theory, and family ties perspective on migration to demonstrate that the

settlement process is complex. Additionally, family enabling factors that involve normative resources, such as relying on children for late-life care, and material resources, such as host-city house ownership are critical in shaping older adults' relocation and settlement intentions. Finally, **Chapter 8** presents the principal findings and summarises the results of the hypothesis tests. This chapter outlines the theoretical and practical implications of this study, identifies limitations, and presents conclusions.

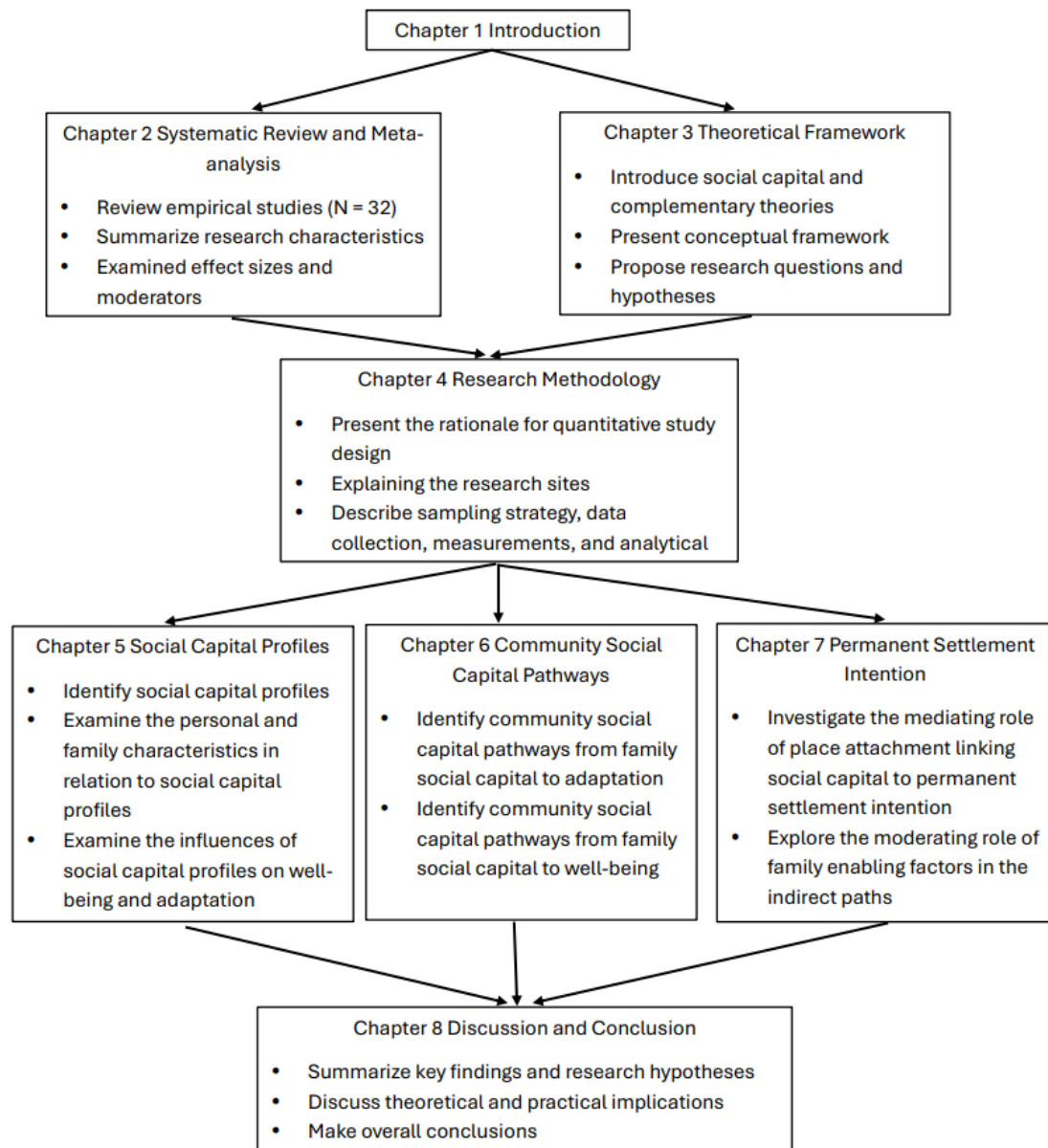


Figure 1.2. *Thesis Outline*

Chapter 2 A Systematic Review and Meta-Analysis of Social Capital and the Well-being of Older Migrants

2.1 Brief Introduction

In this chapter, a systematic review and meta-analysis of the social capital and well-being of older migrants was conducted. The results of this meta-analysis demonstrated that family social capital, community structural social capital, and community cognitive social capital exert substantial positive effects on well-being. Additionally, the results of a moderation analysis revealed that differences in migration patterns contributed to the observed heterogeneity in the association between family social capital and well-being. This chapter concludes by identifying research gaps and proposing directions for future research.

2.2 Methods

The review process adhered to the guidelines outlined in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (Moher et al., 2009), and registered with PROSPERO (ID: CRD42024618883). We conducted systematic searches in five digital academic databases, including PubMed, PsyInfo (via ProQuest), EBSCO, Scopus, and Web of Science. The search was limited to peer-reviewed literature published up until June 2025. During the search process, specific key terms related to migration, social capital, well-being, and target group were selected from

titles, keywords, and abstracts. The searched English key terms are presented in Table 2.1 below. Grey literature was excluded from the search due to concerns related to its quality, discoverability, accessibility, and archiving practices.

Table 2.1. *Search Terms*

Social Capital	family social capital OR family relation OR family support OR family contact frequency OR community social capital OR neighbourhood cohesion OR social participation OR trust OR reciprocity OR sense of belonging OR structural social capital OR cognitive social capital OR bonding social capital OR bridging social capital OR linking social capital OR emotional support OR instrumental support OR ties with place of origin
Migration	migrant OR migration OR immigrant OR immigration
Target Group	older adults OR older people OR ageing
Well-being	self-rated health OR physical functional ability OR falls OR frailty OR mental health OR life satisfaction OR quality of life OR depression OR loneliness OR happiness OR well-being.

2.21 Screening Eligibility and Study Selection

Initially, duplicate records were removed, resulting in a total of 2,450 unique articles. Subsequently, a screening process for the abstract and title of the studies was employed, leading to the exclusion of 1,645 articles. The next step was full-text screening, wherein studies were considered for initial inclusion if they satisfied the following criteria: (a) all the participants aged 50 and above or reported the results for the 50+ aged group; (b) adopted social capital theory or utilised social capital measurements within the study; (c) the participants were all migrants or reported the results for migration group; (d) the

study applied a quantitative design. The procedures followed for the search and selection of articles are presented in Figure 2.1. The author and another investigator independently assessed the titles and abstracts to determine eligibility for inclusion. Full texts were retrieved for potentially eligible studies, and those meeting the selection criteria were included. Discrepancies regarding eligibility were resolved through discussions with another investigator to reach a consensus.

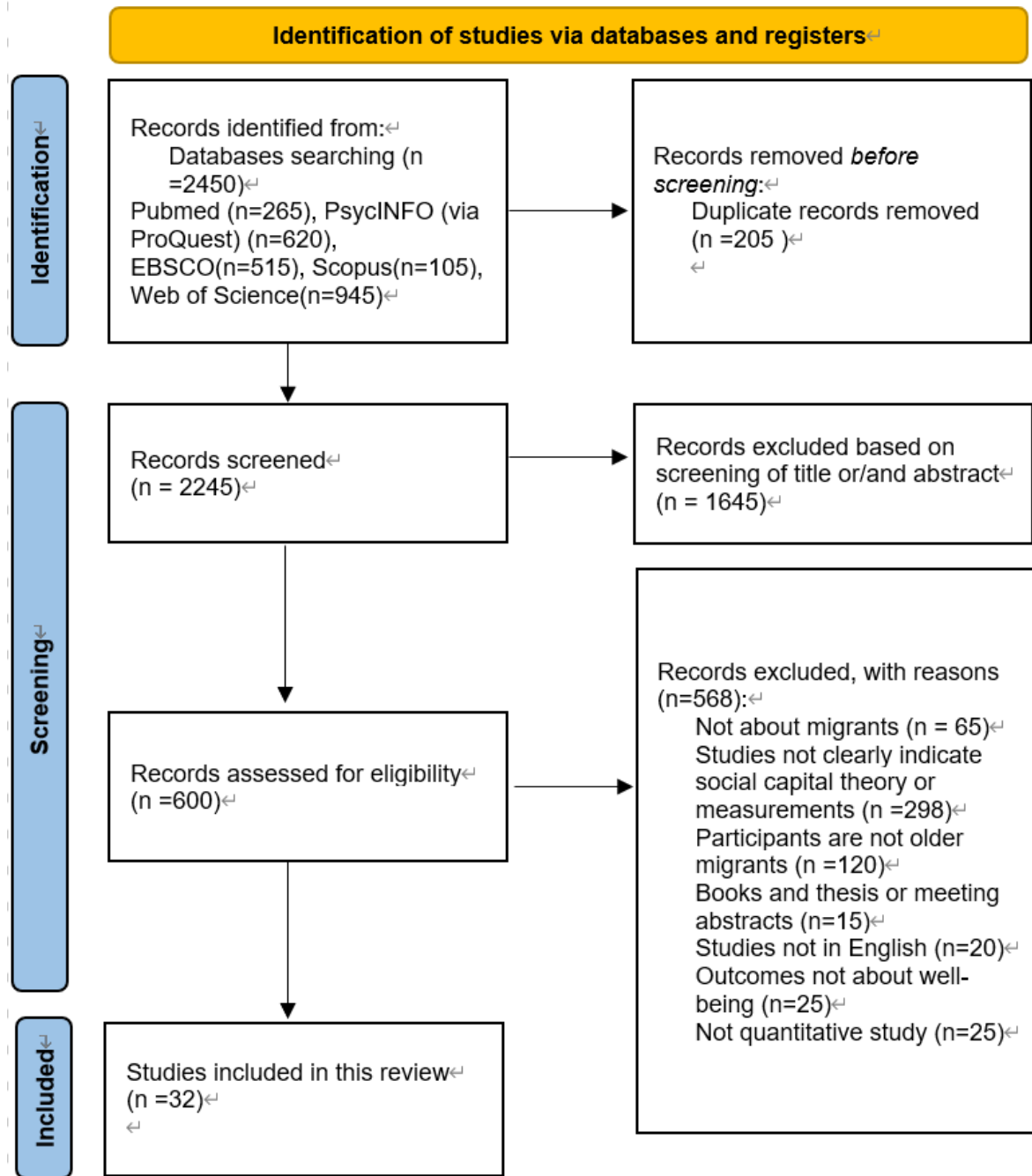


Figure 2.1. *PRISMA Flow Diagram of the Literature Search*

2.22 Data Extraction and Quality Assessment

Table 2.2 presents the information extracted from the selected studies. The extracted information included: (i) study details (author[s], publication year, study period, and research site); (ii) study characteristics (sample size and migration patterns); (iii) social

capital indicators; (iv) outcomes associated with well-being.

To ensure the validity of information reported by the selected studies, a quality assessment of the studies was performed independently by the author and investigator. Specifically, the criteria proposed by Siddaway et al. (2019) were adopted to measure the rigour of the selected quantitative studies, and these criteria are outlined as follows: (a) appropriate research design, (b) representative and unbiased sample, (b) reliable and valid assessment of key variables, (d) appropriate data analysis, and (e) explicit discussion. Each criterion received a score of 1 (*qualified*) or 0 (*unqualified*), with higher scores reflecting greater rigour. To ensure consistency and resolve any discrepancies in scoring, the author and investigator engaged in open discussion and provided justification for their respective scores attributed to each study. All included studies were rated as moderate to high quality.

2.3 Statistical Analysis

A random-effects model was used because the selected studies differed from each other in terms of research participants, sampling strategies, and research settings (Borenstein et al., 2021). A random effects model incorporated the variances into an overall estimated effect. The raw data of Pearson's correlation r and the sample size of each study were used to estimate the pooled effect size of the association between social capital and older migrants' well-being. When studies did not report correlations directly, effect sizes were harmonized using established meta-analytic approaches. Specifically, odds ratios were transformed into standardised mean differences using a logarithmic

conversion, and unstandardised regression coefficients were converted into Pearson's correlation coefficients using t-statistics and corresponding degrees of freedom (Chinn, 2000; Deeks et al., 2008). This approach facilitates the integration of diverse effect size metrics onto a common scale, thereby enabling more accurate and meaningful meta-analytic synthesis. The correlation was transformed through Fisher's z , converting a standardised metric to be compared, with 95% confidence intervals (CIs) (Borenstein et al., 2021). All the analyses were performed with Comprehensive Meta-Analysis 3.0 software (Biostat, Inc., Englewood, LA, USA). A positive correlation indicates that higher levels of social capital are correlated with better well-being, and a negative correlation indicates the inverse relationship.

To estimate the variation between studies, individual studies were used as the unit of analysis as it is anticipated that the effects will be relatively consistent within each study but may vary substantially between studies (Borenstein et al., 2021). If an individual study examined more than one outcome variable (e.g., a measure for physical health and another measure for mental health), the sample size was divided by the number of outcomes to reduce the impact on the overall effect size (Borenstein et al., 2021). The analysis of heterogeneity and variance between groups of studies was conducted using the Q statistic. Moreover, the I^2 statistic was employed to determine the proportion of variance in effect size attributable to between-study variance (Higgins et al. 2003), with the values of 25 percent, 50 percent, and 75 percent representing low, moderate, and high heterogeneity, respectively (Higgins et al., 2003). Subsequently, a moderator analysis was conducted to examine whether the heterogeneity of the overall correlation

could be moderated by the sample size, migration patterns, and cultural background. A funnel plot was used to visually examine the presence of publication bias in the meta-analysis. In addition, Egger's regression intercepts were used as a supplement to provide more objective and precise information regarding publication bias (Song & Gilbody, 1998).

2.4 Results

2.4.1 Characteristics of Selected Studies

Following the screening process, a total of 32 articles that met the eligibility criteria were included in this meta-analysis. Among the selected studies, six studies simultaneously investigated the relationships between family social capital, community structural social capital, and community cognitive social capital with well-being. Additionally, eleven studies explored the influences of family social capital and community structural social capital on well-being, while seven studies focused on the associations between community cognitive social capital and community structural social capital with well-being of older migrants.

The indicators of the family social capital contain intergenerational relations with adult children in the host cities or countries, contact frequency, support from hometown family members, and the spousal relationship of older migrants. The indicators of the community structural social capital include various community activity participation. Trust and reciprocity and sense of community were mainly assessed as the community cognitive social capital. Three reviewed studies distinguished connections with

hometowns and the host society. Two reviewed studies mentioned the network loss of family and friends for older migrants.

With respect to the well-being outcomes, the majority of studies ($n = 23$) focused on mental well-being, while five studies examining both physical and mental well-being, and four studies examined the physical well-being only. Regarding the research population, 23 studies focused on international immigrants, and nine studies specifically concerned with internal Chinese migrants. Furthermore, all the studies implied cross-sectional research designs.

2.42 Differences Between Older Migrants and Local Residents

In examining social capital performance between older migrants and local residents, Tang et al. (2022) found that older internal migrants relied more on family support than local residents but participated less in community activities and less frequently engaged with their neighbours. Peng et al (2015) observed that older internal migrants receive greater support from their children than local residents. Jiang and Renema (2021) indicated that compared to native-born older adults, older international migrants reported lower levels of belongingness, trust, and local friendships in their host country. Additionally, compared to native Dutch individuals, older international migrants experienced higher levels of loneliness and lower participation in social activities as well as reduced contact frequency with neighbours (Kate et al., 2020).

Table 2.2. *Characteristics of Studies Included in the Meta-Analysis*

Study Period	Research Design (N=Sample Size)	Outcomes and Measurements of Well-being	Social Capital Indicators	Population	Authors
2013	Cross-Sectional (n=101)	Self-rated physical and mental health (SF-36)	Community structural social capital: Civic participation*; Social networks*; Social participation*; Social support; Community cognitive social capital: Views of community; Trust and reciprocity	Older Chinese immigrants in Canadian Prairie City	Luo & Menec, 2018
NM	Cross-sectional (n=205)	Self-Rated Health (A global question)	Community structural social capital: Partnership in the community; Information sharing*; Political participation; Community cognitive social capital: Social norms; Trust;	Older Korean immigrants in the U.S.	Kim & Harris, 2013

2011-2012	Cross-sectional (<i>n</i> =3104)	Self-Rated Health (A global question)	Family social capital: Contact with family in the home country*; Community structural social capital: Social participation; Contact with friends in the home country*	Older immigrants in Italy	Cela & Belgiojoso, 2021
2013	Cross-sectional (<i>n</i> =1000)	Self-rated physical and mental health (SF-36)	Community cognitive social capital: Social trust*; Reciprocity*	Older internal migrants in China (urban-urban versus rural-urban)	Ma et al., 2020
2020	Cross-sectional (<i>n</i> =656)	Self-rated physical and mental health (SF-12)	Family social capital: Family network*; Community structural social capital: Friend networks*; Community cognitive social capital: Trust*	Older internal migrants in China	Tian et al., 2021

2008-2010	Cross-sectional (<i>n</i> =1092)	Self-rated health (A global question) and Depression (CES-D10)	Community structural social capital: Friend networks*; Family social capital: Family network*	Older Korean Immigrants in Florida and New York	Park et al., 2015
2015	Cross-sectional (<i>n</i> =591)	Self-rated mental health (A global question)	Community structural social capital: Social network in the neighborhood*; Organisation and community activities participated*; Membership in Communist Party and political institutions* Family social capital: Family relationship*	Local versus older internal migrants in China	Tang et al., 2022
2015	Cross-sectional (<i>n</i> =2583)	Happiness (One item from World Value Survey)	Community structural social capital: Friends in the resident community; Country of origin friends; Contact with the country of origin*	Middle-Aged and Older immigrants in Western European Countries	Jiang & Renema, 2021

			Community cognitive social capital: Sense of belonging in the resident community*; Generalised trust*; Family social capital: Contact with the country of origin*		
2018-2019	Cross-sectional (n=470)	Happiness (MUNSH-24)	Community cognitive social capital: Social cohesion*	Older internal migrants in China	Liu et al., 2023
2022	2018 CLDS (n=8346)	Depression (CES-D20)	Community structural social capital: Social networks*; Community cognitive social capital: Social trust* Family social capital: Trust of family members*	Older internal migrants in China	Zhou et al., 2022
2011-2012	Cross-sectional (n=815)	Quality of life (one-item question) and Loneliness (De Jong Gierveld Scale-6)	Community structural social capital: Social networks* Family social capital: Family network*	Older immigrants in England and Wales	Burholt et al., 2018

2013- 2014	2014 LASA (<i>n</i> = 461)	Loneliness (De Jong Gierveld Scale-11)	Family social capital: Contact with hometown family	Turkish and Moroccan older immigrants in the Netherlands	Klok et al., 2017
NM	Cross-sectional (<i>n</i> =133)	Happiness (MUNSH- 24)	Family social capital: Intergenerational support*; Community structural social capital: Social support outside the family	Older internal migrants versus local residents	Peng et al., 2015
2019- 2020	Cross-sectional (<i>n</i> =728)	Psychological well- being (PGC-9)	Family social capital: Intergenerational emotional support*	Older internal migrants in China	Yang et al., 2022
2023	Cross-sectional (<i>n</i> =483)	Affective well-being (PANAS-10)	Family social capital: Support from family* Community structural social capital: Support from friends, neighbours, and significant others*; Formal social support (community activities, welfare services)*	Grandparenting internal older migrants in China	Guo et al., 2023

2019	Cross-sectional (<i>n</i> =244)	Life Satisfaction (Neto's Migrant Life Satisfaction Scale)	Community structural social capital: Ask for advice, and have someone talk to in the community*; Meet new friends, participate in community activities* Community cognitive social capital: Trust in the community*; Interest in new things	Older internal migrants (<i>laopiao</i>) in China	Zhao et al., 2021
2011	Cross-sectional (<i>n</i> =382)	Life satisfaction (A global question)	Community structural social capital: Partnership with the community*; Information sharing*; Political participation; Community cognitive social capital: Social norms*; Trust*	Older Chinese versus older Korean immigrants in the U.S.	Kim et al., 2015
2011	Cross-sectional (<i>n</i> =205)	Quality of life (Subjective index of quality of life-8)	Community structural social capital: Partnership with the community*; Information sharing; Political participation*; Community cognitive social capital: Social norms; Trust*;	Older Chinese immigrants in the U.S.	Kim et al., 2019

2005-2006	One wave of SHARE (<i>n</i> =950)	Quality of life (CASP-12), Life satisfaction (A global question) and Depression (Euro-D12)	Community structural social capital: One's variety of participation in social activities*	Older immigrants in Israel	Amit & Litwin, 2010
2011-2013	Cross-sectional (<i>n</i> =3105)	Quality of life (A global question) and Depression (PHQ-9)	Community structural social capital: Friend support*; Social engagement*; Community cognitive social capital: Neighborhood cohesion; Family social capital: Family support*	Chinese older immigrants in Chicago	Guo et al., 2022a
2001-2002	Cross-sectional (<i>n</i> =101)	Quality of life (One question from	Family social capital: Support from spouse and child*	Arab American	Ajrouch, 2007

		WHOQOL-BREF) and Life satisfaction (A global question)			
2011- 2013	2013 PINE (<i>n</i> =2923)	Quality of life (A global question) and Depression (PHQ-9)	Community structural social capital: Friend support*; Community cognitive social capital: Neighborhood cohesion*; Family social capital: Spousal support*; Family support*	Chinese older immigrants in the United States	Guo et al., 2022b
2016- 2017	Statistics Netherlands (<i>n</i> = 7920)	Loneliness (De Jong Gierveld-6)	Community structural social capital: Social activities*;	First-generation immigrants versus local Dutch	Kate et al., 2020
2011	Cross-sectional (<i>n</i> =382)	Depression (GDS- SF15)	Community structural social capital: Community partnership*; Political participation*; Information sharing*;	Older Chinese versus older Korean	Kim et al., 2013

			Community cognitive social capital: Norms*; Trust	immigrants in Los Angeles County	
2013	Cross-sectional (<i>n</i> =209)	Depression (CES-D10)	Family social capital: Family network*; Community structural social capital: Community support*; Community participation*; Negative interaction*; Community cognitive social capital: Social cohesion	Older Korean immigrants in the U.S.	Jang et al., 2015
2004	Baseline of SHARE (<i>n</i> =10518)	Depression (Euro-D12)	Community structural social capital: social participation*; Family social capital: number of children, frequency of contact with children*	Older immigrants versus local residents Europe	Sabater & Graham, 2016
2011-2013	Population Study of Chinese Elderly (PINE) (<i>n</i> =2717)	Self-rated health (A global question) and Quality of life (A global question)	Family social capital: Contact frequency; Emotional closeness*; Living arrangements; Trust Community structural social capital: Support from friends*	Older Chinese immigrants in the U.S.	Lai et al., 2019

2006	The first wave of the GGS Turkish-German ($n = 606$)	Loneliness (De Jong Gierveld-6)	Family social capital: Living arrangements*; Contact frequency; Emotional support; Relationship satisfaction*	First-generation older Turkish migrants	Kate et al., 2021
2012-2013	Baseline data from Population Study of Chinese Elderly (PINE) in Chicago ($n = 3157$)	Depressive symptoms (PHQ-9), Loneliness (ULS-3) and Quality of life (A global question)	Community structural social capital: Loss of friends*; Friend support network*; Family social capital: Spouse or child loss; Family support network*	Older Chinese immigrants in the U.S.	Liu et al., 2021
2021	Cross-sectional ($n=4995$)	Emotional loneliness and Social loneliness (De Jong Gierveld-6)	Community structural social capital: Friend network size; Contact frequency with friends*; Civic engagement*	Dutch retirement migrants abroad	Savas et al., 2025

			Community cognitive social capital: Sense of belonging to the destination country*		
NM	Cross-sectional (n= 244)	Frailty (FRAIL-5)	Family social capital: Family support* Community social capital: Friends and significant others support*	Older Korean immigrants in the U.S.	Sagong & Yoon, 2021
2008-2009	Cross-sectional (n= 246)	Physical Functioning (SF-36)	Family social capital: Family support* Community social capital: Friends and significant others support*	Older Korean immigrants in the U.S.	Lee & GlenMaye, 2014

Note: * denotes the result showed that the influence of social capital indicator is significant on well-being outcomes in each individual study. NM: not mentioned

2.43 Association Between Family Social Capital and Well-being of Older Migrants

Figure 2.2 presents the results of the overall association between family social capital and older migrants' well-being. Specifically, under the random-effects model, a small but significantly positive association between family social capital and older migrants' well-being was observed ($r = 0.100$, 95% CI [0.012, 0.188], $p < 0.05$). Significant heterogeneity in this association was observed across the included studies ($Q = 788.412$, $I^2 = 97.717$, $p < 0.001$). Overall, these findings indicate that higher levels of family social capital were significantly associated with enhanced well-being among older migrants.

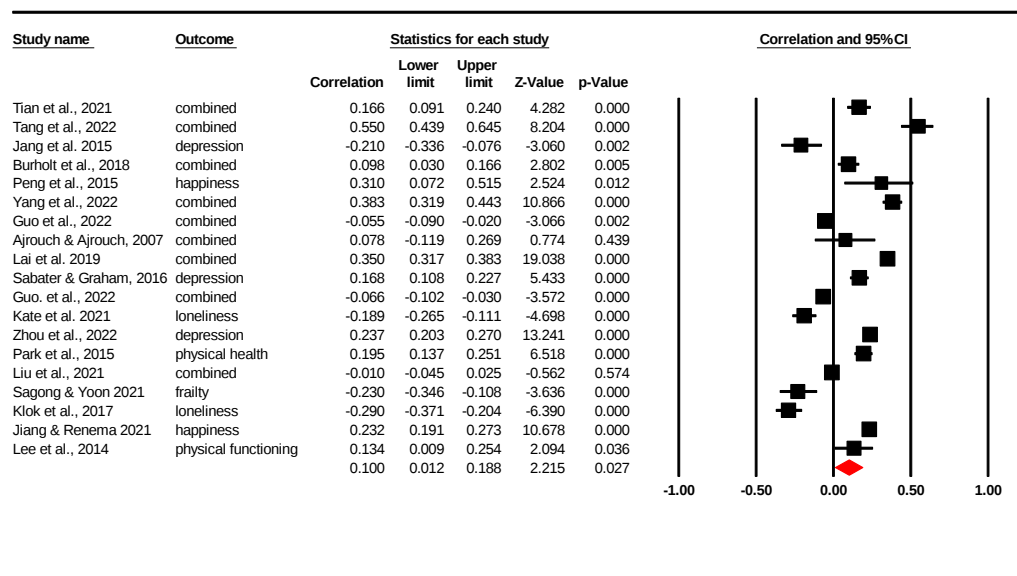


Figure 2.2. Forest plot of Association Between Family Social Capital and Well-being

2.44 Association Between Community Structural Social Capital and Well-being of Older Migrants

The results of the association between community structural social capital and older

migrants' well-being are presented in Figure 2.3. Using the random-effects model, a small but significant association between community structural social capital and older migrants' well-being was found ($r = 0.110$, 95% CI [0.032, 0.186], $p < 0.01$). Substantial heterogeneity in this association was observed across the studies ($Q = 1316.511$, $I^2 = 98.253$, $p < 0.001$).

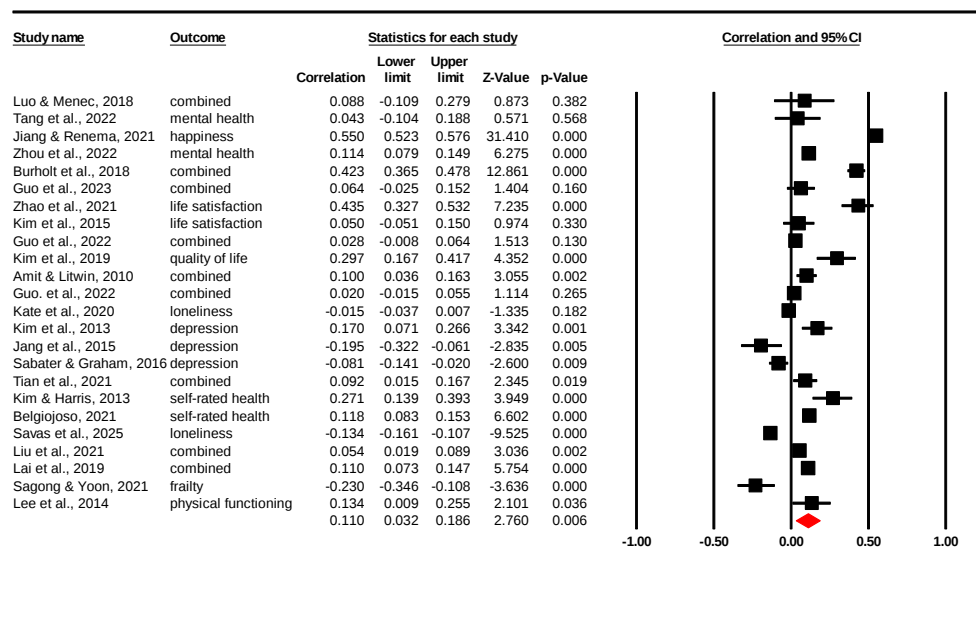


Figure 2.3. Forest Plot of Association Between Community Structural Social Capital and Well-being

2.45 Association Between Community Cognitive Social Capital and Well-being of Older Migrants

As shown in Figure 2.4, the association between community cognitive social capital and well-being of older migrants was also significant ($r = 0.160$, 95% CI [0.023, 0.290], $p < 0.05$). The analysis results revealed substantial heterogeneity in this association across the studies ($Q = 1269.316$, $I^2 = 98.897$, $p < 0.001$).

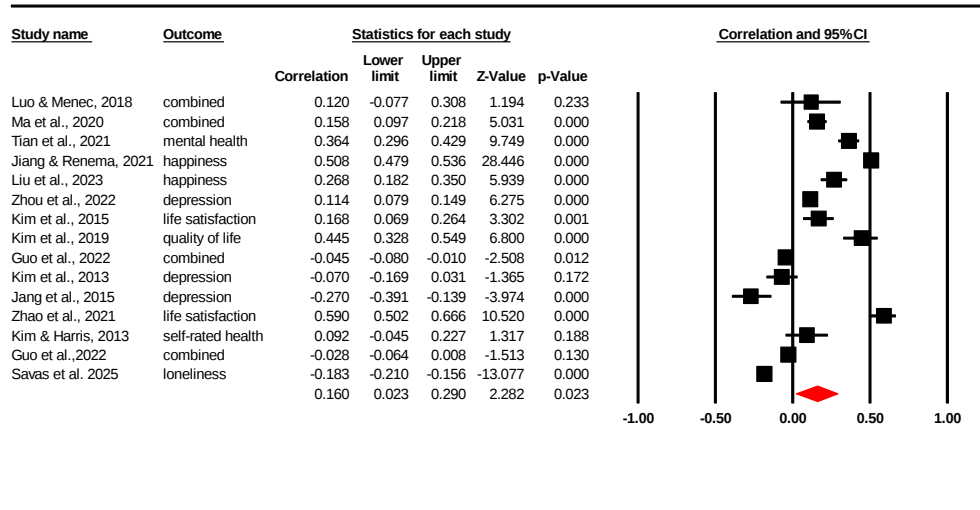


Figure 2.4. Forest plot of Association Between Community Cognitive Social Capital and Well-being

2.46 Moderator Analysis

Table 2.3 shows the results of moderation analyses of the influence of family social capital, community structural social capital, and community cognitive social capital on the well-being of older migrants. These analyses were conducted to determine whether migration patterns, sample size, and migrant cultural background accounted for the heterogeneity in the correlations. The results revealed that the association between family social capital and well-being was significantly moderated by migration intentions ($Q_b = 5.535$, $p < 0.05$), with the relationship significant only for those intended to migrate to live with their adult children ($r = 0.268$, 95% CI [0.097,0.424], $p < 0.001$). In addition, the association between family social capital and the well-being of older migrants was also significantly moderated by the migration distance ($Q_b = 15.621$, $p < 0.01$), with the relationship significant only among those internal migrants ($r = 0.328$, 95% CI [0.213,0.433], $p < 0.001$).

Table 2.3. *Results of Moderator Analysis of the Associations Between Social Capital and Well-being*

Moderator group		Subgroup	<i>k</i>	<i>r</i>	95% CI	<i>Qb</i>
<i>Migration patterns</i>						
Family social capital		Other reasons	13	0.024	[-0.086,0.138]	5.535*
		Relocating with children	6	0.268	[0.097,0.424]	
Community social capital	structural	Other reasons	19	0.104	[0.011,0.194]	0.116
		Relocating with children	5	0.130	[0.008,0.248]	
Community social capital	cognitive	Other reasons	10	0.097	[-0.090,0.278]	1.579
		Relocating with children	5	0.278	[0.063,0.468]	
Family social capital		Internal	5	0.328	[0.213,0.433]	15.621*
		International	14	0.018	[-0.083,0.118]	
Community social capital	structural	Internal	5	0.149	[0.046,0.249]	0.529
		International	19	0.098	[-0.006,0.189]	
Community social capital	cognitive	Internal	5	0.304	[0.158,0.437]	3.510
		International	10	0.081	[-0.107,0.263]	
<i>Cultural background</i>						
Family social capital		East Asian	14	0.136	[0.030,0.239]	1.407
		Western	3	0.005	[-0.181,0.191]	
Community social capital	structural	East Asian	16	0.093	[0.041,0.144]	0.250

social capital		Western	8	0.138	[-0.032,0.300]	0.007
Community	cognitive	East Asian	13	0.154	[0.057,0.248]	
social capital		Western	2	0.185	[-0.495,0.725]	
<i>Sample size</i>						
Family social capital		<1000	11	0.076	[-0.090,0.238]	0.307
		>=1000	8	0.134	[-0.014,0.250]	
Community	structural	<1000	14	0.130	[0.027,0.231]	0.355
social capital		>=1000	10	-0.083	[-0.035,0.199]	
Community	cognitive	<1000	9	0.204	[0.033,0.363]	0.621
social capital		>=1000	6	0.095	[-0.118,0.300]	

Note. * $p < 0.05$.

2.47 Publication Bias

Three funnel plots were used to illustrate the presence of publication bias (Figures 2.5, 2.6, and 2.7), where the x-axis denotes Fisher's z and the y-axis represents the standard error. In all the funnel plots, the majority of the studies are distributed around the mean effect size at the top, although the symmetry is not visually apparent. Moreover, Egger's regression test results yielded nonsignificant intercepts for family social capital ($b = -0.278$, 95% CI [-7.240, 6.685], $p > 0.05$), community structural social capital ($b = 2.851$, 95% CI [-3.210, 8.912], $p > 0.05$), and community cognitive social capital ($b = 5.519$, 95% CI [-4.496, 15.533], $p > 0.05$) on the well-being of older migrants were all not significant, suggesting that publication bias were unlikely.

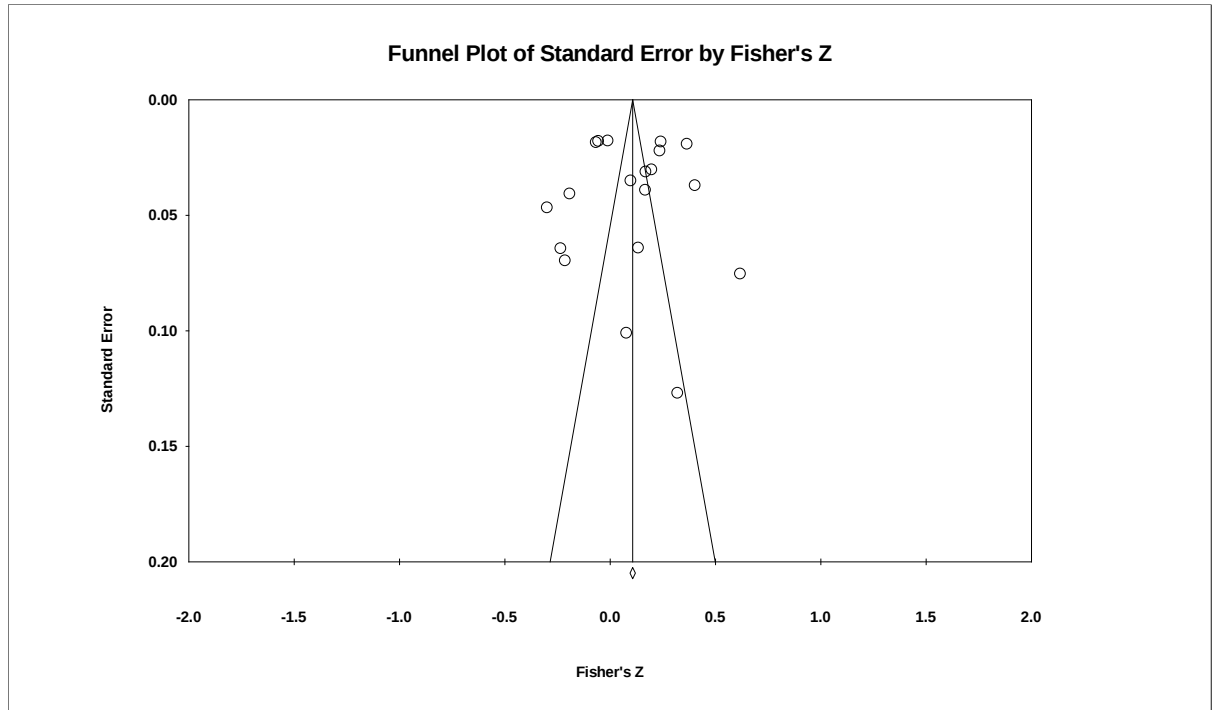


Figure 2.5. *Funnel Plot of the Association Between Family Social Capital and Well-being*

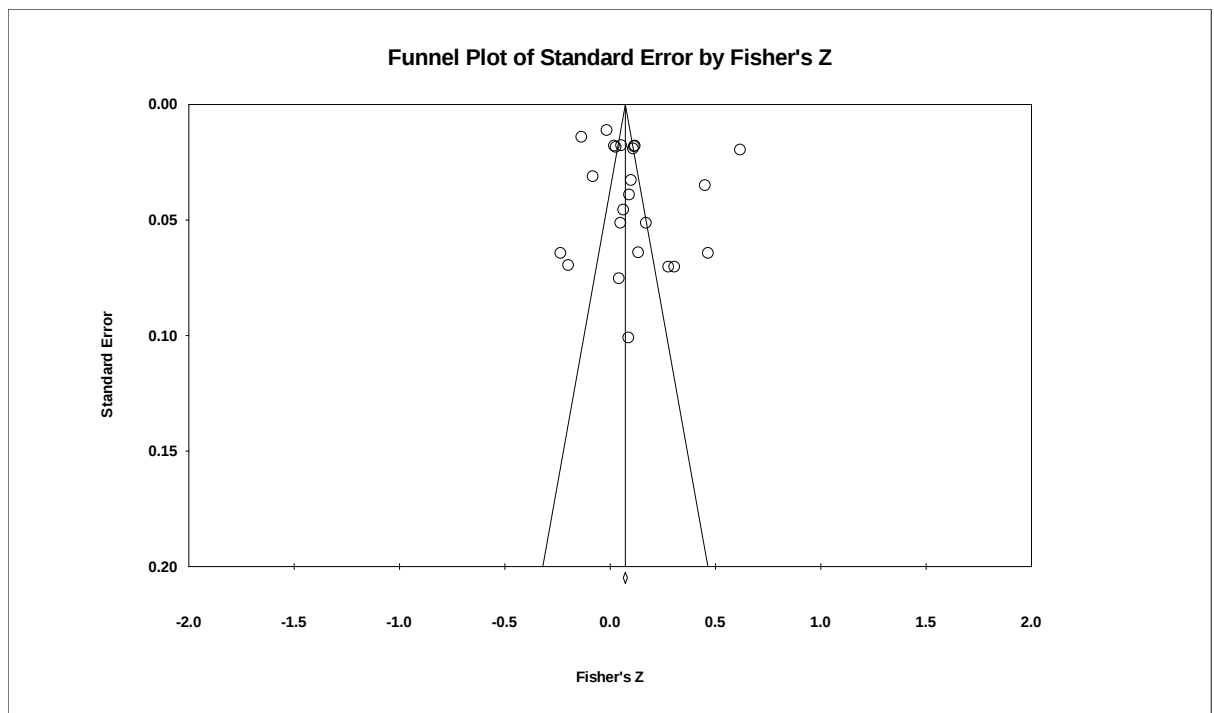


Figure 2.6. *Funnel Plot of the Association Between Community Structural Social Capital and Well-being*

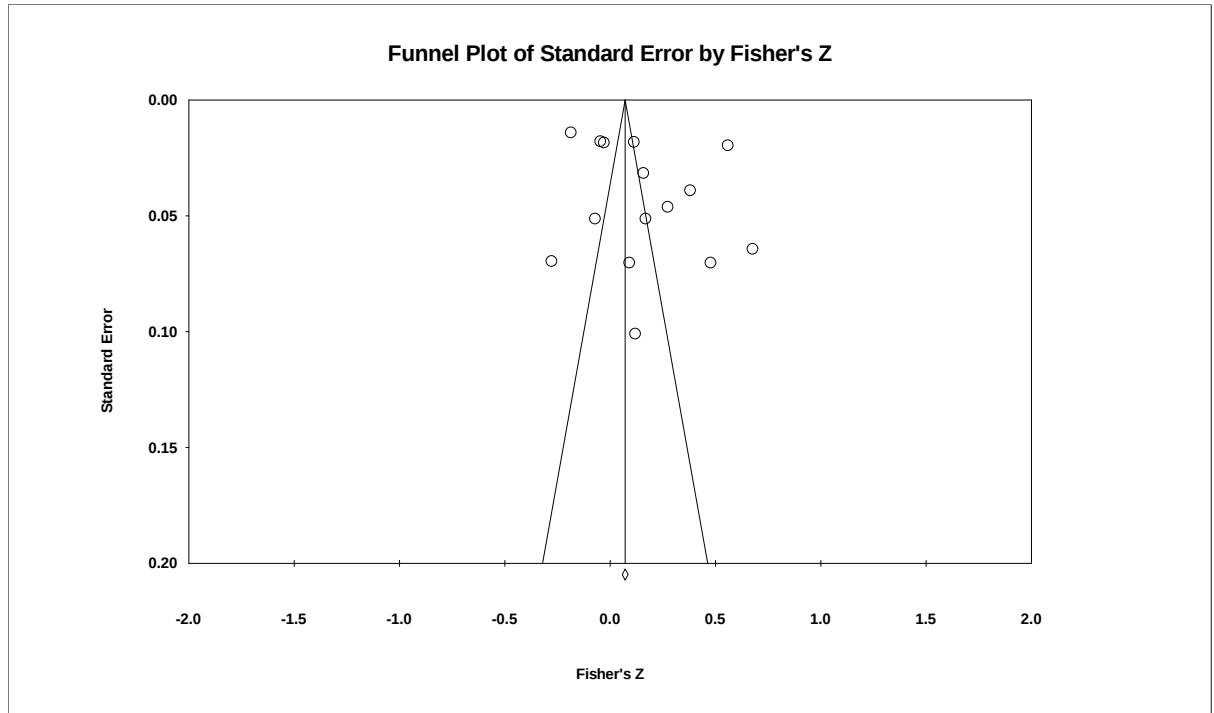


Figure 2.7. *Funnel Plot of the Association Between Community Cognitive Social Capital and Well-being*

2.5 Discussion

This chapter provides a summary of the characteristics of studies investigating the association between social capital and well-being among older migrants. All included studies employed a cross-sectional design. The majority of studies focused on international older immigrants, a substantial number ($n = 9$) of studies focused specifically on older Chinese internal migrants. According to China's National Health Commission, older internal migrants accounted for more than 7% of the total migrant population in 2016, a statistic estimated at 18 million in 2018 (National Health Commission of the People's Republic of China, 2019).

Regarding the study population, few studies conducted a comparative design to examine differences among various ethnic groups ($n = 4$) or between migrants and local

residents ($n = 4$). Nearly half of the studies measured both family and community social capital. The studies assessed a wide range of well-being outcomes, such as quality of life, depression, happiness, loneliness, life satisfaction, affective well-being, and self-rated health.

This meta-analysis revealed a weak but significantly positive association between family social capital and the well-being of older migrants. This finding resonated with the results of previous review studies, which highlight the prominent role of family social capital as a significant protector for well-being, especially for older migrants (Bhatia et al., 2024; Wang & Lai, 2022). Nyqvist et al. (2012) identified family social capital as the dominant support for older adults' well-being in a systematic review. The distinction between family and community dimensions of social capital originates from research on the benefits of parent-child interactions and community ties (Coleman, 1988; Furstenberg & Kaplan, 2004). Socioemotional selectivity theory suggests that older adults increasingly depend on intimate ties (Carstensen et al., 1999). Scholars' attention has paid to family social capital as family is the closest environment surrounding an individual, but there is still no consistent definition and measurements on family social capital (Alvarez et al., 2017). Ongoing debates also extend to the boundaries of family. Hence, Alvarez et al. (2017) recommended including nuclear and extended family members in a joint framework. Evidence also indicated that older migrants would maintain ties with family in their hometowns and benefit from their continued support (Kou et al., 2018).

The mean overall effect sizes of community structural social capital, and community

cognitive social capital on well-being were also significant. This meta-analysis indicates that the magnitude effect of community cognitive social capital is slightly larger than community structural social capital on the well-being of older migrants. This result is in line with the previous study, which illustrates that the construction of social capital is age-related, indicating that older adults may have physical disabilities in formulating community social capital through activity participation (Nyqvist et al., 2012; Leinonen et al., 2002). We found that the majority ($n = 13$) of the studies that measured community cognitive social capital were among Eastern Asian background older migrants. The community cognitive social capital, such as mutual trust and cohesion, involves voluntary associations and wider social relations that link individuals to the larger society (Putnam, 1993; 2000). The findings implied that community harmony and a sense of belonging may be more important for older migrants with collectivist cultural backgrounds (Akkuş et al., 2017).

The results of this meta-analysis demonstrate substantial heterogeneity in the examined associations, prompting an investigation into the moderators potentially contributing to this heterogeneity. The findings indicated that the heterogeneity in the associations of family social capital with well-being can be attributed to different migration patterns. Specifically, it was observed that older migrants intending to relocate to their adult children and the internal older migrants derived greater benefit from family social capital, compared to those with alternative migration intentions and international older immigrants. This observation aligns with the person-environment resources and ageing-well model, which posits that older adults obtain resources from

both proximal environments (e.g., family interactions) and distal environments (e.g., community engagement) (Wahl & Gerstorf, 2018; 2020). Additionally, older migrant parents have achieved family reunification after long-term separation (Nedelcu, 2023) and usually live with or close to their migrant children. In this process, reunification and support across generations play an important role in older people's migration decisions. The reviewed studies on family-motivated migration primarily focus on internal migrants in China, where older parents may expect support from their adult children rather than seeking new lifestyles (Lai & Chau, 2010). The findings underscore the importance of considering broader socio-cultural contexts when examining the impact of social capital dimensions on older migrants' well-being.

2.6 Research Gaps

2.61 Insufficient Research on the Interconnection Between Hometown and Host City Social Capital in Shaping Older Migrants' Well-being

Only three reviewed studies distinguished connections with hometown and local society, in examining the influences on the well-being of older migrants. Research has indicated that older migrants may actively participate in local communities to build new connections, while simultaneously maintaining ties with their places of origin as a source of emotional support and continuity (Kou et al., 2018). They perceived both local and hometown social networks with strong reciprocal and interdependency as well-being aspects (Zontini, 2015). However, sustaining connections with the place of origin can introduce complexities, including challenges related to identity and

adaptation in the host environment (Kou et al., 2018). While local and hometown networks each appear to play distinct and sometimes overlapping roles in shaping adaptation and well-being, further examination of how they jointly influence older migrants' experiences could enhance our understanding in this area.

2.62 Insufficient Evidence Regarding the Interplay Between Family and Community Social Capital on Well-being

Nyqvist et al. (2012) systematically reviewed studies about social capital and older adults' mental health, and suggested that supports from family and friends are vital. They also suggested that future studies should consider an ecological perspective to investigate the different levels of systems' effects on older adults' well-being. Distinguishing between family and community social capital is therefore important, as this distinction can better capture the social connections of older migrants in host societies. Recent qualitative studies highlighted the important role of close family relationships in facilitating older migrants with a sense of belonging to the host environments (e.g., Gao et al., 2021; Liu et al., 2020). Empirical evidence also demonstrated a positive association between family relationships and social participation in local community among older adults, especially among migrants (Ruan & Wang, 2024; Wangliu, 2023). However, the specific pathways by which family social capital translates into community social capital and subsequently affects adaptation and well-being have not been fully articulated. This gap limits a comprehensive understanding of the ageing well processes in the host society for older migrants.

2.63 Inadequate Focus on Both Positive and Negative Aspects of Well-being

Among the reviewed studies, most assessed either positive or negative affect alone. This narrow approach fails to capture the full spectrum of well-being, which encompasses not only the presence of positive states such as life satisfaction and happiness, but also the absence of negative states such as depression and loneliness (Diener, 1984; Eid & Larsen, 2008). A balanced assessment is particularly important for older migrants, who may simultaneously experience positive well-being and persistent challenges or distress during integration (Berry, 1997; Bhatia et al., 2024; Demes & Geeraert, 2013). Moreover, one reviewed study conceptualised social capital merely as coping resources for older immigrants, and found that different types of resources could have different effects on psychological well-being (Guo et al., 2022b). The role of social capital in supporting adaptation among older migrants also requires further research.

Chapter 3 Theoretical Framework

3.1 Brief Introduction

This chapter presents an overview of social capital theory and complementary theoretical perspectives. Building on these foundations, the Multidimensional Social Capital Framework for Ageing Well and Ageing in Place was developed as the conceptual framework for this thesis. This model informed the research design and the formulation of the hypotheses.

3.2 Theoretical Perspectives: Social Capital

Social capital refers to the resources and benefits derived from social relationships, networks, and norms, which support individual achievement and cooperation for mutual advantage. Coleman (1990) defined social capital as those aspects of social structures that enable individual or collective action. Putnam (1994; 2000) further explained that social capital comprises networks, norms of reciprocity, and trustworthiness that enhance collective effectiveness in pursuing shared goals. Bourdieu (1986) conceptualised social capital as the aggregate of actual or potential resources linked to membership in a durable network of institutionalised relationships, highlighting its role in maintaining or advancing social position and power. Lin (2017) demonstrated that social capital is rooted in the resources embedded within social networks, which individuals can access and mobilise for instrumental or expressive

purposes. According to these definitions, social capital is a multidimensional construct that is based on the quality and structure of social relationships and shapes individual and collective outcomes.

Social capital is commonly conceptualised as involving several dimensions, particularly structural and cognitive dimensions (Harpham et al., 2002; Putnam, 1994). Structural social capital involves social participation and group membership, whereas cognitive social capital involves trust, belonging, and reciprocity (Bassett & Moore, 2013; Harpham et al., 2002; Lin & Erickson, 2010). Relational dimensions capture the quality of interactions, such as trustworthiness (Claridge, 2018). However, some overlap exists between cognitive and relational dimensions (Claridge, 2018), while the structural and cognitive binary dimensions are well established and widely applied in empirical studies. Szreter and Woolcock (2004) further classified social capital across bonding, bridging, and linking dimensions: Bonding refers to inward-facing networks that reinforce exclusive identities, bridging connects individuals across diverse social and ethnic groups, and linking involves trust-based relationships across power or authority hierarchies. These dimensions illustrate the complexity of social capital and its central role in shaping well-being, adaptation, and social integration.

To accurately represent the distinct networks and resources relevant to older migrants, this study divided social capital into family and community dimensions in accordance with Coleman's (1988) conceptualisation. Coleman (1988) distinguished between social capital generated within the family and that derived from the broader community, which are both essential to well-being and social functioning. Within families, social

capital is characterised by strong kinship ties, obligations, and mutual trust that foster support and socialisation. For migrant families, family-based social capital plays a crucial role in mitigating migration-related stress by sustaining close-knit support networks and transmitting cultural values and resources across generations (Coleman, 1988).

The conventional categorisation of social capital into bonding, bridging, and linking dimensions does not fully capture the unique configurations of older migrants' social networks. Although these categories are applicable in many contexts, they do not adequately represent the intimate yet unfamiliar environments that older migrants must navigate. The parent–child relationship is the most enduring bond across the life course, particularly in Asian cultures that emphasise family cohesion (Fingerman et al., 2011; Reyes & Patterson, 2025). In China, linking social capital often refers to connections with welfare systems and community authorities, which differ fundamentally from the intimate family ties central to older migrants' support systems. Accordingly, this study adopted a family–community division of social capital as an alternative framework to examine older Chinese internal migrants' social capital. Family social capital encompasses the intimate, obligation-based networks that provide emotional and instrumental support critical for coping with migration stresses and transmitting cultural values. Community social capital includes broader social participation, trust, and access to institutional resources that complement family support and facilitate integration into the host society. This division captures the diversity and complexity of social resources that older migrants use to adapt to new environments.

Research has proven that family and community social capital play protective roles in relation to the adaptation and well-being of older migrants. Studies emphasise the importance of instrumental and emotional family support (Li et al., 2017; Park et al., 2021; Peterson et al., 2021; Sabater & Graham, 2016). Trust, social participation, and local community connections are essential for adaptation and well-being (Kim et al., 2013; 2015; 2019). Family social capital is especially important as older migrants reconstruct networks in new environments (Hagan et al., 1996; Li et al., 2017; Tilly, 2007). Structural and cognitive social capital in the wider community have been shown to have significant effects on the well-being of individuals (Forsman et al., 2012). While the effects of structural social capital would vary in different cultural contexts (De Silva et al., 2007), collective activities and a sense of belonging are stronger predictors of older Chinese immigrants' well-being than older Korean immigrants (Kim et al., 2013). Trust and reciprocity have also been found to affect the mental health of older adults in Chinese contexts (Norstrand & Xu, 2012; Yip et al., 2007). These mixed findings highlight the need to further examine how family and community social capital shape well-being among older internal migrants in China.

3.3 Conceptual Framework

This study applied social capital theory and complementary perspectives to examine the role of social capital in the process of ageing well among older internal migrants in China. Using the convoy model with a life-course framework, this study posited that social capital profiles differ according to the strength of hometown and local

connections, clarifying the social capital formation during migration and the influences of social capital on adaptation and well-being. By integrating the environment and ageing-well model, the thesis examines the pathways of community structural and cognitive social capital linking family social capital to adaptation and well-being, to further explore the interplay between family and community resources in facilitating older migrants' integration and well-being in the host environments. Finally, this thesis further explores the pathways of place attachment linking social capital and permanent settlement intention of older migrants, and the interplay with family enabling factors. Figure 3.1. shows the conceptual framework of the Multidimensional Social Capital Framework for Ageing Well and Ageing in Place.

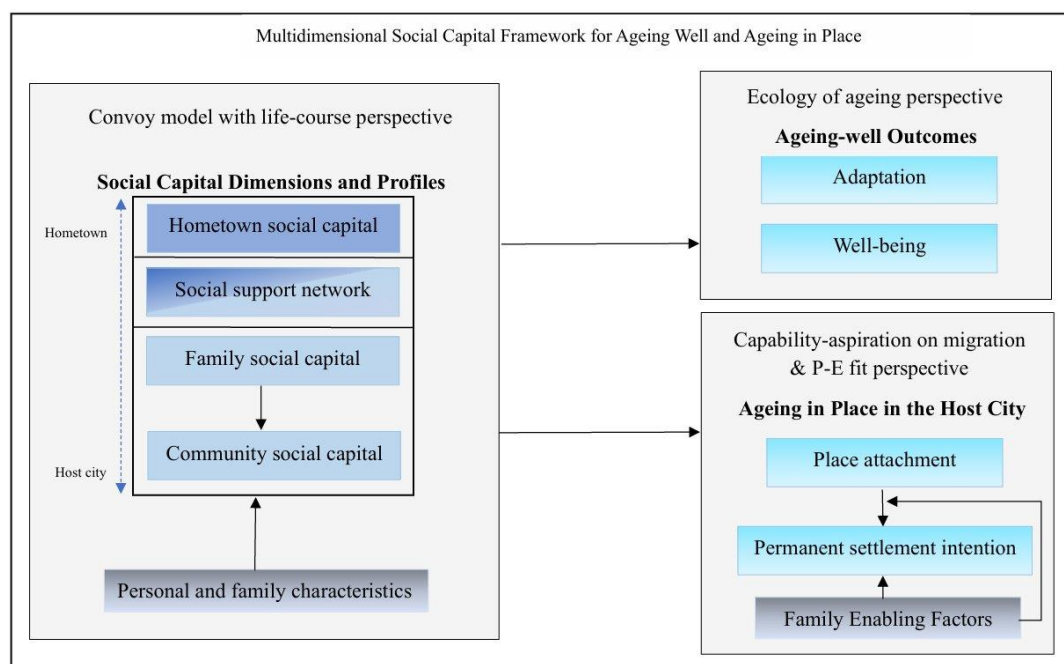


Figure 3.1. *Multidimensional Social Capital Framework for Ageing Well and Ageing in Place*

3.31 Social Capital Profiles: Differentiating Hometown and Local Ties

The network approach is an extensively used framework for measuring and analysing

social capital; it focuses on resources generated through social relationships (Kawachi et al., 2008; Lin, 2017). The convoy model complements this approach by highlighting the closeness of relationships and the evolving nature of social networks over the life course (Antonucci et al., 2011). The convoy model conceptualises social networks as ‘convoys’ that accompany individuals throughout life and are organised in concentric layers from intimate family to friends and acquaintances. This perspective is consistent with Coleman’s (1988) distinction between family and community social capital and reflects the relational structure of social networks.

The incorporation of the life-course perspective could provide essential temporal and spatial dimensions to the analysis of social capital and networks among older migrants (Bengtson et al., 2012; Hendricks, 2012). This perspective emphasises that social relations and resources are embedded within time and place and shaped by interconnected lives and social trajectories that unfold across contexts (Bengtson et al., 2012). The spatial separation between origin and destination communities influences the maintenance, transformation, or loss of social capital, affecting adaptation, well-being, and settlement intentions. This study integrated social capital theory with the convoy model with a life-course perspective to construct a comprehensive framework and capture the multidimensional, dynamic, and context-dependent social relations involved in ageing and migration.

Social relations differ on the basis of individual characteristics such as age, sex, and socioeconomic status (Antonucci & Birditt, 2014). Social capital is shaped by an individual’s position within the social structure (Bourdieu, 1985; Schiff, 1992).

Personal attributes such as education and wealth facilitate certain forms of social capital, while group membership also generates social capital (Fox et al., 2023; Kawachi, 1999). Recent evidence also suggested that older migrants with higher education and income tend to have more diverse and active social networks, while those with limited resources or reduced competence were more likely to experience restricted social capital profiles (Gan et al., 2024; Park et al., 2015; Park et al., 2018). Within families, parents' human resources contribute to their children's social capital formation (Coleman, 1988). Bourdieu (1985) argues that economic, cultural, and social capital are distinct yet interrelated forms of capital, and that, under certain conditions, economic and cultural capital can be transformed into social capital. Family members' cultural resources, such as education, can activate social capital within families, influencing individual success (Bourdieu, 1985; Furstenberg & Kaplan, 2004). Collectively, these influences highlight how social capital profiles among older migrants could be shaped by personal and familial attributes.

3.32 Pathways of Community Social Capital

From the ecology of ageing, old age is defined as a critical phase in the life course that is influenced by the environment (Wahl et al., 2012). This perspective highlights the importance of the environment to ageing well, with a particular focus on the social environment (Lawton & Nahemow, 1973; Wahl & Lang, 2006). Social environment contains individuals' social life, such as close and intimate relationships, while the environment and ageing-well model also distinguishes the proximal and distal aspects

of the surrounding environment (Wahl & Gerstorf, 2020; Bronfenbrenner, 1979). Social capital focuses on the resources formulated from social networks (Berkman et al., 2000). Both perspectives posit that network-based resources are essential to individuals' well-being; hence, the integration of these perspectives into theoretical models is particularly valuable for elucidating the process of ageing well among older migrants.

Wahl et al. (2012) proposed the person-environment processes in the environment and ageing-well model. This model identifies two pathways of interaction: agency, which refers to intentional and proactive behaviours, and belonging, which reflects a sense of positive connection between individuals and their environments (Bandura, 2006; Baumeister & Leary, 1995; Wahl & Oswald, 2010; Wahl et al., 2012). The most immediate interface between the person and environment generated resources, facilitating ageing well through these pathways (Wahl et al., 2012). The belonging pathway illustrates the bonds, affective and attachment to the environment (Smith, 2009; Oswald & Wahl, 2005), which is similar to the cognitive aspects of social capital. The agency pathway includes the reactive and proactive behaviours to adapt to the environment (Wahl et al., 2012), which is conceptually similar to structural social capital. Early research indicated that family members could help each other in generating social capital outside the family, by mobilising their resources (Coleman, 1988; Morrow, 1999; Offer & Schneider, 2007). In the process of family-driven relocation, family social capital is the most intimate and dependable resource available to older migrants (Treas & Mazumdar, 2004). On the basis of the proximal–distal environmental dichotomy, the two aforementioned person–environment pathways, and

the intergenerational transmission of social capital within migrant families, this study proposed that family social capital indirectly influences the outcomes of ageing well among older migrants through community structural and cognitive social capital pathways.

3.33 Outcomes of Ageing Well: Adaptation and Well-being

Well-being is central in ageing-well outcomes, and it is influenced by the environmental factors (Wahl et al., 2012). Well-being relates to how people feel and think about their lives (Diener, 1984). It is a broad concept that can be divided into two components: Affective well-being involves the presence of positive emotions (e.g., happiness) and the absence of negative emotions (e.g., depressive symptoms), whereas cognitive well-being concerns individuals' evaluative judgements of their lives, such as overall life satisfaction (Busseri & Sadava, 2011; Diener, 1984; Eid & Larsen, 2008). Affective and cognitive well-being are thus distinct constructs (Lucas et al., 1996). Accordingly, this study assessed older Chinese internal migrants' well-being by using indicators of both cognitive and affective well-being, namely life satisfaction, happiness, and depressive symptoms.

Ageing well involves autonomy and identity and reflects proactive adaptation and attachment to the environment (Wahl et al., 2012). The adaptation process required certain social resources around the older migrants, and the outcomes of adaptation explain how the older migrants integrate into the host environments. Ward et al. (2010) defined sociocultural adaptation as behavioural competence in acquiring culturally

appropriate skills and managing social interactions in the host environment. For example, the ability to navigate cross-cultural encounters and manage daily life involves factors such as language proficiency and knowledge of local customs (Kosic, 2002; Searle & Ward, 1990; Ward & Kennedy, 1999; Ward & Searle, 1991). Psychological adaptation refers to the cognitive and emotional responses to stress in host cultural environments (Ward et al., 2010). From the perspectives of embeddedness and social cohesion, community social capital (e.g., civic participation and mutual trust) supports integration into mainstream society and the pursuit of collective well-being (Wenger et al., 2007). From the perspective of acculturation, interactions with host communities enhance adaptation among older migrants (Kuo, 2014; Ward & Kennedy, 1999). This study incorporated adaptation into its framework of ageing well to capture older migrants' experiences of integrating into host cities.

3.34 Pathways of Place Attachment Linking Social Capital to Preferences for Ageing in Place in the Host City

Recent research has increasingly focused on migrants who arrive in their 40s and later face the choice of either ageing in the host society or returning to their hometowns. Empirical findings indicate that only a minority eventually return to their places of origin, while the majority prefer to age in place within the host community (e.g., Baykara-Krumme, 2013; Hunter, 2011). Research has also examined the growing subgroup of older migrant parents (zero migrants) who relocate primarily to accompany their adult children to new cities or countries (e.g., Tiaynen-Quadir, 2016). Although such migration is becoming increasingly prevalent, the preferences for ageing in place

of these older migrants remain understudied. Moreover, while place attachment is widely recognized as a key factor influencing older adults' preference to age in place (Clark et al., 2023), the specific mechanisms and contextual factors shaping place attachment among older migrants have not been sufficiently examined.

Building on the concept of ageing in place, the ecology of ageing perspective frames this preference as older adults' desire to remain within familiar environments, which are defined as extending from the home to the broader community (Wahl, 2004; Wahl et al., 2012; Hidalgo & Hernández, 2001). The person-environment (P-E) fit perspective posits that such preferences arise from alignment between personal needs and adaptive environmental resources (Park et al., 2017; Wahl et al., 2012). Place attachment is defined as the emotional bonds between individuals and their environments and is central in this process (Hidalgo & Hernández, 2001). Social environment is a crucial determinant of place attachment (Wahl et al., 2012; Hidalgo & Hernández, 2001). Families and neighbours form the foundation of such attachment through social relations that facilitate access to support and resources (Wiles et al., 2008; Gardner, 2011; Wahl et al., 2012; Hidalgo & Hernández, 2001; Pani-Harreman et al., 2022). Elucidating how place attachment forms and how it influences the permanent settlement intentions of older migrants, particularly those who relocate to live with adult children, is essential to developing policies that meet the needs of such migrants. The increasing prevalence of family-motivated internal migration amid population ageing in China underscores the urgency of developing targeted policies and programmes that support older migrants in achieving successful ageing within host communities.

3.35 Role of Family Enabling Factors

In Chinese society, the family plays a central role in shaping both individual and collective behaviours (Bond, 1986). Family unity and harmony are rooted in the cultural value of filial piety (Gruijters, 2017; Zhang, 2008). Family dynamics and intergenerational obligations drive the decision-making process (Otoo & Kim, 2020). Research has demonstrated that family networks, particularly the relationships between parents and children, are critical in shaping migration behavior (Thomas & Dommermuth, 2020; Thomas et al., 2017; Van Der Pers et al., 2014; Mulder & Malmberg, 2014).

Geographic proximity facilitates frequent contact, caregiving, and support, particularly within parent–child dyads (Kaufman & Uhlenberg, 1998; Lawton et al., 1994; Mulder & van der Meer, 2009; Silverstein & Bengtson, 1997). The linked-lives perspective posits that individual life trajectories are embedded in social networks, meaning that ties to significant others influence decisions regarding the timing, reason and destination of relocation (Coulter et al., 2016; Elder, 1994). Studies have explored grandparenting migration, in which older adults provide care across geographic locations (e.g., Ho & Chiu, 2020; Nedelcu & Wyss, 2019). However, the later-life care needs of older migrants and the intended care arrangements of such adults remain underexplored.

The aspirations–capabilities framework of migration (De Haas, 2021) identifies social capital as an individual capability and a key determinant of migration decisions, while family resources play critical roles in these processes. In Asian contexts, filial

care expectations strongly shape ageing parents' aspirations (Silverstein & Bengtson, 1997), reflecting the normative dimension of family resources. Such care expectations may be crucial to late-life migration decisions, particularly permanent settlement intentions, which are defined as the preference to age in place within a host city. Furthermore, the material resources, such as house ownership, also exert an important influence on ageing-in-place preference among older adults (Clark et al., 2024). Drawing on the concepts of endowment and psychological effects, home ownership represents not only an economic asset but also a source of psychological identity and security within living environments (Kahneman & Tversky, 2013; Clark & Lisowski, 2017). The direct and interactive effects of capabilities and aspirations in shaping these preferences among older migrants merit further empirical exploration.

3.4 Research Questions and Hypotheses

Research Question (1): What are the social capital profiles that characterise older migrants?

Hypothesis 1.1: Social capital profiles reflect combinations of and distinctions between hometown and local connections.

Research Question (2): Which factors influence the formation of these profiles, and how do the profiles influence adaptation and well-being?

Hypothesis 2.1: Older migrants with higher socioeconomic status are more likely to have diverse social capital profiles.

Hypothesis 2.2: Older migrants whose children are more socially active are more likely to have greater local social capital.

Hypothesis 2.3: Older migrants who have more conflicts with their adult children are less likely to possess higher levels of local social capital.

Hypothesis 2.4: Compared with those in weak local and strong hometown social capital type or weak local and hometown social capital type, older migrants with strong local and weak hometown social capital type or diverse hometown and local social capital type would report better adaptation status.

Hypothesis 2.5: Compared with those in weak local and strong hometown social capital type or weak local and hometown social capital type, older migrants with strong local and weak hometown social capital type or diverse hometown and local social capital type would report better well-being status.

Research Question (3): How do older migrants generate local community social capital to support their ageing-well process in the host city?

Hypothesis 3.1: Family social capital has direct associations with adaptation and well-being.

Hypothesis 3.2: Family social capital indirectly influences adaptation through community structural and community cognitive social capital.

Hypothesis 3.3: Family social capital indirectly influences well-being through community structural and community cognitive social capital.

Research question (4): How does social capital influence permanent settlement intentions (preferences for ageing in place) in the host city through place attachment under different statuses of family enabling factors?

Hypothesis 4.1: Family and community social capital directly influence the permanent settlement intention among older migrants.

Hypothesis 4.2: Family and community social capital indirectly influence the permanent settlement intention through place attachment pathways.

Hypothesis 4.3: Family enabling factors have direct associations with the ageing-in-place preferences, and moderate the indirect influences of family and community social capital on the permanent settlement intention.

Chapter 4 Methodology and Research Design

4.1 Brief Introduction

The present chapter introduces the research methodology, including the rationale for conducting quantitative approach, the background of the research sites in Guangzhou and Shenzhen, the sampling strategy and data collection procedures, the measurement of variables, and the analytical strategy employed.

4.2 Rationale for Quantitative Design

This study adopted a quantitative design. Creswell (1994) argued that quantitative methods are appropriate for inquiries with clearly defined empirical questions established before data collection. Method selection should align with the researcher's perspectives, experiences, and objectives (Creswell, 2009; Tuli, 2011). Philosophically, positivism underpins this approach, positing an objective reality independent of human thought (Park et al., 2020; Tuli, 2011). In the social sciences, positivism seeks to identify universal principles that explain recurring behavioural patterns, facilitating prediction and generalisation. Quantitative methods support descriptive and correlational analyses to examine associations and infer trends generalisable to broader populations (Nardi, 2018).

Studies on older internal migrants relocating to join adult children in China (e.g., Guo et al., 2023; Tang et al., 2022) have primarily employed surveys because of the

lack of longitudinal and national datasets involving this population. Challenges such as a lack of household registration (*hukou*) in host cities and variable residency durations render surveys an effective data collection method. As a rigorous methodological approach, quantitative survey research ensures high-quality outcomes through representative sampling, systematic data collection, and robust analysis (Ponto, 2015). The present thesis surveyed older migrants in two large southern Chinese and subsequently tested the proposed hypotheses that were based on established theoretical frameworks to examine the associations between social capital and adaptation and well-being among older internal migrants in China.

4.3 Research Settings in Guangzhou and Shenzhen

Guangdong province, in which the cities of Guangzhou and Shenzhen are located, was home to 13.8% of China's internal migrant population in 2020, a statistic that exceeded the percentage of the national resident population in the area (National Bureau of Statistics of the People's Republic of China, 2021). Guangzhou hosts a large migrant population that numbered approximately 10 million in 2020, with nearly 8% of these migrants aged 50 and above (Guangzhou Statistics Bureau, 2022). Shenzhen's migrant population constitutes more than 70% of the city's total population, with individuals aged 50 and above representing approximately 10% of these migrants (Statistics Bureau of Shenzhen Municipality, 2023). This large migrant demographic presents distinct challenges and opportunities for urban planning and service provision.

Guangzhou's cultural landscape reflects strong Lingnan traditions and widespread

use of the Cantonese dialect, which may hinder older migrants' social participation and intergenerational interaction. By contrast, Shenzhen's fully urbanised environment, compared with Guangzhou's 86% urbanisation rate (Guangdong Provincial Bureau of Statistics, 2023), offers distinct infrastructure, economic opportunities, and industrial structures. These contextual differences shape migrants' lived experiences and influence social capital and the process of adaptation. The inclusion of both cities in the present study facilitated a comprehensive examination of older migrants' experiences across diverse social and cultural environments, supporting the objectives of the thesis.

4.4 Sampling Strategy and Data Collection

The targeted survey population was selected based on the following criteria: (i) individuals aged 50 years and older, and (ii) those who migrated to live with their adult children in residential housing in Shenzhen and Guangzhou, ensuring that their initial arrival date was no earlier than that of their children.

Sampling Strategies

Given the large and dispersed population of older migrants in Shenzhen and Guangzhou, obtaining a comprehensive sampling frame was challenging. To ensure representativeness and minimize bias, a multi-stage sampling approach was employed. First, nine districts (four in Shenzhen, namely Futian, Luohu, Baoan, and Longgang, and five in Guangzhou, namely Huangpu, Nansha, Baiyun, Tianhe, and Haizhu) were randomly selected, stratified by geographic location and socioeconomic status. Subsequently, within each selected district, three to five residential communities were

randomly selected, ensuring representation of diverse neighborhood environments. Finally, households meeting the inclusion criteria (older parents who migrated with adult children) were identified through collaboration with community workers and social workers in the selected communities. Figure 4.1 and 4.2 present the districts in Shenzhen and Guangzhou that were selected for the survey in the present thesis.

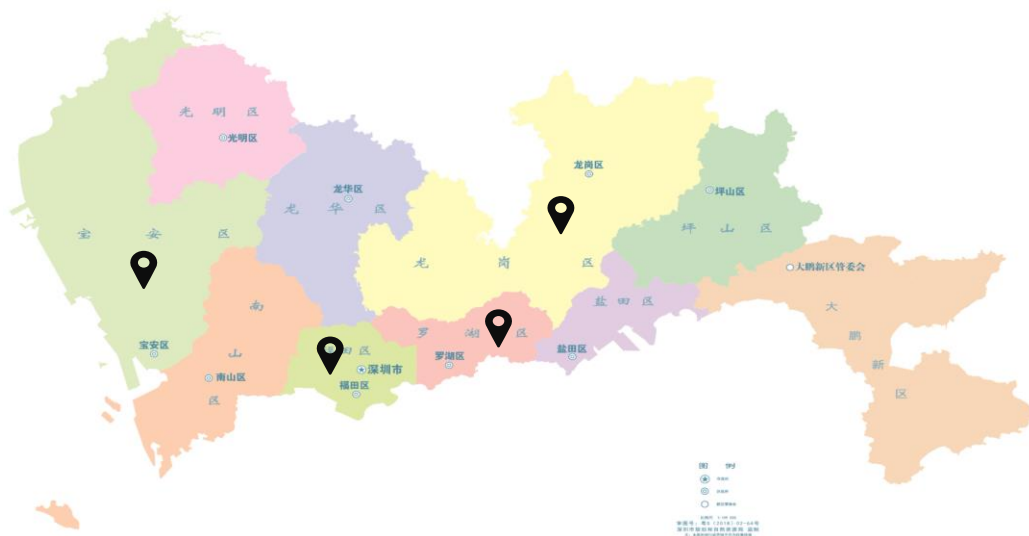


Figure 4.1. *Surveyed Districts in Shenzhen*

Source:tianditu.gov.cn

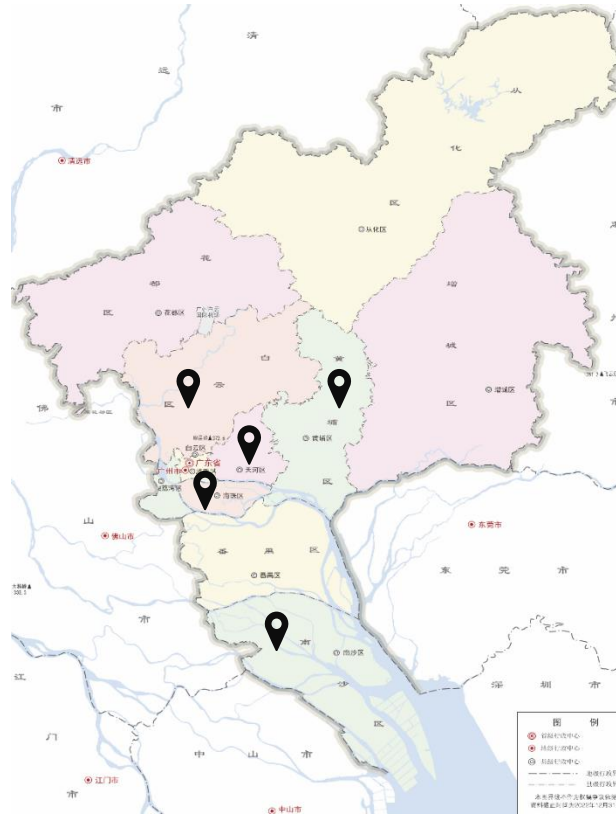


Figure 4.2. *Surveyed Districts in Guangzhou*

Source: tianditu.gov.cn

Data Collection

Data were collected from September 2023 to January 2024. Eligible older migrants from the identified households were systematically selected using a predetermined sampling interval to participate in face-to-face interviews lasting 45 to 60 minutes. The overall response rate was 75.1%, yielding 721 valid, complete questionnaires (406 from Shenzhen and 315 from Guangzhou). The study was approved by the Ethics Review Board of the author's affiliated institution (HSEARS20230628002), and informed consent was obtained by having all the participants fill out consent forms prior to data collection.

Sample Description

The sample includes 721 older migrants aged 50–84 years ($M = 63.78$, $SD = 6.66$),

primarily female (62%) and holding urban hukou (52.15%), with moderate education levels (42.72% having completed high school or above). On average, they had lived in the host cities for 6.97 years, though only 16.50% had transferred their hukou and 30.10% migrated intra-provincially. Their adult children, aged 23–59 years ($M = 37.54$, $SD = 5.52$), were generally well educated (65.46% with a university degree or higher); 71.01% held host-city hukou and had resided there for an average of 13.06 years. Moreover, 63.66% owned homes in host cities, and 34.12% were only children.

Table 4.1. *Demographic characteristics of the sample ($N = 721$)*

Demographic characteristics	M (SD)/ N (%)	Range
<i>Personal characteristics (Older migrants)</i>		
Age	63.78 (6.66)	50-84
Urban <i>hukou</i>	376 (52.15%)	
Sex (Female)	447 (62.00%)	
Transferred <i>hukou</i> to host city	119 (16.50%)	
Residency duration (in years)	6.97 (5.01)	
<i>Education level</i>		
Primary school and below	230 (31.90%)	
Middle school	183 (25.38%)	
High school and above	308 (42.72%)	
<i>Income level</i>		
< 1,000	195 (27.05%)	
1,000-3,999	302 (41.89%)	

>= 4,000	224 (31.07%)	
Migration distance (intra-provincial)	217 (30.10%)	
<i>Family characteristics (Adult children)</i>	M (SD)/ N (%)	
Age	37.54 (5.52)	23-59
The only one child	246 (34.12%)	
Sex (Female)	249 (34.54%)	
Transferred hukou to host city	512 (71.01%)	
Residency duration (in years)	13.06 (6.44)	
<i>Education level</i>		
Middle school and below	43 (5.96%)	
High school to Post-secondary	206 (28.57%)	
University and above	472 (65.46%)	
Has house ownership in host city	459 (63.66%)	

4.5 Measurements

Social Capital Variables

Family Social Capital: Family social capital was measured using a multidimensional approach that captured the quality of relationships with adult children. The Intergenerational Solidarity Scale (Bai et al., 2018a; Jin et al., 2015) was used to assess five dimensions of such relationships: relational quality, contact frequency, shared activities, intergenerational support, and attitudinal consensus. The following questions

were posed to the older migrants: ‘How well do you get along with your adult child here?’ ‘What are your general feelings of closeness to him/her?’ ‘When you and your adult child are not living together, how often do you contact him/her by phone, text, email, letter, etc.?’ ‘How often do you participate in recreational activities or family gatherings with this child?’ ‘How often do you receive gifts or money from him/her?’ ‘How similar are your opinions on social issues?’ ‘Overall, how similar are your opinions?’ ‘How similar are your opinions regarding government versus family responsibility for the care of older adults?’ Responses were scored using a 5-point Likert scale with a total score ranging from 5 to 40, with higher scores indicating greater family social capital. The scale exhibited satisfactory internal consistency in the present study (Cronbach’s $\alpha = 0.73$).

Community Structural Social Capital: Community structural social capital via four items addressing three dimensions: social gathering engagement (e.g., interactions with and visit to neighbours and friends), community event participation (e.g., local festivals and programmes organised by social work stations), and voluntary activities (e.g., voluntary activities within the neighborhood and host city). The items were adopted from previous studies and have demonstrated good validity in Chinese communities, particularly among older adults (Lu et al., 2022; Zhu et al., 2019). The responses were scored on a 5-point Likert scale with endpoints ranging from 1 (*never participate*) to 5 (*frequently participate*). The total score ranged from 4 to 20, with higher scores indicating greater community structural social capital. In the present study, Cronbach’s alpha for this scale was 0.71.

Welfare services benefits: Welfare services benefits was measured through participation in or receipt of welfare services in the host city. Respondents reported access to nine services: cross-provincial medical payment, senior citizen card for free benefits (e.g., visiting scenic spots and accessing public transportation), resident health record establishment, senior citizen old age allowance, free medical checkups, regular home visits by community staff, livelihood assistance, medical assistance for major diseases, and free health information lectures. Responses were coded dichotomously (1 = yes, 0 = no). The total score ranges from 0 to 9, with a higher score indicating access to a broader range of welfare service benefits.

Community Cognitive Social Capital: Community cognitive social capital was assessed using four items representing trust in the local community, reciprocity, and belonging. One item was used to assess social trust: ‘Most people living in this community can be trusted.’ Two items were used to assess reciprocity: ‘Most of the residents are concerned about each other.’ and ‘Most people living in this community would help each other.’ Furthermore, respondents were asked whether they consider themselves to be members of the community. This measure has demonstrated good validity in Chinese communities, particularly among older adults (Lu et al., 2022; Zhu et al., 2019). Responses were scored on a 5-point scale with endpoints ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The total score ranged from 4 to 20, with higher scores indicating greater neighbourhood cohesion. Cronbach’s alpha for this measure in the present study was 0.83.

Social Support Network: The social support network was measured by the validated

Chinese version of the Lubben Social Network Scale-6 (LSNS-6) (Chang et al., 2018; Lubben et al., 2006). Participants were asked about the number of kin (families/relatives) and friends, both in hometown and host city: ‘How many of these individuals do you see or hear from at least once a month?’ ‘How many of these individuals do you feel close to such that you could call on them for help?’ and ‘How many of these individuals do you feel at ease with such that you can talk about private matters?’ Each question had six response options (1 = *none*, 2 = *one*, 3 = *two*, 4 = *three or four*, 5 = *five to eight*, and 6 = *nine or more*). The total score ranged from 6 to 36, with higher scores indicating larger social support networks. Cronbach’s alpha for this measure in the present study was 0.81.

Contact With Hometown: The strength of hometown connections was measured by assessing the frequency of contact older migrants maintained with relatives, friends, and neighbours in their place of origin by phone, text, email, or letter. Responses were scored on a 5-point Likert scale with endpoints ranging from 1 (*almost never*) to 5 (*almost every day*). The total score ranged from 1 to 5 for contact with relatives and from 2 to 10 for contact with friends and neighbours. Higher scores indicated a greater frequency of contact with hometown ties.

Adaptation and Well-being

Adaptation was divided into psychological and sociocultural dimensions. The Brief Sociocultural Adaptation Scale (Demes & Geeraert, 2013) was adopted and adjusted according to a validated adaptation scale among older internal Chinese migrants (Yang, 2021). The measurements evaluated participants’ adaptation to the local weather, living

customs, eating habits, consuming habits and language. Responses were provided on a scale ranging from 1 (*extremely ill adapted*) to 7 (*extremely well adapted*). A summary score of these items ranges from 5 to 35, with higher scores indicating a better sociocultural adaptation status they have. The scale demonstrated good internal consistency (Cronbach's $\alpha = 0.80$). Psychological adaptation was measured using a validated scale for older internal Chinese migrants (Yang, 2021). Participants rated their agreement with the following five statements: 'I like the place I live now', 'I care about the change (in built environments, policy and etc.) that occur in this city/community', 'I'd like to integrate into this city', 'I feel like I've been accepted by the locals', 'I feel like I'm already a local.' Responses were recorded on a 5-point Likert scale. The total score ranges from 5 to 25, with higher scores indicating better psychological adaptation. Internal reliability was satisfactory, with Cronbach's alpha of 0.85.

Well-being was measured by evaluating depressive symptoms, life satisfaction, and happiness. Depressive symptoms were assessed using the Center for Epidemiologic Studies Depression Scale 8 (Radloff, 1977; Zhao et al., 2024). The respondents reported the frequency of certain mental states over the past week on a 4-point scale with endpoints ranging from 0 (*never, less than 1 day*) to 3 (*most of the time, 5–7 days*). Two items ('I feel happy' and 'I have a happy life') were reverse coded. The total score ranged from 0 to 24, with higher scores indicating more severe depressive symptoms. Internal reliability was satisfactory, with Cronbach's alpha of 0.81. Life satisfaction was measured by the 5-item Life Satisfaction Scale (Bai et al., 2010; Pavot et al. 1991). Responses were recorded on a 5-point Likert scale (1 = *strongly disagree* to 5 = *strongly*

agree). The total score ranges from 5 to 25, higher scores indicating greater life satisfaction. The scale showed excellent internal consistency (Cronbach's $\alpha = 0.87$). Happiness was assessed using a single question (Swift et al., 2014): 'All things considered, how happy are you with your life?' Responses were recorded on an 11-point scale (0-10), with higher scores indicating greater happiness.

Permanent Settlement Intention

Consistent with Lu et al. (2023), permanent settlement intention was defined as the older migrants' willingness to settle permanently in the host city. These intentions were measured using a binary variable indicating whether the participants had decided to settle permanently in the surveyed city (1 = *yes*, 0 = *others*).

Place Attachment

In accordance with previous studies (Lu et al., 2023; Yang, 2021; Zahnow & Tsai, 2019), place attachment was measured using a five-item scale assessing participant agreement with the following statements: 'I like the place I live now', 'I care about the change (in built environments, policy and etc.) that occur in this city/community', 'I'd like to integrate into this city', 'I feel like I've been accepted by the locals', 'I feel like I'm already a local resident.' Responses were recorded on a 5-point Likert scale, resulting in a total score range of 5 to 25. The higher scores indicating higher place attachment. Internal reliability was satisfactory, with Cronbach's alpha of 0.85.

Family enabling factors

Family enabling factors consisted of normative resources, represented by intended care arrangements, and material resources, reflected in the adult children's home ownership.

Measures of intended care arrangements were adopted from a previous study on Chinese older adults (Song et al., 2017). Older migrants were presented with the following items and instructed to select the option that most closely matched their expectations for receiving care: (1) move in with and rely on the adult child for care; (2) remain at home and rely mainly on the spouse for care; (3) remain at home and use community-based services for care (e.g., meal support program for older adults and community-based care services); (4) move to an older adult care institution; and (5) have no idea. The first option was coded as ‘rely on children’, and the remaining four were coded as ‘other’. Housing ownership of adult children was assessed by asking whether their adult children owned a home in the host city (1 = *yes*, 0 = *no*).

Covariates

Personal characteristics comprised participant age (in years), migration with a spouse, sex, education level (ranging from 1 = *primary school and below* to 3 = *high school and above*), *hukou* status (0 = *rural*, 1 = *urban*), whether the participants’ *hukou* had been transferred to the host city, duration of residence in the host city, monthly personal income (ranging from 1 = less than C¥1,000 to 3 = more than C¥3,999), migration distance (1 = *intraprovince*, 0 = *interprovince*), and self-rated health (1 = *fair or poor*, 0 = *excellent*). **Family characteristics** comprised adult children’s social gathering frequency (ranging from 1 = *almost never* to 5 = *almost every day*), residency duration, education level (ranging from 1 = *middle school and below* to 3 = *university and above*), sex, home ownership in the host city, whether the only child and whether they transferred *hukou* to the host city. And to better capture the various interactions between

the older migrants and their adult children, the intergenerational conflict sub-scale from Intergenerational Relationship Quality Scale (Bai, 2018a) was adopted. Specifically, conflict with adult children was measured through responses to three questions: ‘How often do you think he/she makes excessive demands on you?’ ‘How often does he/she criticize you or your actions?’ ‘How often do you have tense and strained feelings toward him/her?’ Responses were scored on a 5-point Likert scale with endpoints ranging from 1 (*never*) to 5 (*always*); the total score ranged from 3 to 15, with higher scores indicating more frequent conflict. Cronbach’s alpha for this measure in the present study was 0.71.

4.6 Analytical Strategy

Preliminary data preparation and examination preceded the main analysis. Skewness, histograms, and Q-Norm plots assessed the normality of all numeric variables. Scatter plots were used to evaluate the linearity of relationships between key variable pairs. Following these steps, a series of analyses were conducted. The overall analytical strategy is outlined below, with detailed procedures presented in each chapter. This study employed SPSS 26.0 (IBM Corp, 2019), Mplus 8 (Muthén & Muthén, 2017), and STATA 17 (Stata Corp, 2021) to conduct the analyses. Descriptive statistics, specifically means, standard deviations, and ranges, to characterise the sample were presented first.

Social capital types were examined using latent profile analysis. To decide the number of types, model fit was tested including the Bayesian information criterion (BIC), entropy, the Lo–Mendell–Rubin likelihood ratio test (LMR-LRT), the bootstrap

likelihood ratio test (BLRT), and posterior probabilities. In general, better fitting latent profile models have lower BIC values and higher entropy (i.e. an index of classification quality) values. Additionally, the two likelihood ratio tests (LMR-LRT and BLRT) compare two adjacent models: the $(c-1)$ -cluster model versus the c -cluster model, where significant p -values suggest the current model performs better than the prior model. Another approach used to identify the most appropriate number of clusters is to evaluate posterior probabilities (i.e. matrix of conditional probabilities for cases to be placed in their respective cluster); classification quality is good when diagonal values are high and off-diagonal values are low. After the optimal profile solution had been selected, each cluster's social capital characteristics were used to label the groups. Multinomial logistic regressions were subsequently employed to estimate the determinants of social capital types. Multivariate analyses were conducted where adaptation and well-being were treated as outcome variables, and social capital profiles were independent variables (See **Chapter 5**).

Multivariate linear regression, logistic regression, and path analysis within a structural equation modeling (SEM) framework were used to examine the pathways of community social capital linking family social capital to adaptation and well-being (See **Chapter 6**), and the pathways of place attachment linking social capital to the permanent settlement intention (See **Chapter 7**). Specifically, in **Chapter 7**, the interaction terms of "place attachment $\times$ intended care arrangements" and "place attachment $\times$ host-city house ownership" were added to indirect paths to test whether the associations between place attachment and ageing-in-place preferences vary across

different statuses of family enabling factors. Bootstrapping with 5,000 replications was applied to calculate the indirect, direct, and total effects with 95% confidence intervals (MacKinnon et al., 2004).

Chapter 5 Unveiling Hometown and Local Networks: Social Capital Profiles, Determinants, and Their Associations with Adaptation and Well-being

5.1 Brief Introduction

This study incorporated hometown and host city dimensions to characterise older adult migrants' social capital profiles. This chapter presents the evaluation of Hypotheses 1.1–2.5. Four social capital profiles emerged: Strong Hometown-Weak Local Social Capital, Minimal Hometown and Local Social Capital, Diverse Local and Hometown Social Capital, and Strong Local–Weak Hometown Social Capital. Older migrants with Diverse Local and Hometown Social Capital and Strong Local–Weak Hometown Social Capital reported substantially greater adaptation and well-being compared to those with Minimal Hometown and Local Social Capital. By contrast, those with Strong Hometown–Weak Local Social Capital reported greater depressive symptoms than did those with Minimal Hometown and Local Social Capital. Compared with those in Strong Hometown–Weak Local Social Capital type, older migrants with Strong Local–Weak Hometown Social Capital and Diverse Local and Hometown Social Capital reported greater psychological adaptation.

The findings highlight the importance of diverse and locally embedded social capital for older migrants' adaptation and well-being. Positive family interactions, especially with adult children, are key to developing beneficial social capital profiles. Moreover, enhancing family cohesion and community engagement may increase older migrants'

well-being in urban China.

5.2 Social Capital Profiles and Their Associations With Well-being

The network approach conceptualises social capital as the resources embedded within social networks and structured relationships that provide access to support, information, and other benefits (Kawachi et al., 2008). Previous studies employed both structural and cognitive aspects of social capital indicators to identify the network and social participation profiles among older migrants. For example, in a study of older Asian Americans, Park et al. (2018) identified four types of social networks based on network structure, relationship quality, and community cohesion (i.e., diverse-integrated, moderately diverse-integrated, marginally restricted-noncongregant, and restricted-congregant). Deslauriers and Levasseur (2025) included measurements of social participation frequency, network size and social support among older adults and identified four types (i.e., diverse, childless, restricted, and very socially active). These studies have associated having diverse networks and active participation with increased well-being among older migrants. Limited studies have highlighted that ties to places of origin continue to provide emotional support that enhances older migrants' well-being (Heikkinen & Lumme-Sandt, 2013; Buffel, 2017). However, the distinction between hometown and local social capital in the profile studies has been overlooked, leaving a critical dimension of older migrants' social capital underexplored.

Recently, person-centered approaches have gained prominence in identifying social capital profiles (e.g., Gan et al., 2024; Deslauriers & Levasseur, 2025). Unlike variable-

centred methods that examine relationships between specific variables across a population, person-centred approaches identify subgroups with shared characteristics that differ meaningfully (Howard & Hoffman, 2017). Latent profile analysis, a person-centred approach, classifies individuals within heterogeneous populations into distinct subgroups (Muthén, 2001). The present study applied latent profile analysis to examine diverse local and hometown social capital profiles among older migrants and identify distinguishing characteristics across subgroups.

5.3 Research Questions

This study evaluated the indicators of social capital from hometowns and host cities to construct a comprehensive profile of older migrants' social resources. We anticipated the existence of distinct social capital profiles among older internal Chinese migrants, reflecting varying patterns of connection to hometown and local communities. The specific research questions addressed are: (1) What distinct social capital profiles emerge reflecting these differing hometown and local ties? (2) How were these social capital profiles associated with adaptation and well-being, and in what ways did personal and family characteristics associate with these profiles?

5.4 Methods

5.4.1 Measurements

This study differentiates between hometown and local social capital. Local social capital includes family social capital, community structural and cognitive social capital,

and welfare service benefits in the host city. Community structural social capital was analysed separately to provide a more comprehensive understanding of social capital profiles. Social support networks included both local and hometown connections, total scores were calculated separately for kin and friend networks; these scores ranged from 3 to 18. Hometown social capital was measured by contact frequency, with scores ranging from 1 to 5 for contact with relatives and 2 to 10 for contact with friends and neighbours.

The dependent variables include adaptation (psychological adaptation and sociocultural adaptation), well-being (life satisfaction, happiness, and depressive symptoms), all detailed in Chapter 4. The covariates include personal (age, whether migrate with spouse, sex, education, *hukou* status, whether transferred *hukou* to the host city, residency duration, personal monthly income, migration distance, and self-rated health of older migrants), and family characteristics (whether has house ownership in the host city, social gathering frequency, residency duration, education, sex, and whether they transferred *hukou* to the host city of their adult children, and conflict with children), with comprehensive descriptions provided in Chapter 4.

5.42 Data Analysis

Descriptive statistics of personal and family characteristics, variables associated with adaptation and well-being, and social capital indicators were examined. Profiles of social capital were derived using latent profile analysis (LPA). This analysis began with a two-cluster model and increased the number of clusters iteratively to determine the

optimal model. Model selection was based on the Akaike information criterion (AIC), BIC, entropy, the LMR–LRT, and the BLRT. Lower AIC and BIC values and higher entropy values indicate increased model fit (Akaike, 1974; Muthén & Muthén, 2000; Sclove, 1987). Significant *p* values for LMR–LRT and BLRT suggest improved model performance relative to the previous model (Nylund et al., 2007). After the optimal cluster model had been identified, each cluster was evaluated on the basis of its social capital characteristics, and group names were assigned accordingly. The clusters were also compared in terms of personal and family characteristics, and adaptation and well-being outcomes using a series of chi-square tests and analysis of variance (ANOVA). Multinomial logistic regression was used to estimate the determinants of social capital types. Multivariate analyses were conducted where adaptation and well-being were treated as outcome variables, and social capital profiles were independent variables. To explore the distinct influences of hometown and local social capital profiles on these outcomes, regression models used the Minimal Hometown and Local Social Capital and Strong Hometown–Weak Local Social Capital types as reference groups. No evidence of multicollinearity was observed since the values of the variance inflation factor (VIF) for all variables were between 1.09 to 2.30 (Alin, 2010). Latent profile analysis was conducted using Mplus 8 (Muthén & Muthén, 2017), and additional analyses were conducted using STATA 17 (Stata Corp, 2021).

5.5 Results

5.5.1 Latent Profile Analysis

Table 5.1 presents the results of latent profile analysis for each of the five solutions. Overall, the AIC and BIC values decreased from cluster solutions from 2 to 6. Although the entropy value was not the largest in cluster solution 4, and the BIC value is not the lowest in cluster solution 4. Both LMR-LRT and BLRT values showed improvements ($p < 0.01$) through the four-cluster solution, but they deteriorated from the five-cluster solution ($p > 0.05$). Taken together, the model with four social capital types was identified as being most optimal based on various fit indices as well as a meaningful classification and balanced cluster sizes.

Table 5.1. *Model Fit Statistics for Selecting the Optimal Number of Classes*

No. of profiles	BIC	AIC	Entropy	LMR-LRT ($H_0 = k - 1$ classes)	BLRT ($H_0 = k - 1$ classes)
2	29448.938	29306.938	0.711	$P < 0.001$	$P < 0.001$
3	29180.086	28987.7	0.778	$P < 0.01$	$P < 0.01$
4	29085.714	28842.94	0.769	$P < 0.01$	$P < 0.01$
5	29016.777	28723.616	0.792	$P = 0.208$	$P = 0.211$
6	29000.08	28656.53	0.762	$P = 0.153$	$P = 0.157$

Note. AIC: Akaike information criterion. BIC: Bayesian information criterion. LMR-LRT: Lo-Mendell-Rubin likelihood ratio test. BLRT: Bootstrap likelihood ratio test.

Table 5.2 presents profiles for the total sample and for each of the four social capital types; percentages indicate observed percentages within the most likely classes. A graphical illustration of the profiles using standardised scores is provided in Figure 5.1. Based on the distribution of proportions and averages for each variable, social capital types were named: Strong Hometown-Weak Local Social Capital, Minimal Hometown and Local Social Capital, Diverse Local and Hometown Social Capital, and Strong

Local–Weak Hometown Social Capital. Strong Hometown–Weak Local Social Capital type made up 18.59% of the sample ($n = 134$) and was characterized by high frequency of contact with hometown relatives and friends but low engagement in local community, lower cognitive community social capital, smaller social support networks, and lower family social capital in the host city overall. Diverse Local and Hometown Social Capital type comprised 31.07% ($n = 224$) of the sample, exhibited balanced and relatively high levels of both hometown and local social capital. Older migrants of this group maintained active participation in the host community, had high community cognitive social capital, and the largest social support networks in both hometown and the host city, and moderate contact with hometown ties. Strong Local–Weak Hometown Social Capital type comprised 18.72% ($n = 135$) of the sample. This group demonstrated low contact frequency with hometown ties but showed the highest levels of social participation in the host city, greater access to social welfare services, and the highest family social capital in the host city. Minimal Hometown and Local Social Capital type comprised 31.62% ($n = 228$) of the sample, displayed relatively low levels across all indicators of hometown and local social capital, including limited social participation, low contact with both hometown and local networks, and minimal social support and family social capital.

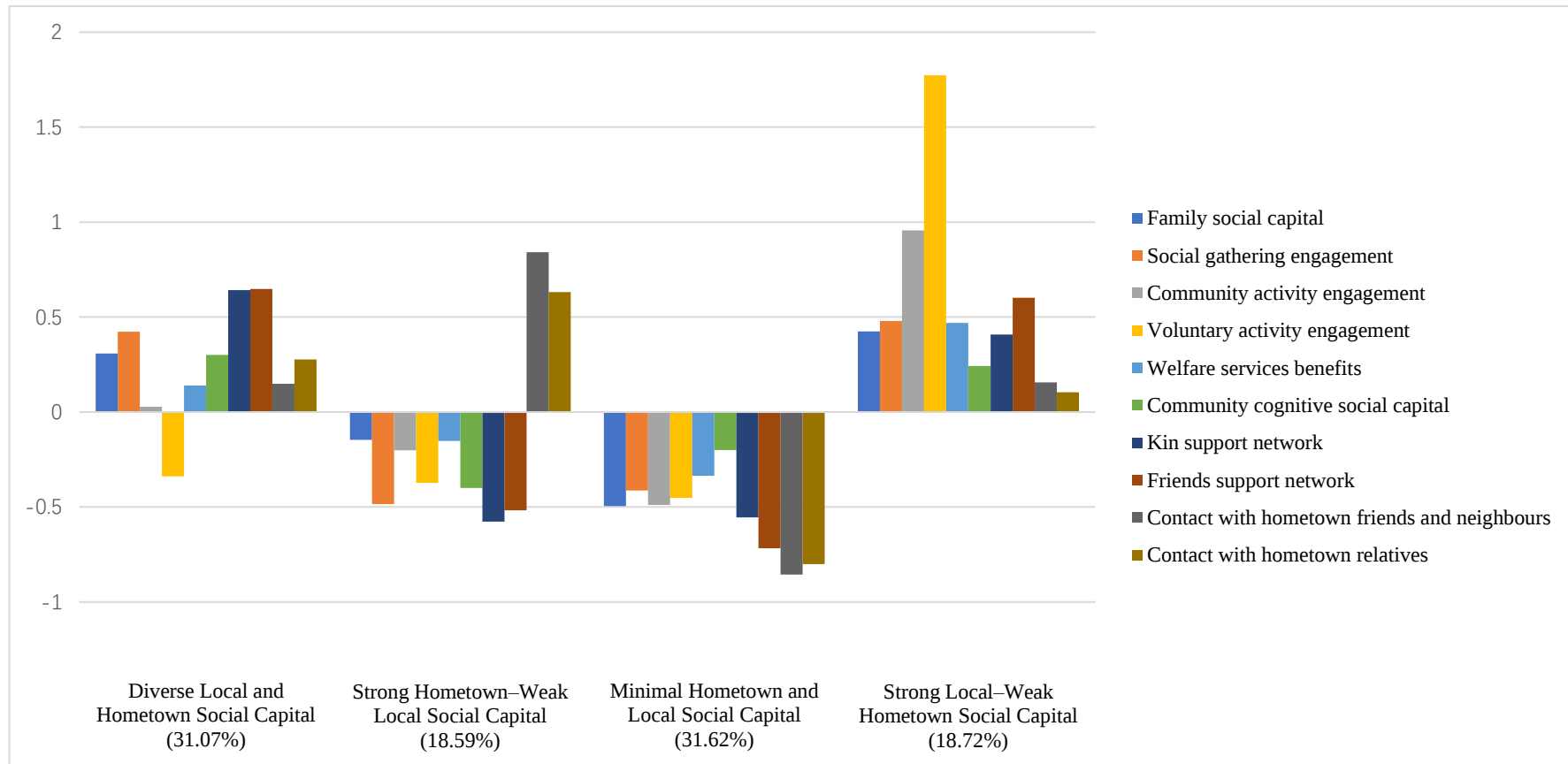


Figure 5.1. *Standardised Mean Scores of Variables in the Four Social Capital Profiles*

Table 5.2. Profiles of Social Capital Types

	Strong Hometown– Weak Local Social Capital	Minimal Hometown and Local Social Capital	Diverse Local and Hometown Social Capital	Strong Local–Weak Hometown Social Capital
Latent profile prevalence	18.59%	31.62%	31.07%	18.72%
<i>Items-means</i>				
Family social capital	27.62	26.14	29.55	30.04
Social gathering engagement	2.37	2.47	3.58	3.66
Community activity engagement	1.93	1.60	2.19	3.26
Voluntary activity engagement	1.39	1.30	1.42	3.66
Community cognitive social capital	13.87	14.39	15.69	15.54
Welfare services benefits	2.50	2.17	3.02	3.62
Contact with hometown relatives	4.02	2.64	3.68	3.51
Contact with hometown friends and neighbours	7.38	3.90	5.95	5.97
Kin support network	8.23	8.30	12.21	11.44
Friends support network	7.87	7.19	11.88	11.72

Table 5.3 shows the personal and family characteristics and adaptation and well-being of older migrants across the four typologies of social capital. Older migrants with Strong Local–Weak Hometown Social Capital had longer residency duration than older migrants with Strong Hometown–Weak Local Social Capital, and those with Minimal Hometown and Local Social Capital. The Strong Local–Weak Hometown Social Capital profile had the highest proportion of older migrants held urban *hukou* and migrated with their spouses, to have transferred their *hukou* to the host city, to have an education level of high school or higher, to have a middle monthly income level (C¥1,000–3,999), and to report good self-rated health. Concerning family characteristics, the adult children of older migrants with Strong Local–Weak Hometown Social Capital and Diverse Local and Hometown Social Capital would have a higher frequency of social gatherings, compared with those in Minimal Hometown and Local Social Capital type. Additionally, older migrants in the Strong Local–Weak Hometown Social Capital type reported less conflict with their children than did those in the Minimal Hometown and Local Social Capital type. Older migrants with Strong Local–Weak Hometown Social Capital profile were also more likely to have children who owned homes in and had transferred their *hukou* to the host city; their children were also the most likely to have a university education or higher.

Compared to older migrants in Strong Hometown–Weak Local Social Capital type or Minimal Hometown and Local Social Capital type, older migrants in Strong Local–Weak Hometown Social Capital type and Diverse Local and Hometown Social Capital

type had greater sociocultural adaptation and psychological adaptation scores. Similarly, compared to older migrants with Strong Hometown–Weak Local Social Capital or Minimal Hometown and Local Social Capital, older migrants with Diverse Local and Hometown Social Capital and Strong Local–Weak Hometown Social Capital reported higher life satisfaction and happiness and lower levels of depressive symptoms.

Table 5.3. Personal and Family Characteristics and Adaptation and Well-being By Social Capital Types

		Social capital profiles				
	Total (N = 721)	Strong Hometown–Weak Local Social Capital (N = 134)	Minimal Hometown and Local Social Capital (N =228)	Diverse Local and Hometown Social Capital (N = 224)	Strong Local– Weak Hometown Social Capital (N = 135)	Test statistic Group Comparison
	M (SD)/ N (%)	M (SD)/ N (%)	M (SD)/ N (%)	M (SD)/ N (%)	M (SD)/ N (%)	
<i>Personal characteristics</i>						
Age	63.78 (6.66)	63.50 (6.44)	63.93 (6.92)	63.96 (6.66)	63.50 (6.51)	0.248
<i>Sex</i>						
Female	447 (62.00%)	84 (62.69%)	135 (59.21%)	142 (63.39%)	86 (63.70%)	1.131
<i>Hukou</i>						
Urban	376 (52.15%)	79 (58.96%)	90 (39.47%)	125 (55.80%)	82 (60.74%)	22.360***
Length of residency (in years)	6.97 (5.01)	6.16 (5.06)	6.47 (4.61)	7.23 (4.91)	8.21 (5.54)	4.957**
<i>Income</i>						
< 1,000	195 (27.05%)	33 (24.63%)	80 (35.09%)	56 (25.00%)	26 (19.26%)	15.456*
1,000–3,999	302 (41.89%)	51 (38.06%)	87 (38.16%)	97 (43.30%)	67 (49.63%)	
>= 4,000	224 (31.07%)	50 (37.31%)	61 (26.75%)	71 (31.70%)	42 (31.11%)	
<i>Education</i>						
Primary school and below	230 (31.90%)	40 (29.85%)	97 (42.54%)	67 (29.91%)	26 (19.26%)	41.203***
Middle school	183 (25.38%)	23 (17.16%)	66 (28.95%)	62 (27.68%)	32 (23.70%)	
High school and	308 (42.72%)	71 (52.99%)	65 (28.51%)	95 (42.41%)	77 (57.04%)	

above						
<i>Migration with spouse</i>						
Yes	445 (61.72%)	74 (55.22%)	127 (55.70%)	151 (67.41%)	93 (68.89%)	11.896**
<i>Transferred hukou</i>						
Yes	119 (16.50%)	21 (15.67%)	26 (11.40%)	38 (16.96%)	34 (25.19%)	11.789**
<i>Self-rated health</i>						
Good	468 (64.91%)	75 (55.97%)	127 (55.70%)	160 (71.43%)	106 (78.52%)	28.345***
<i>Migration distance</i>						
Intraprovince	217 (30.10%)	43 (32.09%)	70 (30.70%)	70 (31.25%)	34 (25.19%)	1.982
<i>Family characteristics</i>						
Child's residency duration	13.06 (6.44)	12.15 (6.44)	12.59 (6.75)	13.59 (6.34)	13.90 (5.91)	2.586
<i>Child's education</i>						
Middle school and below	43 (5.96%)	7 (5.22%)	21 (9.21%)	12 (5.36%)	3 (2.22%)	
High school to Post-secondary	206 (28.57%)	35 (26.12%)	80 (35.09%)	63 (28.13%)	28 (20.74%)	
University and above	472 (65.46%)	92 (68.66%)	127 (55.70%)	149 (66.52%)	104 (77.04%)	20.371**
Child's social gathering frequency	2.76 (0.93)	2.72 (0.93)	2.51 (0.96)	2.88 (0.84)	3.01 (0.93)	10.260***
Child transferred hukou	512 (71.01%)	93 (69.40%)	137 (60.09%)	170 (75.89%)	112 (82.96%)	25.346***

<i>Child's house ownership in host city</i>						
Yes	459 (63.66%)	79 (58.96%)	129 (56.58%)	155 (69.20%)	96 (71.11%)	12.432**
<i>Child's sex</i>						
Female	249 (34.54%)	54 (40.30%)	66 (28.95%)	79 (35.27%)	50 (37.04%)	5.544
Conflict with the child	5.89 (1.96)	6.00 (1.84)	6.21 (2.08)	5.74 (1.91)	5.50 (1.87)	4.419**
<i>Host city</i>						
Shenzhen	406 (56.31%)	77 (57.46%)	118 (51.75%)	129 (57.59%)	82 (60.74%)	3.222
Guangzhou	315 (43.69%)	57 (42.54%)	110 (48.25%)	95 (42.41%)	53 (39.26%)	
<i>Outcomes</i>						
Psychological adaptation	15.26 (2.85)	14.36 (3.10)	14.33 (2.86)	15.93 (2.39)	16.62 (2.42)	30.245***
Sociocultural adaptation	23.79 (4.98)	23.21 (5.40)	22.68 (4.54)	24.71 (4.99)	24.73 (4.84)	8.791***
Life satisfaction	17.86 (4.04)	17.09 (3.85)	16.51 (4.18)	18.91 (3.73)	19.14 (3.59)	21.308***
Happiness	7.77 (1.80)	7.34 (1.75)	7.07 (1.89)	8.33 (1.44)	8.43 (1.81)	29.746***
Depression	5.17 (4.37)	6.63 (4.66)	6.00 (4.46)	3.92 (3.67)	4.41 (4.28)	16.161***

Note. M = Mean; SD = Standard Deviation. Chi-square tests for categorical variables and ANOVA for continuous variables were performed to compare group differences.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

5.52 Regression Analysis

The analysis of personal and family attributes in relation to social capital profiles revealed significant associations, as detailed in Table 5.4. The findings indicated that older migrants with better self-rated health status, longer residency, and education level of higher school and above were more likely to have the Strong Local–Weak Hometown Social Capital profile. However, older age may prevent the migrants from having this profile. Better self-rated health was also positively correlated with the Diverse Local and Hometown Social Capital profile. Interestingly, higher education was also associated with the Strong Hometown–Weak Local Social Capital type. Regarding family characteristics, older migrants whose adult children more frequently engaged in social gatherings were more likely to exhibit Strong Local–Weak Hometown Social Capital, Diverse Local and Hometown Social Capital, and Strong Hometown–Weak Local Social Capital profiles, compared to the Minimal Hometown and Local Social Capital profile. By contrast, a higher frequency of conflicts with adult children was negatively associated with the likelihood of exhibiting Strong Local–Weak Hometown Social Capital and Diverse Local and Hometown Social Capital profiles.

Table 5.4. Logistic Regression Models of Personal and Family Characteristics on Social Capital Profiles

<i>Ref. Minimal Hometown and Local Social Capital</i>	<i>Diverse Local and Hometown Social Capital</i>		<i>Strong Hometown–Weak Local Social Capital</i>		<i>Strong Local–Weak Hometown Social Capital</i>	
	RRR	95% CI	RRR	95% CI	RRR	95% CI
<i>Personal characteristics</i>						
<i>Education (ref. primary school and below)</i>						
Middle school	1.198	(0.712 - 2.018)	0.785	(0.411 - 1.501)	1.655	(0.834 - 3.282)
High school and above	1.517	(0.850 - 2.709)	2.163*	(1.132 - 4.132)	3.496***	(1.703 - 7.177)
<i>Income (ref. <1,000)</i>						
1,000–3,999	1.185	(0.710 - 1.976)	0.989	(0.541 - 1.809)	1.264	(0.659 - 2.424)
>= 4,000	0.935	(0.505 - 1.733)	1.037	(0.509 - 2.112)	0.747	(0.342 - 1.631)
Sex (female)	1.329	(0.870 - 2.031)	1.174	(0.724 - 1.905)	1.327	(0.800 - 2.202)
Migration with spouse	1.334	(0.872 - 2.042)	0.780	(0.484 - 1.258)	1.137	(0.679 - 1.904)
Urban <i>hukou</i> status	1.354	(0.827 - 2.215)	1.532	(0.864 - 2.716)	1.053	(0.578 - 1.918)
Good self-rated health	1.716*	(1.123 - 2.624)	0.780	(0.487 - 1.251)	2.170**	(1.266 - 3.719)
Transferred <i>hukou</i>	0.845	(0.459 - 1.558)	0.897	(0.446 - 1.807)	1.231	(0.632 - 2.398)
Age	0.982	(0.947 - 1.019)	0.982	(0.943 - 1.023)	0.948*	(0.906 - 0.992)
Residency duration	1.031	(0.981 - 1.083)	1.007	(0.950 - 1.068)	1.095**	(1.032 - 1.163)
Intraprovince migration	1.363	(0.878 - 2.114)	1.278	(0.778 - 2.098)	1.122	(0.651 - 1.932)
<i>Family characteristics</i>						
Residency duration of the child	1.011	(0.970 - 1.053)	0.992	(0.946 - 1.040)	1.013	(0.963 - 1.067)
Child transferred <i>hukou</i>	1.313	(0.746 - 2.314)	1.028	(0.545 - 1.939)	1.433	(0.698 - 2.939)
Social gathering frequency of the child	1.522***	(1.220 - 1.899)	1.343*	(1.045 - 1.725)	1.768***	(1.361 - 2.295)

Education (ref. middle school and below)

High school to Post-secondary	0.918	(0.390 - 2.161)	1.148	(0.421 - 3.125)	1.503	(0.368 - 6.137)
University and above	1.063	(0.441 - 2.561)	1.633	(0.587 - 4.542)	2.821	(0.684 - 11.632)
Child's sex (female)	1.208	(0.778 - 1.873)	1.246	(0.765 - 2.031)	1.154	(0.688 - 1.935)
House ownership of the child (yes)	1.272	(0.767 - 2.109)	0.795	(0.454 - 1.392)	1.106	(0.604 - 2.026)
Conflict with the child	0.868**	(0.783 - 0.961)	0.928	(0.827 - 1.040)	0.814**	(0.718 - 0.922)
Constant	0.334	(0.025 - 4.488)	0.731	(0.038 - 13.900)	0.342	(0.013 - 9.317)
R ²				0.085		
Chi ²				165.63***		

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 5.5. presents adaptation outcomes relative to the Minimal Hometown and Local Social Capital profile as the primary reference category. It also includes additional contrasts: Strong Local–Weak Hometown Social Capital vs. Strong Hometown–Weak Local Social Capital, and Diverse Local and Hometown Social Capital vs. Strong Hometown–Weak Local Social Capital. Holding personal and family characteristics as constant, older migrants in Diverse Local and Hometown Social Capital type ($\beta = 0.146$, $SE = 0.241$, $p < 0.001$), and Strong Local–Weak Hometown Social Capital type ($\beta = 0.164$, $SE = 0.288$, $p < 0.001$) were significantly related to better psychological adaptation, compared with older migrants in Minimal Hometown and Local Social Capital type. Similarly, older migrants in Diverse Local and Hometown Social Capital type ($\beta = 0.148$, $SE = 0.445$, $p < 0.001$), and Strong Local–Weak Hometown Social Capital type ($\beta = 0.123$, $SE = 0.530$, $p < 0.01$) were significantly related to better sociocultural adaptation, compared with older migrants in Minimal Hometown and Local Social Capital type. When compared to the Strong Hometown–Weak Local Social Capital group, those in the Strong Local–Weak Hometown Social Capital ($\beta = 1.138$, $SE = 0.285$, $p < 0.001$) and Diverse Local and Hometown Social Capital profiles ($\beta = 0.800$, $SE = 0.255$, $p < 0.01$) exhibited superior psychological adaptation.

Table 5.5. *Regression Models of Sociocultural and Psychological Adaptation*

	Psychological adaptation β (SE)	Sociocultural adaptation β (SE)
<i>Social capital types</i>		
<i>(Ref. Minimal Hometown and Local Social Capital)</i>		
Strong Hometown–Weak Local Social Capital	-0.049	0.018

	(0.274)	(0.505)
Diverse Local and Hometown Social Capital	0.146*** (0.241)	0.148*** (0.445)
Strong Local–Weak Hometown Social Capital	0.164*** (0.288)	0.123** (0.530)
Strong Local–Weak Hometown Social Capital vs Strong Hometown–Weak Local Social Capital	1.138*** (0.285)	0.338 (0.547)
Diverse Local and Hometown Social Capital vs Strong Hometown–Weak Local Social Capital	0.800** (0.255)	0.401 (0.486)
<i>Covariates–personal characteristics</i>		
<i>Education (ref. primary school and below)</i>		
Middle school	0.101* (0.260)	0.007 (0.479)
High school and above	0.138** (0.276)	0.007 (0.508)
<i>Income (ref. <1,000)</i>		
1,000 – 3,999	-0.018 (0.253)	-0.055 (0.466)
>=4,000	0.007 (0.300)	0.003 (0.552)
Sex (female)	-0.013 (0.201)	0.019 (0.370)
Migration with spouse	0.027 (0.202)	-0.038 (0.372)
Urban <i>hukou</i> status	0.171*** (0.237)	0.042 (0.437)
Good self-rated health	0.200*** (0.205)	0.134*** (0.378)
Transferred <i>hukou</i>	0.050 (0.276)	0.002 (0.509)
Age	0.001 (0.017)	-0.021 (0.032)
Residency duration	0.138** (0.024)	0.081 (0.044)
Intraprovince migration	-0.004 (0.208)	0.348*** (0.384)
<i>Covariates–family characteristics</i>		
Residency duration of the child	-0.039 (0.020)	-0.057 (0.036)

Child transferred Hukou	0.010 (0.274)	-0.004 (0.505)
<i>Education (ref. middle school and below)</i>		
High school to Post-secondary	0.063 (0.426)	-0.016 (0.786)
University and above	0.055 (0.436)	0.016 (0.804)
Social gathering frequency of the child	0.041 (0.104)	-0.000 (0.192)
Child's sex (female)	-0.050 (0.204)	-0.011 (0.377)
House ownership of the child (yes)	0.075 (0.248)	-0.010 (0.457)
Conflict with the child	-0.039 (0.048)	-0.041 (0.089)
Host city (Guangzhou)	-0.144*** (0.216)	-0.195*** (0.397)
R ²	0.287	0.207
F	11.65***	7.55***

Standardised beta coefficients. Standard errors in parentheses.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 5.6. presents well-being outcomes relative to the Minimal Hometown and Local Social Capital profile as the primary reference category. It also includes additional contrasts: Strong Local–Weak Hometown Social Capital vs. Strong Hometown–Weak Local Social Capital, and Diverse Local and Hometown Social Capital vs. Strong Hometown–Weak Local Social Capital. Holding personal and family characteristics as constant, older migrants in Diverse Local and Hometown Social Capital type ($\beta = 0.165$, $SE = 0.350$, $p < 0.001$), and Strong Local–Weak Hometown Social Capital type ($\beta = 0.120$, $SE = 0.417$, $p < 0.01$) were significantly related to higher levels of life satisfaction, compared with older migrants in Minimal Hometown and Local Social Capital type. Similarly, older migrants in Diverse Local and Hometown Social Capital type ($\beta = 0.215$, $SE = 0.157$, $p < 0.001$), and Strong Local–Weak

Hometown Social Capital type ($\beta = 0.170$, $SE = 0.187$, $p < 0.001$) were significantly related to higher levels of happiness, compared with older migrants in Minimal Hometown and Local Social Capital type. However, older migrants with Strong Hometown–Weak Local Social Capital type ($\beta = 0.084$, $SE = 0.403$, $p < 0.05$) were significantly related to higher levels of depressive symptoms compared with older migrants in the Minimal Hometown and Local Social Capital type. Older migrants in Diverse Local and Hometown Social Capital type ($\beta = -0.101$, $SE = 0.355$, $p < 0.05$) were significantly associated with lower levels of depressive symptoms compared with older migrants in the Minimal Hometown and Local Social Capital type. Furthermore, compared with those in the Strong Hometown–Weak Local Social Capital profile, older migrants in Strong Local–Weak Hometown Social Capital exhibited reduced depressive symptoms ($\beta = -0.424$, $SE = 0.427$, $p < 0.05$). Finally, relative to Strong Hometown–Weak Local Social Capital type, both Strong Local–Weak Hometown Social Capital type ($\beta = 0.332$, $SE = 0.181$, $p < 0.1$) and Diverse Local and Hometown Social Capital ($\beta = 0.299$, $SE = 0.161$, $p < 0.1$) profiles were marginally associated with higher levels of happiness.

Table 5.6. *Regression Models of Life Satisfaction, Happiness and Depressive Symptoms*

	Life satisfaction β (SE)	Happiness β (SE)	Depressive symptoms β (SE)
<i>Social capital types</i>			
<i>(Ref. Minimal Hometown and Local Social Capital)</i>			
Strong Hometown–Weak Local Social Capital	0.032 (0.397)	0.025 (0.178)	0.084* (0.403)
Diverse Local and Hometown Social Capital	0.165*** (0.350)	0.215*** (0.157)	-0.101* (0.355)
Strong Local–Weak Hometown Social Capital	0.120** (0.417)	0.170*** (0.187)	-0.023 (0.424)

Strong Local–Weak Hometown Social Capital vs Strong Hometown–Weak Local Social Capital	-0.254 (0.403)	0.332 [^] (0.181)	-0.424* (0.427)
Diverse Local and Hometown Social Capital vs Strong Hometown–Weak Local Social Capital	-0.071 (0.358)	0.299 [^] (0.161)	-0.971 (0.378)
<i>Covariates-personal characteristics</i>			
<i>Education (ref. primary school and below)</i>			
Middle school	0.059 (0.377)	0.019 (0.169)	-0.126** (0.383)
High school and above	0.027 (0.400)	0.069 (0.179)	-0.086 (0.406)
<i>Income (ref. <1,000)</i>			
1,000 – 3,999	-0.015 (0.366)	-0.079 (0.164)	-0.016 (0.372)
>=4,000	0.028 (0.434)	-0.044 (0.195)	-0.053 (0.441)
Sex (female)	0.050 (0.291)	0.044 (0.131)	-0.024 (0.296)
Migration with spouse	0.032 (0.292)	0.072* (0.131)	-0.101** (0.297)
Urban <i>hukou</i> status	-0.020 (0.343)	0.052 (0.154)	-0.025 (0.349)
Good self-rated health	0.245*** (0.297)	0.227*** (0.133)	-0.222*** (0.302)
Transferred <i>hukou</i>	-0.036 (0.400)	-0.069 (0.179)	0.043 (0.406)
Age	0.056 (0.025)	0.045 (0.011)	-0.032 (0.025)
Residency duration	0.128** (0.034)	0.014 (0.015)	0.067 (0.035)
Intraprovince migration	0.067 (0.302)	0.019 (0.135)	-0.030 (0.307)
<i>Covariates-family characteristics</i>			
Residency duration of the child	0.029 (0.028)	0.046 (0.013)	-0.058 (0.029)
Child transferred <i>hukou</i>	-0.025 (0.397)	-0.016 (0.178)	-0.033 (0.403)
<i>Education (ref. middle school and below)</i>			
High school to Post-secondary	0.056 (0.618)	0.096 (0.277)	-0.146* (0.628)
University and above	0.198** (0.632)	0.138 (0.283)	-0.121 (0.642)
Social gathering frequency of the child	0.045 (0.151)	0.068 (0.068)	-0.015 (0.153)

Child's sex (female)	0.003 (0.296)	0.054 (0.133)	-0.010 (0.301)
House ownership of the child (yes)	0.113** (0.360)	0.066 (0.161)	-0.065 (0.365)
Conflict with the child	-0.204*** (0.070)	-0.192*** (0.032)	0.142*** (0.071)
Host city (Guangzhou)	0.006 (0.312)	-0.010 (0.140)	0.002 (0.317)
R ²	0.252	0.246	0.185
F	9.76***	9.46***	6.56***

Standardised beta coefficients; Standard errors in parentheses

[^] $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

5.6 Discussion

The study identified four distinct social capital profiles among older internal Chinese migrants using step-by-step latent profile analysis: Strong Hometown–Weak Local Social Capital, Minimal Hometown and Local Social Capital, Diverse Local and Hometown Social Capital, and Strong Local–Weak Hometown Social Capital. By employing comprehensive measurements, including both hometown and local connections, the study provided a comprehensive understanding of social capital configurations in this population. Older migrants with Diverse Local and Hometown Social Capital type and Strong Local–Weak Hometown Social Capital type were significantly more likely to report better adaptation and well-being status compared to those with the Minimal Hometown and Local Social Capital type. In contrast, older migrants with the Strong Hometown–Weak Local Social Capital profile were significantly associated with higher depressive symptoms compared to the Minimal Hometown and Local Social Capital group.

This study extends the findings of research that primarily focused on network profiles

based on the intimacy of family and friend relationships (Cheng et al., 2009; Fiori et al., 2006; Park et al., 2015) by distinguishing between hometown and host-city connections to reveal novel social capital dynamics. The Minimal Hometown and Local Social Capital and Diverse Local and Hometown Social Capital profiles were found to be dominant among older migrants. Older migrants with Minimal Hometown and Local Social Capital faced the “double dilemma” of ageing and relocation, which often hinders the establishment of new relationships while existing networks contract (Sluzki, 1992; Wiles et al., 2009). Nevertheless, consistent with the life-course perspective, older migrants with Diverse Local and Hometown Social Capital demonstrated that resources could be accumulated and expanded over time (Berkman, 1986; Dannefer, 2003). This finding aligns with previous research indicating that migrants would maintain hometown ties while building local connections in their host society (Jin et al., 2012; Zhou & Guo, 2023; Zontini, 2015).

The Strong Local–Weak Hometown Social Capital and Strong Hometown–Weak Local Social Capital types characterised by their differential engagement with host-city and hometown networks. These two types were less prevalent among the four profiles, suggesting that completely severing hometown ties while building new local connections, or maintaining strong hometown connections without developing local relationships, are not common strategies among older migrants (Jin et al., 2012; Zontini, 2015; Zhou & Guo, 2023). Older migrants with Strong Hometown–Weak Local Social Capital can be understood through the lens of the selective optimization with compensation model (Baltes & Baltes, 1990). This profile reflects a prioritisation of

maintaining supportive relationships with familiar ties over pursuing extensive new connections in the host society (Baltes & Baltes, 1990; Treas, 2014). Conversely, the Strong Local–Weak Hometown Social Capital profile reflects adaptive resilience, wherein migrants leverage environmental resources to thrive post-relocation (Wahl et al., 2012; Wahl & Gerstorf, 2020). These findings contribute to a more comprehensive understanding of the complex social integration processes experienced by older migrants in their new environments.

The study revealed significant associations between personal/family attributes and social capital profile. Interactions with adult children emerged as critical factors: heightened social engagement of adult children predicted a greater likelihood of parents belonging to the Strong Local–Weak Hometown Social Capital or Diverse Local and Hometown Social Capital profiles, whereas frequent intergenerational conflicts reduced this probability. This result provides empirical evidence extending the spillover effect of social capital (Coleman, 1988; Offer & Schneider, 2007; Ravanera, 2000) to older migrants, particularly those relocating for family reasons, highlighting the reciprocal influence within family systems. This finding further corroborates the notion that lower intergenerational relationship quality with adult children can impede older parents' access to community supportive resources. Notably, while adult children's social engagement could facilitate the transfer of social resources to their ageing parents, our findings suggest a more complex dynamic. Specifically, higher levels of social engagement among adult children were also associated with older parents being classified in the Strong Hometown–Weak Local Social Capital profile. This pattern may

indicate that when adult children are more engaged outside the family, opportunities for intergenerational interaction and support could be reduced, potentially making it more challenging for older parents to develop local social connections.

This study demonstrates that social capital profiles significantly associated with adaptation and well-being status of older migrants in the host society. Older migrants with Diverse Local and Hometown Social Capital and Strong Local–Weak Hometown Social Capital profiles exhibit better psychological and sociocultural adaptation compared to those with Minimal Hometown and Local Social Capital. These profiles are characterized by higher levels of family social capital, cognitive social capital, and social participation. This finding aligns with previous research indicating that local organization participation facilitates successful adaptation and integration (Lancee, 2012). Family cohesion and solidarity also contribute to positive outcomes for family members (Furstenberg & Kaplan, 2004). Furthermore, the results suggest that strong local attachment in the Strong Local–Weak Hometown Social Capital and Diverse Local and Hometown Social Capital profiles, may support better psychological adaptation than the Strong Hometown–Weak Local profile. This supports the view that strong local ties foster identity, belonging, and long-term integration, rather than separation (Berry, 1997, 2005; Kou et al., 2018; Massey, 1986).

Our results further indicate that older migrants with Strong Local–Weak Hometown Social Capital and Diverse Local and Hometown Social Capital profiles experience better life satisfaction and happiness compared to those with Minimal Hometown and Local Social Capital. These findings align with previous research that highlights the

benefits of good family relationships, community engagement, sense of belongingness and social support network sizes for well-being (e.g., Ajrouch, 2007; Kim et al., 2015; Kim et al., 2019; Zhou et al., 2022). Notably, the Diverse Local and Hometown Social Capital profile is also associated with lower depressive symptoms compared to the Minimal Hometown and Local Social Capital profile, consistent with research emphasizing the protective effects of family support, trust and social networks (e.g., Burholt et al., 2018; Guo et al., 2022b; Park et al., 2015). The results underscore the importance of maintaining both local and hometown connections for enhanced well-being, consistent with the previous study (Zontini, 2015).

Interestingly, the Strong Hometown–Weak Local Social Capital profile showed no significant effects on adaptation compared to the Minimal Hometown and Local Social Capital profile. Older migrants in this category maintained strong hometown connections but had limited local resources. The lack of local community connections may impede their integration into the host society (Kou et al., 2018; Massey, 1986). This pattern reflects a preference for maintaining separate ties, which may signal limited desire or opportunity for integration (Berry, 1997; 2005). Additionally, this profile was not significantly associated with improved life satisfaction or happiness, possibly due to the physical distance from familiar support networks and the absence of new local connections.

In contrast, older migrants with Strong Hometown–Weak Local Social Capital profile exhibited higher levels of depressive symptoms compared to the Minimal Hometown and Local Social Capital profile. This outcome can be attributed to the

increased isolation and homesickness resulting from higher contact frequency with hometown ties coupled with limited connections in the host city (Zontini, 2015). Moreover, this social capital profile may lead to accumulated stress as older migrants reinforce cultural ties and expectations, impeding full integration into the host society and potentially fostering feelings of inadequacy (Chiu & Ho, 2020). Furthermore, older migrants with the Strong Local–Weak Hometown Social Capital profile exhibited lower depressive symptoms compared to those with Strong Hometown–Weak Local Social Capital type. These findings underscore the essential role of social connections and engagement in the host community in providing social support and mitigating negative emotional outcomes.

Chapter 6 Tracing the Pathways: How Community Social Capital Bridges Family Social Capital with Adaptation and Well-being

6.1 Brief Introduction

As described in this chapter, this study contributes to the literature by analysing the associations between family social capital and adaptation and well-being among older Chinese internal migrants and the mediating roles of community structural and cognitive social capital in these associations. Hypotheses 3.1–3.3 were also tested. The analysis results revealed that family social capital was positively associated with both adaptation and well-being among the older adult migrants surveyed. These associations were partially mediated by community social capital. Specifically, family social capital enhanced adaptation through both community structural and cognitive pathways, although the mediating effect of the structural pathway on the sociocultural adaptation was marginal. For positive affect (life satisfaction and happiness), both community structural and cognitive social capital pathways were significant. By contrast, for negative affect (depressive symptoms), only community cognitive social capital showed a significant mediating role.

These findings underscore the central role of family social capital in promoting adaptation and well-being among older migrants both directly and indirectly through strengthened community cognitive social capital. The weak influence of structural social capital on sociocultural adaptation and negative affect suggests that the quality

of social relationships exerts a greater influence on adaptation and well-being than does the frequency of participation in the community. Coordinated development of family and community resources is essential to promote successful ageing in individuals who engage in late-life migration.

6.2 Mediating Role of Community Social Capital

Chaudhury and Oswald (2019) extended the concept of person–environment interactions to social environments, which involve multiple levels of contacts and relationships of varying quantity and quality. Social environments influence individual behaviour by establishing norms and providing opportunities for engagement. Wahl and Gerstorf (2018; 2020) categorised environments into proximal (e.g., interactions with family) and distal (e.g., community engagement) contexts.

Agency and belonging pathways shape outcomes associated with ageing well through social interactions and emotional connections (Wahl et al., 2012). The agency pathway reflects the ability of older adults to access and use environmental resources through goal-directed behaviours and coping strategies (Bandura, 2006; Chaudhury & Oswald, 2019; Wahl et al., 2012). By contrast, the belonging pathway involves cognitive and emotional evaluations of living environments, such as place attachment and emotional bonds (Oswald & Wahl, 2005; Peace & Holland, 2005; Smith, 2009; Wahl et al., 2012). Community social capital is a critical factor in these pathways. It consists of two dimensions: structural social capital, which refers to objective measures of social connections (e.g., participation in community activities), and cognitive social

capital, which involves subjective evaluations such as trust, reciprocity, and a sense of belonging (Bassett & Moore, 2013; Harpham et al., 2002; Lin & Erickson, 2010). The present study employed both the structural and cognitive dimensions of community social capital as mediators of family social capital to assess their influence on adaptation and well-being among older migrants.

Family members' access to the social capital generated within the family depends on family solidarity (Bourdieu, 1973; Coleman, 1988; Furstenberg & Kaplan, 2004), which constitutes the most abundant source of their social capital (Bott, 1971; Furstenberg & Kaplan, 2004). Furstenberg and Kaplan (2004) noted that members of families with high levels of social capital tend to respond to each other's needs and draw upon mutual goodwill. Coleman (1988) argued that the intergenerational transmission of social capital from resourceful parents promotes children's development. Hagan et al. (1996) extended this framework to newly arrived migrant families, demonstrating that parental support is vital to children's development in host societies. Because of the centrality of collectivist cultural norms and intergenerational interdependence in Chinese society (Kim & Silverstein, 2021), the present study posited that older Chinese parents who relocate to reunite with adult children may strengthen community connections through family resources, particularly intergenerational interactions. Family social capital is also positively associated with the structural and cognitive dimensions of community social capital, which support adaptation and well-being among older migrants.

6.3 Conceptual Framework and Research Questions

This study contributes to the literature by analysing the associations between family social capital and adaptation and well-being among older Chinese internal migrants, along with community structural social capital and community cognitive social capital pathways. The two primary research questions addressed are outlined as follows: (1) How did community structural social capital and community cognitive social capital mediate the association between family social capital and adaptation? (2) How did community structural social capital and community cognitive social capital mediate the association between family social capital and well-being? Figure 6.1 and Figure 6.2 display the conceptual models linking family social capital and adaptation (i.e., psychological adaptation and sociocultural adaptation) and well-being (i.e., life satisfaction, happiness and depressive symptoms).

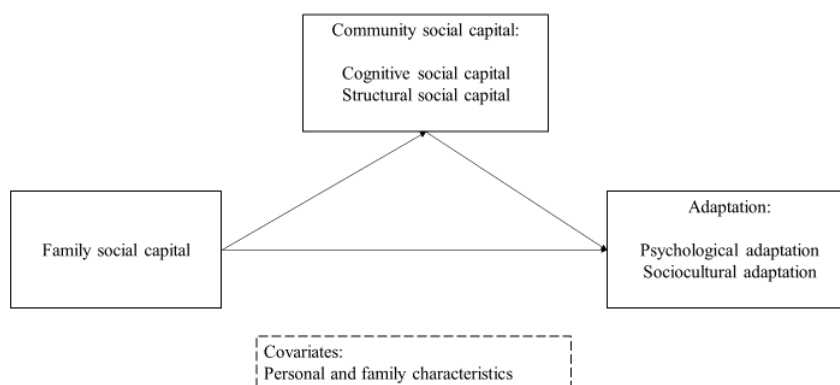


Figure 6.1. *Framework of Pathway From Family Social Capital to Adaptation Via Community Social Capital*

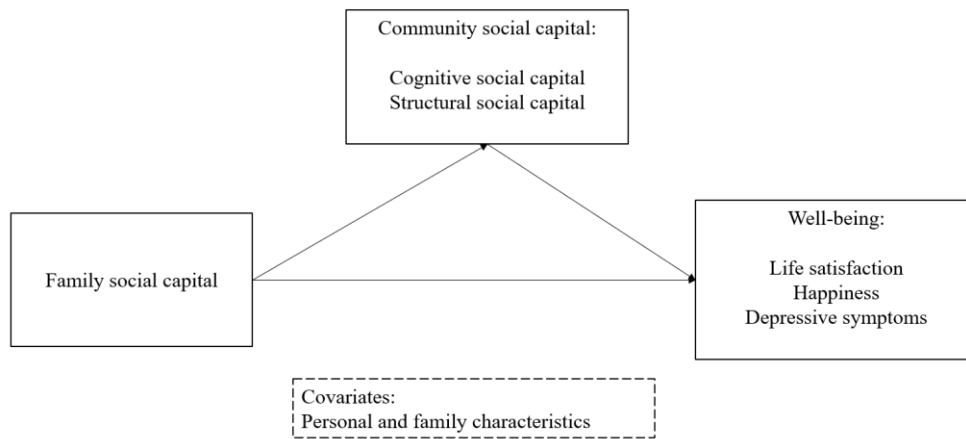


Figure 6.2. *Framework of Pathway From Family Social Capital to Well-being Via Community Social Capital.*

6.4 Methods

6.4.1 Measurements

The independent variable includes family social capital, and the mediators are community structural social capital, and community cognitive social capital, all described in detail in Chapter 4. The dependent variables include adaptation (psychological adaptation and sociocultural adaptation), and well-being (life satisfaction, happiness, and depressive symptoms), all detailed in Chapter 4. The covariates include personal (age, whether migrate with spouse, sex, education, *hukou* status, whether transferred *hukou* to the host city, residency duration, personal monthly income, migration distance, self-rated health, social support network, welfare service benefits, and contact with hometown of older migrants), and family characteristics (whether has house ownership in the host city, social gathering frequency, residency duration, education, sex, and whether they transferred *hukou* to the host city of their adult children and conflict with children), with comprehensive descriptions provided in

6.42 Data Analysis

Descriptive and bivariate correlation analyses were conducted using SPSS 26 (IBM Corp, 2019). To assess the association between family social capital and adaptation and well-being (Hypothesis 3.1) and the mediating effects of community structural social capital and community cognitive social capital (Hypotheses 3.2–3.3), this study applied multivariate linear regression and path analyses within an SEM framework. Correlated terms among the two mediators were included. All control variables were regressed on the dependent variable and mediators.

The models were estimated using robust maximum likelihood (MLR) with corrected chi-square as well as standard error. MLR is a robust estimator to correct the moderate violations of assumption and accommodates random missing data (Li, 2016; Wang & Wang, 2019). Model fit was examined by the following criteria: the chi-square test statistic, comparative fit index (CFI), Tucker–Lewis index (TLI; >0.90 ; Hu & Bentler, 1999), root mean square error of approximation (RMSEA; <0.08), and standardised root mean square residual (SRMR; <0.08 ; Browne & Cudeck, 1992; Hooper et al., 2008). Mplus Version 8 (Muthén & Muthén, 2017) was used to conduct the regressions and path analyses because it supports multiple independent variables, mediators, and moderators (Stride et al., 2015). Standardised coefficients for direct, indirect, and total effects are reported. Because of the typically skewed distribution of indirect effects, a 95% CI was calculated using 10,000 bootstrap samples.

6.5 Results

6.5.1 Descriptive Analysis

Table 6.1 presents the characteristics of the sampled older migrants. The average age of the older migrants was 63 years (range: 50–84 years). The older migrants had resided in the host cities for 6.97 years, on average, whereas their adult children had resided in the host cities for 13.06 years. Among the older migrants, 52.15% held urban *hukous*, and 62% were women. Regarding social capital scores, the average score for family social capital was 28.24, that for community structural social capital was 7.32, and that for community cognitive social capital was 14.91. Concerning adaptation, the mean psychological adaptation score was 15.26, and the mean sociocultural adaptation score was 23.79. For well-being, the average score was 17.86 for life satisfaction, 7.77 for happiness, and 5.17 for depressive symptoms.

Table 6.1. *Descriptive Statistics of the Samples*

Variable	Category	Range	Mean (SD)/Percent
<i>Personal characteristics</i>			
Age		50-84	63.78 (6.66)
Sex	Male		274 (38.00%)
	Female		447 (62.00%)
<i>hukou</i> status	Rural		345 (47.85%)
	Urban		376 (52.15%)
Migration with spouse	Yes		445 (61.72%)
	No		276 (38.28%)
Income	<1,000		195 (27.05%)
	1,000-3,999		302 (41.89%)
	>=4,000		224 (31.07%)
Education	Primary school and below		230 (31.90%)
	Middle school		183 (25.38%)

	High school and higher		308 (42.72%)
Residency duration		0-21	6.97 (5.01)
Whether transferred <i>hukou</i>	Yes		119 (16.51%)
	No		602 (83.49%)
Self-rated health	Fair or poor		253 (35.09%)
	Good		468 (64.91%)
Migration distance	Intraprovince		217 (30.10%)
	Interprovince		504 (69.90%)
Social support network		6-36	19.76 (5.97)
Contact with hometown		3-15	9.06 (2.74)
Welfare service benefits		0-9	2.77 (1.80)
<i>Family characteristics</i>			
Child's education	Middle school and below		43 (5.96%)
	High school to Post-secondary		206 (28.57%)
	University and above		472 (65.46%)
Child's sex	Male		472 (65.47%)
	Female		249 (34.53%)
Child's house ownership in the host city	No		262 (36.33%)
	Yes		459 (63.67%)
Whether transferred <i>hukou</i> of the child	No		209 (28.99%)
	Yes		512 (71.01%)
Child's residency duration		1-39	13.06 (6.44)
Child's social gathering frequency		1-5	2.76 (0.93)
Conflict with the child		3-15	5.89 (1.96)
Host city	Shenzhen		406 (56.31%)
	Guangzhou		315 (43.69%)
<i>Social capital</i>			
Family social capital		15-40	28.24 (4.24)
Community structural social capital		4-18	7.32 (3.12)
Community cognitive		4-20	14.91 (2.60)

social capital		
<i>Adaptation</i>		
Psychological adaptation	5-20	15.26 (2.85)
Sociocultural adaptation	7-35	23.79 (4.98)
<i>Well-being</i>		
Life satisfaction	5-25	17.86 (4.04)
Happiness	0-10	7.77 (1.80)
Depressive symptoms	0-22	5.17 (4.37)

6.52 Correlational Analysis

Table 6.2 presents the bivariate correlation among the key variables. Psychological adaptation and sociocultural adaptation were positively correlated with family social capital and community social capital. Life satisfaction and happiness were also positively correlated with family social capital and community social capital, whereas depressive symptoms were negatively correlated with family and community social capital. All reported correlations were significant.

Table 6.2. *Correlation Analysis*

	1	2	3	4	5	6	7
1. Family social capital							
2. Community cognitive social capital	0.274 ***						
3. Community structural social capital	0.233 ***	0.150 ***					
4. Psychological adaptation	0.309 ***	0.582 ***	0.336 ***				
5. Sociocultural adaptation	0.151 ***	0.266 ***	0.111 **	0.343 ***			

6. Life satisfaction	0.349 ***	0.414 ***	0.271 ***	0.446 ***	0.277 ***		
7. Happiness	0.417 ***	0.344 ***	0.291 ***	0.368 ***	0.192 ***	0.521 ***	
8. Depressive symptoms	-0.296 ***	-0.279 ***	-0.120 **	-0.282 ***	-0.200 ***	-0.415 ***	-0.504 ***

Note. ** $p < 0.01$ *** $p < 0.001$

6.53 Regression Analysis

The linear regression results for the direct effects of family social capital on adaptation and well-being are shown in Table 6.3 and 6.4. In terms of adaptation, the results showed that family social capital had significant, positive associations with psychological adaptation ($\beta = 0.072$, $SE = 0.021$, $p < 0.05$) and sociocultural adaptation ($\beta = 0.104$, $SE = 0.046$, $p < 0.01$). Similarly, community structural social capital had a significant and positive association with psychological adaptation ($\beta = 0.127$, $SE = 0.029$, $p < 0.001$); significant positive associations between community cognitive social capital and psychological adaptation ($\beta = 0.488$, $SE = 0.033$, $p < 0.001$) and sociocultural adaptation ($\beta = 0.170$, $SE = 0.070$, $p < 0.001$) were also found. In terms of well-being, the results showed that family social capital had significant associations with life satisfaction ($\beta = 0.117$, $SE = 0.035$, $p < 0.001$), happiness ($\beta = 0.217$, $SE = 0.016$, $p < 0.001$), and depressive symptoms ($\beta = -0.135$, $SE = 0.041$, $p < 0.001$). Similarly, community structural social capital had significant and positive associations with life satisfaction ($\beta = 0.088$, $SE = 0.046$, $p < 0.05$), and happiness ($\beta = 0.111$, $SE = 0.021$, $p < 0.01$); significant associations between community cognitive social capital

and life satisfaction ($\beta = 0.251$, $SE = 0.054$, $p < 0.001$) happiness ($\beta = 0.159$, $SE = 0.025$, $p < 0.001$), and depressive symptoms ($\beta = -0.134$, $SE = 0.063$, $p < 0.001$) were also found.

Table 6.3. *Direct Effects of Family Social Capital on Adaptation*

	Psychological adaptation β (SE)	Sociocultural adaptation β (SE)
Family social capital	0.072* (0.021)	0.104** (0.046)
Community structural social capital	0.127*** (0.029)	0.024 (0.061)
Community cognitive social capital	0.488*** (0.033)	0.170*** (0.070)
<i>Personal characteristics</i>		
<i>Education (ref. primary school and below)</i>		
Middle school	0.081* (0.219)	-0.003 (0.466)
High school and above	0.140*** (0.234)	0.014 (0.499)
<i>Income (ref. below 1,000)</i>		
1,000–3,999	-0.005 (0.213)	-0.054 (0.455)
$\geq 4,000$	-0.033 (0.252)	-0.019 (0.538)
<i>Sex (ref. male)</i>		
Female	-0.033 (0.169)	0.014 (0.360)
<i>Migrate with spouse (ref. no)</i>		
Yes	0.001 (0.170)	-0.060 (0.363)
<i>hukou status (ref. rural)</i>		
Urban	0.136***	0.030

	(0.200)	(0.426)
Self-rated health (<i>ref. fair or poor</i>)		
Good	0.073* (0.178)	0.076* (0.380)
Whether transferred <i>hukou</i> (<i>ref. no</i>)		
Yes	0.075* (0.234)	0.019 (0.498)
Age	-0.049 (0.015)	-0.032 (0.032)
Residency duration	0.103** (0.020)	0.071 (0.043)
Migration distance (<i>ref. interprovincial</i>)	-0.022	0.338***
Intraprovincial	(0.176)	(0.375)
Social support network	0.028 (0.014)	0.138*** (0.031)
Contact with hometown	0.008 (0.030)	-0.009 (0.063)
Welfare service benefits	0.022 (0.052)	0.001 (0.111)
<i>Family characteristics</i>		
Residency duration of the child	-0.020 (0.017)	-0.060 (0.035)
Whether transferred <i>hukou</i> of the child (<i>ref. no</i>)		
Yes	0.020 (0.231)	0.004 (0.492)
Education of the child (<i>ref. Middle school and below</i>)		
High school to Post-secondary	0.079 (0.360)	-0.008 (0.768)
University and above	0.031 (0.370)	0.004 (0.789)
Sex of the child (<i>ref. male</i>)		
Female	-0.044	-0.017

	(0.174)	(0.372)
House ownership in the host city (<i>ref. no</i>)		
Yes	0.040 (0.210)	-0.025 (0.447)
Social gathering frequency of the child	0.025 (0.089)	-0.020 (0.189)
Conflict with the child	0.037 (0.042)	0.003 (0.089)
Host city (<i>ref. Shenzhen</i>)		
Guangzhou	-0.072* (0.185)	-0.176*** (0.394)
R ²	0.500	0.257

Notes. Standardised coefficients are reported.

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

Table 6.4. *Direct Effects of Family Social Capital on Well-being*

	Life satisfaction β (SE)	Happiness β (SE)	Depressive symptoms β (SE)
Family social capital	0.117** (0.035)	0.217*** (0.016)	-0.135*** (0.041)
Community structural social capital	0.088* (0.046)	0.111** (0.021)	0.038 (0.054)
Community cognitive social capital	0.251*** (0.054)	0.159*** (0.025)	-0.134*** (0.063)
<i>Personal characteristics</i>			
Education (<i>ref. primary school and below</i>)			
Middle school	0.037 (0.354)	0.002 (0.164)	-0.125** (0.414)
High school and above	0.010 (0.379)	0.053 (0.175)	-0.099* (0.443)
Income (<i>ref. below 1,000</i>)			
1,000–3,999	-0.022 (0.346)	-0.089* (0.160)	0.001 (0.404)

>=4,000	-0.003 (0.409)	-0.080 (0.189)	-0.012 (0.478)
<i>Sex (ref. male)</i>			
Female	0.039 (0.274)	0.037 (0.126)	-0.025 (0.320)
<i>Migrate with spouse (ref. no)</i>			
Yes	0.012 (0.276)	0.054 (0.128)	-0.084* (0.322)
<i>hukou status (ref. rural)</i>			
Urban	-0.040 (0.324)	0.037 (0.149)	-0.008 (0.378)
<i>Self-rated health (ref. fair or poor)</i>			
Good	0.163*** (0.289)	0.164*** (0.133)	-0.188*** (0.338)
<i>Whether transferred hukou (ref. no)</i>			
Yes	-0.031 (0.379)	-0.068 (0.175)	0.019 (0.443)
<i>Age</i>			
	0.021 (0.024)	0.007 (0.011)	-0.027 (0.028)
<i>Residency duration</i>			
	0.099* (0.033)	-0.010 (0.015)	0.074 (0.038)
<i>Migration distance (ref. interprovincial)</i>			
Intraprovincial	0.062 (0.285)	0.024 (0.132)	-0.014 (0.334)
<i>Social support network</i>			
	0.046 (0.023)	0.069 (0.011)	-0.138*** (0.027)
<i>Contact with hometown</i>			
	0.052 (0.048)	-0.003 (0.022)	0.028 (0.056)
<i>Welfare service benefits</i>			
	0.081* (0.085)	0.076* (0.039)	0.010 (0.099)
<i>Family characteristics</i>			
Residency duration of the child	0.026 (0.027)	0.043 (0.012)	-0.065 (0.031)

Whether transferred <i>hukou</i> of the child (<i>ref. no</i>)			
Yes	-0.022 (0.374)	-0.009 (0.173)	-0.039 (0.437)
Education of the child (<i>ref. middle school and below</i>)			
High school to Post-secondary	0.049 (0.584)	0.085 (0.270)	-0.142* (0.682)
University and above	0.157* (0.600)	0.090 (0.278)	-0.092 (0.701)
Sex of the child (<i>ref. male</i>)			
Female	-0.000 (0.282)	0.038 (0.131)	0.000 (0.330)
House ownership in the host city (<i>ref. no</i>)			
Yes	0.089* (0.340)	0.045 (0.158)	-0.064 (0.398)
Social gathering frequency of the child			
	0.016 (0.144)	0.036 (0.067)	-0.010 (0.168)
Conflict with the child			
	-0.145*** (0.068)	-0.126*** (0.031)	0.094** (0.079)
Host city (<i>ref. Shenzhen</i>)			
Guangzhou	0.054 (0.300)	0.029 (0.138)	-0.011 (0.351)
R ²	0.345	0.326	0.236

Notes. Standardised coefficients are reported.

* $p < .05$. ** $p < .01$. *** $p < .001$.

6.54 Path Analysis

Path analyses were conducted to examine the mediating effects of community structural and cognitive social capital on adaptation and well-being among older migrants. Both models exhibited satisfactory fit. For the outcome of adaptation, the model fit statistics were as follows: $\chi^2(24) = 58.798$, RMSEA = 0.045, CFI = 0.952, TLI = 0.910, SRMR = 0.040. Figure 6.3 shows that family social capital was significantly associated with higher levels of community structural social capital ($\beta = 0.204$, $p < 0.001$), and community cognitive social capital ($\beta = 0.273$, $p < 0.001$). Community structural social capital and community cognitive social capital were significantly associated with higher levels of psychological adaptation ($\beta = 0.200$, $p < 0.001$; and $\beta = 0.514$, $p < 0.001$, respectively), and sociocultural adaptation ($\beta = 0.065$, $p < 0.1$; and $\beta = 0.224$, $p < 0.001$, respectively). The covariates of personal (including age, sex, income, education, residency duration, *hukou* status, self-rated health, migration with a spouse, migration distance, and whether transferred *hukou* to the host city), and family characteristics (including education, sex, residency duration, whether transferred *hukou*, and house ownership of the adult children, social gathering frequency and conflict with child) were controlled.

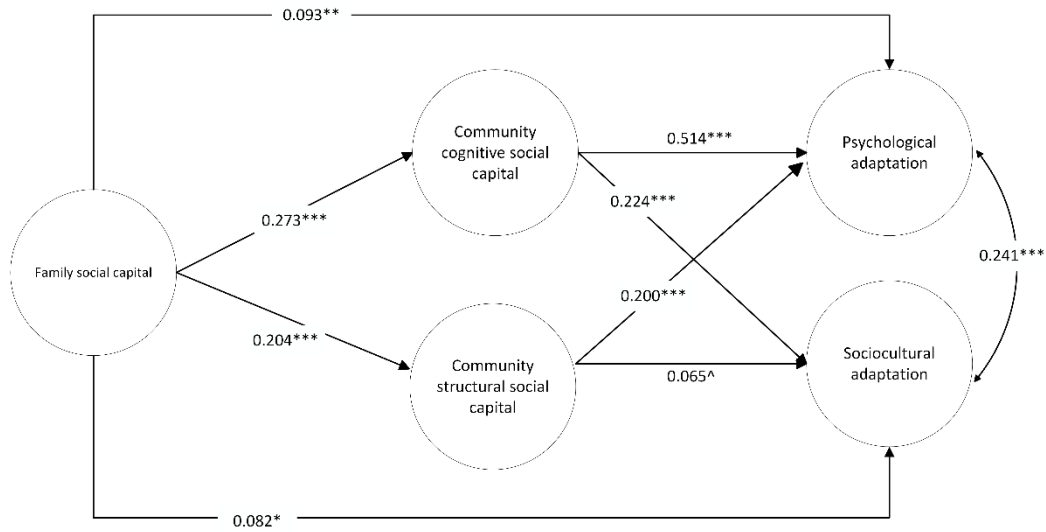


Figure 6.3. Path Analysis Results for Adaptation

Note. Model fit indices: Chi-Square (24) = 58.798; root mean square error of approximation (RMSEA) = 0.045 (95% confidence interval [0.030, 0.059]); Standardised root mean square residual (SRMR) = 0.040; comparative fit index (CFI) = 0.952; Tucker-Lewis index (TLI) = 0.910. $^{\wedge}p < 0.10$. * $p < 0.05$. ** $p < 0.01$ *** $p < 0.001$.

The model fit for the well-being outcome was also satisfactory: $\chi^2(15) = 34.495$, RMSEA = 0.042, CFI = 0.977, TLI = 0.950, SRMR = 0.029. As shown in Figure 4, family social capital was significantly associated with higher levels of community structural social capital ($\beta = 0.204$, $p < 0.001$), and community cognitive social capital ($\beta = 0.274$, $p < 0.001$). Community structural social capital, and community cognitive social capital were significantly associated with higher levels of life satisfaction ($\beta = 0.171$, $p < 0.001$; and $\beta = 0.330$, $p < 0.001$, respectively), and happiness ($\beta = 0.168$, $p < 0.001$; and $\beta = 0.205$, $p < 0.001$, respectively). Community cognitive social capital was significantly associated with lower levels of depressive symptoms ($\beta = -0.211$, $p < 0.001$). The covariates of personal (including age, sex, income, education, residency duration, *hukou* status, self-rated health, migration with a spouse, migration distance, and whether transferred *hukou* to the host city), and family characteristics (including education, sex, residency duration, whether transferred *hukou*, and house ownership of

the adult children, social gathering frequency and conflict with child) were controlled.

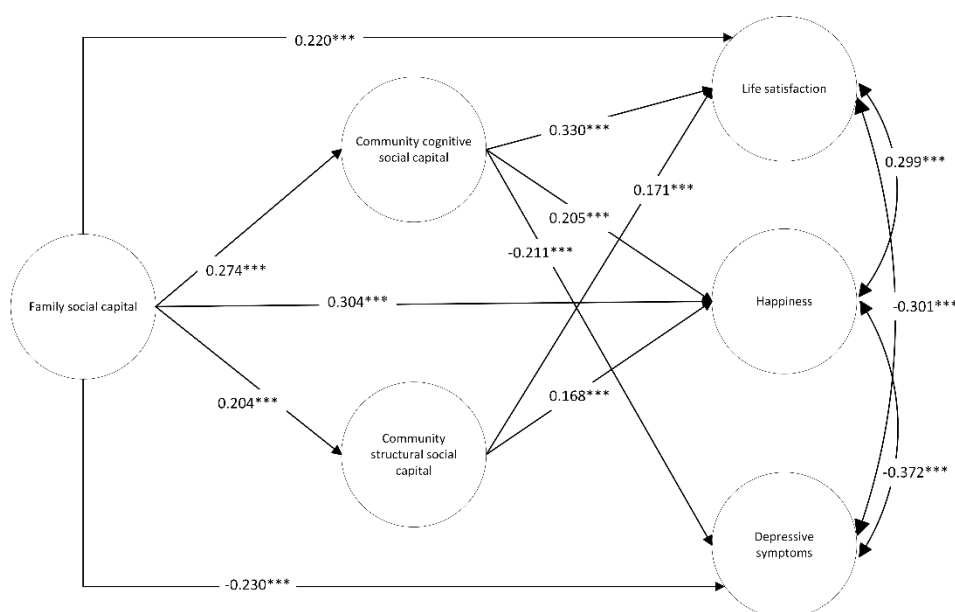


Figure 6.4. Path Analysis Results for Well-being

Note. Model fit indices: Chi-Square (15) = 34.495; root mean square error of approximation (RMSEA) = 0.042 (95% confidence interval [0.024, 0.061]); Standardised root mean square residual (SRMR) = 0.029; comparative fit index (CFI) = 0.977; Tucker-Lewis index (TLI) = 0.950. *** $p < 0.001$. Only significant paths are shown in the figure.

The indirect effects, direct effects, and total effects on adaptation and well-being are shown in Table 6.5 and 6.6. As presented in Table 6.5, the total effects of family social capital on psychological adaptation ($\beta = 0.274$, 95% CI [0.202, 0.342], $p < 0.001$) and sociocultural adaptation ($\beta = 0.157$, 95% CI [0.080, 0.228], $p < 0.001$) were all significant. The direct effects of family social capital on psychological adaptation ($\beta = 0.093$, 95% CI [0.031, 0.160], $p < 0.01$) and sociocultural adaptation ($\beta = 0.082$, 95% CI [0.014, 0.151], $p < 0.05$) were also significant. The significant indirect effects of family social capital on psychological adaptation via community cognitive social capital ($\beta = 0.141$, 95% CI [0.094, 0.187], $p < 0.001$) and community structural social capital ($\beta = 0.041$, 95% CI [0.023, 0.062], $p < 0.001$) respectively. And the indirect

effects of family social capital on sociocultural adaptation were significant via community cognitive social capital ($\beta = 0.061$, 95% CI [0.037, 0.096], $p < 0.001$) and marginally via community structural social capital ($\beta = 0.013$, 95% CI [0.000, 0.031], $p < 0.1$) respectively. The results indicated that community social capital partially mediated the associations between family social capital and adaptation status, with the mediation effect of community structural social capital on sociocultural adaptation being marginal.

Table 6.5. *Direct, Indirect, and Total Effects of Family Social Capital on Adaptation Through Community Social Capital*

Effect	Estimate	95% [CI]
Direct effect		
Family social capital → Psychological adaptation	0.093**	[0.031, 0.160]
Indirect effects		
Family social capital → Community structural social capital → Psychological adaptation	0.041***	[0.023, 0.062]
Family social capital → Community cognitive social capital → Psychological adaptation	0.141***	[0.094, 0.187]
Total effect	0.274***	[0.202, 0.342]
Direct effect		
Family social capital → Sociocultural adaptation	0.082*	[0.014, 0.151]
Indirect effects		
Family social capital → Community structural social capital → Sociocultural adaptation	0.013 [^]	[0.000, 0.031]
Family social capital → Community cognitive social capital → Sociocultural adaptation	0.061***	[0.037, 0.096]
Total effect	0.157***	[0.080, 0.228]

Note. Confidence intervals (CI) for direct and indirect effects were estimated using bootstrapping. Path parameters are standardised coefficients.

[^] $p < 0.10$. * $p < 0.05$. ** $p < 0.01$ *** $p < 0.001$.

As presented in Table 6.6, the total effects of family social capital on life satisfaction ($\beta = 0.345$, 95% CI [0.260, 0.410], $p < 0.001$), happiness ($\beta = 0.395$, 95% CI [0.329, 0.453], $p < 0.001$) and depressive symptoms ($\beta = -0.297$, 95% CI [-0.356, -0.229], $p < 0.001$) were all significant. The direct effects of family social capital on life satisfaction ($\beta = 0.220$, 95% CI [0.142, 0.292], $p < 0.001$), happiness ($\beta = 0.304$, 95% CI [0.239, 0.365], $p < 0.001$) and depressive symptoms ($\beta = -0.230$, 95% CI [-0.303, -0.155], $p < 0.001$) were also significant. The significant indirect effects of family social capital on life satisfaction were significant via community cognitive social capital ($\beta = 0.090$, 95% CI [0.061, 0.125], $p < 0.001$) and community structural social capital ($\beta = 0.035$, 95% CI [0.019, 0.056], $p < 0.001$) respectively. In addition, the indirect effects of family social capital on happiness were significant via community cognitive social capital ($\beta = 0.056$, 95% CI [0.035, 0.084], $p < 0.001$) and community structural social capital ($\beta = 0.034$, 95% CI [0.015, 0.057], $p < 0.01$), respectively. The indirect effect of family social capital on depressive symptoms was only significant via community cognitive social capital ($\beta = -0.058$, 95% CI [-0.092, -0.034], $p < 0.001$). The results indicated that community social capital partially mediated the associations between family social capital and well-being status, with community structural social capital not significantly mediating the effect on depressive symptoms.

Table 6.6. *Direct, Indirect, and Total Effects of Family Social Capital on Well-being Through Community Social Capital*

Effect	Estimate	95% [CI]
Direct effect		
Family social capital → Life satisfaction	0.220***	[0.142, 0.292]
Indirect effects		
Family social capital → Community structural social capital → Life satisfaction	0.035***	[0.019, 0.056]
Family social capital → Community cognitive social capital → Life satisfaction	0.090***	[0.061, 0.125]
Total effect	0.345***	[0.260, 0.410]
Direct effect		
Family social capital → Happiness	0.304***	[0.239, 0.365]
Indirect effects		
Family social capital → Community structural social capital → Happiness	0.034**	[0.015, 0.057]
Family social capital → Community cognitive social capital → Happiness	0.056***	[0.035, 0.084]
Total effect	0.395***	[0.329, 0.453]
Direct effect		
Family social capital → Depressive symptoms	-0.230***	[-0.303, -0.155]
Indirect effects		
Family social capital → Community structural social capital → Depressive symptoms	-0.009	[-0.028, 0.005]
Family social capital → Community cognitive social capital → Depressive symptoms	-0.058***	[-0.092, -0.034]
Total effect	-0.297***	[-0.356, -0.229]

Note. Confidence intervals (CI) for direct and indirect effects were estimated using bootstrapping. Path parameters are standardised coefficients.

** $p < 0.01$ *** $p < 0.001$.

6.6 Discussion

This chapter presents analyses of the associations between family social capital and adaptation and well-being among older migrants and the potential mediating roles of community structural and cognitive social capital. The results indicate that family social capital was positively associated with adaptation and well-being among the surveyed older migrants. These associations were partially mediated by community social capital. Family social capital related to better adaptation through both community structural and cognitive social capital pathways, although the indirect association via community structural social capital was marginal. Similarly, the relationship between family social capital and positive affect (life satisfaction and happiness) was linked to both community structural and cognitive social capital pathways. In contrast, for negative affect (depressive symptoms), only the pathway through community cognitive social capital was significant. By identifying the mechanisms through which family and community resources influence adaptation and well-being, this study fills a gap in the literature on late-life migration and elucidates the factors shaping successful ageing after relocation.

The regression results reveal that higher levels of family social capital were significantly correlated with enhanced adaptation and well-being among older parents who relocated to join adult children, supporting Hypothesis 3.1. These findings are consistent with those of the literature (Gao et al., 2021; Lai et al., 2019; Liu et al., 2017) highlighting the importance of intergenerational solidarity to supporting older migrants’

age well in the host environments. Additionally, these findings are consistent with the convoy model of social relations (Antonucci & Akiyama, 1995), which suggests that older adults depend heavily on their inner social convoy of close family members (Antonucci & Akiyama, 1987).

The results partially supported Hypotheses 3.2 and 3.3, indicating that family social capital indirectly influenced adaptation and well-being through community social capital. Family social capital was positively associated with both community structural and cognitive social capital, only the cognitive dimension consistently mediated the relationships with adaptation and well-being. These findings highlight the central role of community cognitive social capital, defined by trust, a sense of belonging, and emotional connection to local neighbourhoods, in supporting successful adaptation and well-being among older migrants. Family ties may facilitate integration primarily by fostering these affective and subjective aspects of community life, which are essential to ageing well in the host society. This interpretation is consistent with the findings of studies demonstrating that adult children often function as bridges between their parents and broader community networks (Offer & Schneider, 2007; Zhao et al., 2022) and supports the findings of studies suggesting that strong family support enhances access to meaningful social resources (Berkman et al., 2000; Holtfreter et al., 2015). By helping older migrants cultivate emotional bonds and trust within the community, family social capital provides a means for these individuals to experience acceptance and connection, enhancing their adaptation and well-being.

Recent studies have enriched the environment and ageing-well models by

distinguishing different levels of environments and incorporating social environments into person-environment interactions (Chaudhury & Oswald, 2019; Wahl & Gerstorf, 2018; 2020). The present study extends these models by integrating family environments into the environmental framework of ageing well, elucidating the family–community connection. Socioemotional selectivity theory further explains older adults’ preference for intimate relationships and resistance to forming new social ties (Carstensen, 2021; Morrow-Howell & Greenfield, 2016). Accordingly, family social capital functions as an immediate environmental resource that fosters community cognitive social capital, which consistently promotes adaptation and well-being. Although family social capital also involves community structural social capital, the indirect effects of community structural capital were inconsistent. This inconsistency highlights the complex and selective dynamics linking family support, community integration, and successful ageing in late-life migration.

Community structural social capital is defined by participation in community activities and social networks. It exhibited only a marginal association with sociocultural adaptation and a nonsignificant association with depressive symptoms among the sampled older migrants. This finding is inconsistent with those of studies that have highlighted the role of community engagement in promoting well-being (Kim et al., 2015; Liu et al., 2016). Socioemotional selectivity theory (Carstensen, 1992, 2021) provides a possible explanation for this discrepancy, suggesting that older adults prioritise emotionally meaningful relationships over expanding social networks. For older migrants, such prioritisation entails valuing close family ties and a sense of

belonging in the host environment more than engagement in broader community activities. Although family members may encourage participation in neighbourhood events or local groups (Wangliu, 2023), such involvement may not fulfil emotional needs. Superficial engagement in community activities without meaningful connections can leave feelings of loneliness unaddressed (Ruan & Cheung, 2024).

Chapter 7 Ageing in Place in the Host City: The Role of Social Capital, Place Attachment, and Family Enabling Factors in Shaping Permanent Settlement Intentions

7.1 Brief Introduction

Although considerable progress has been made in elucidating ageing migrants' settlement processes, further research is required to clarify how different forms of social capital, particularly local family and community ties, interact with psychological factors such as place attachment to shape permanent settlement intentions. This chapter presents analyses that were conducted to address Hypotheses 4.1–4.3. The findings revealed that family and community structural social capital influenced permanent settlement intentions indirectly through place attachment. By contrast, family social capital had no direct association with permanent settlement intentions, and intended care arrangements only exerted direct effects on such intentions, while the host-city house ownership moderated the associations between place attachment and ageing-in-place preference

This study clarifies the understanding of older migrants' permanent settlement intentions by elucidating the distinct and interconnected roles of family and community social capital, place attachment, and family enabling factors in shaping these intentions. The findings underscore the need for targeted interventions and policies that address the social and psychological integration of older migrants within host communities to facilitate successful ageing. Policies and programmes that facilitate their care needs are

essential in helping them age well in the host society.

7.2 Mediating Role of Place Attachment and Moderating Role of Family Enabling Factors

Older adults' preference for ageing in place is closely linked to strong attachment and identification with their surroundings (Burns et al., 2012; Eisdorfer & Lawton, 1973). Localised social ties and neighbourhood experiences are essential for developing place attachment, which indicates that emotional bonds and a sense of belonging constitute a core element of psychological integration (Adams, 2014; Lewicka, 2005; Toruńczyk-Ruiz & Brunarska, 2018). Empirical studies have demonstrated that strong local social ties foster place attachment among migrants and considerably influence their intentions to remain and settle permanently in host cities (Chow & Healey, 2008; Clark et al., 2017; Lu et al., 2024). However, among migrants who relocate for family reasons, the influence of family ties on such process remains underexplored.

Social capital is defined as resources that are embedded in social networks marked by shared norms and memberships; it serves as a protective factor supporting preferences for ageing in place (Coleman, 1990; Wiles et al., 2011). Family and community constitute the two primary social systems shaping older adult migrants' integration into host cities; each is characterised by distinct yet complementary forms of social capital (Furstenberg, 2005; Jiang et al., 2018; Lu et al., 2015). Family connections to a location can enhance its attractiveness by facilitating access to local resources and social capital (Mulder, 2018).

Beyond individual relationships with family or community, family enabling factors also play an important role in migration decisions (De Haas, 2021), especially for those family-reasoned older migrants. The normative resources, referring to the reliance on adult children for late-life care, often influence relocation and settlement decisions. Close family members frequently remain central in social networks throughout the life course, with care expectations strongly shaped by social norms, especially in Asian societies such as China, where filial piety governs older parents' expectations for support from their offspring (Liefbroer & Mulder, 2006; Silverstein & Bengtson, 1997; Xiao et al., 2024).

Small-scale studies have demonstrated that family care considerations substantially influence migration decisions, particularly when practical support such as childcare or care for frail older adults is needed (Bailey et al., 2004; Nedelcu & Wyss, 2019). The influence of family ties is especially pronounced in welfare regimes that emphasise family responsibility and uphold strong norms of family solidarity (Hank & Buber, 2009). Within migration processes, care circulation in families is crucial; notably, older parents may not always expect reciprocity after providing grandparenting and household care to their adult children (Baldassar & Merla, 2014; Bai et al., 2024; Chiu & Ho, 2020).

The material resources, particularly housing ownership, significantly influence the preferences of ageing in place among older adults. House ownership represents not only an economic asset, but also a source of psychological stability and identity (Clark & Lisowski, 2017; Kahneman & Tversky, 2013). Previous studies have highlighted the

moderating role of home ownership with community attachment in influencing ageing-in-place preferences among older adults (e.g., Clark et al., 2024). However, this relationship remains underexplored among older migrants, whose relocation decisions are often guided by family considerations.

7.3 Conceptual Framework and Research Questions

This study extends the literature by examining the influence of family and community social capital on older migrants' ageing-in-place preferences, with place attachment as a potential mediating mechanism. The study examined whether family enabling factors moderate the indirect pathways linking social capital to ageing-in-place preferences through place attachment. By integrating social and psychological dimensions, this study conducted a detailed analysis of the factors affecting ageing-in-place preferences among family-reasoned older migrants. Specifically, this study addresses the following research questions: 1. How did family and community social capital directly influence older migrants' ageing-in-place preferences? 2. How did place attachment serve as pathways in the relationship between social capital and ageing-in-place preferences? 3. Did the family enabling factors have direct associations with the ageing-in-place preferences, and moderate the indirect pathways from social capital to these preferences? Figure 7.1 shows the conceptual model linking social capital and permanent settlement intention.

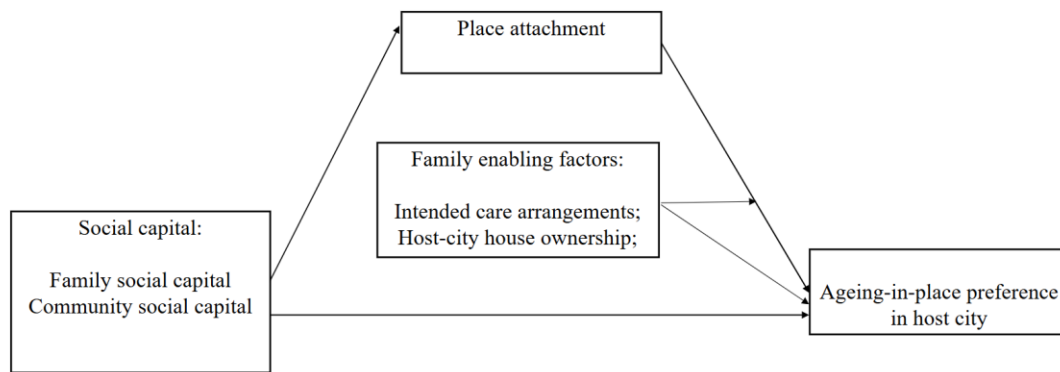


Figure 7.1. Framework of the Direct and Indirect Influence of Social Capital on Permanent Settlement Intention

7.4 Methods

7.41 Study Sample

In China, the household registration (*hukou*) system access to local welfare services and facilitates the establishment of local networks and identity, strengthening place attachment to local communities (Huang et al., 2018; Zhu & Chen, 2010). To better assess permanent settlement preferences among older migrants, this study excluded individuals who had already transferred their *hukou* to the host city. After individuals with local *hukous* ($n = 119$) had been removed, the sample included 602 older migrants.

7.42 Measurements

The independent variables include family social capital, community structural social capital, and community cognitive social capital, all described in detail in Chapter 4. The dependent variable is the permanent settlement intention, the mediator is the place attachment, and the moderators are the intended care arrangements and house ownership of adult children, all in detail in Chapter 4. The covariates include personal

(age, whether migrate with spouse, sex, education, *hukou* status, residency duration, income, migration distance, contact with hometown, social support network, welfare service benefits, self-rated health, depressive symptoms and grandparenting involvement of older migrants), and family characteristics (residency duration, sex, whether the only child, social gathering frequency and whether they transferred *hukou* to the host city of their adult children, and conflict with children), with comprehensive descriptions provided in Chapter 4.

7.43 Data Analysis

Descriptive analysis and bivariate correlation were conducted using SPSS 26 (IBM Corp, 2019). To assess the association between social capital and permanent settlement intention and the mediating effects of place attachment on this association, this study applied logistic regression modeling and path analysis within a structural equation modeling (SEM) framework. Interaction terms for the indirect paths were added to examine whether the observed associations varied across different statuses of family enabling factors. All control variables were regressed on the dependent variable and mediators.

The weighted least squares means and variance adjusted method was adopted to ensure accurate estimates and standard error in situations with a combination of continuous, binary and ordinal data (Asparouhov & Muthén, 2018; Flora & Curran, 2004; Sass et al., 2014). Model fit was examined by the following criteria: the chi-square test statistic, RMSEA (<0.08), CFI and TLI (>0.90 ; Hu & Bentler, 1999), and

SRMR (<0.08; Browne & Cudeck, 1992; Hooper et al., 2008). Mplus Version 8 (Muthén & Muthén, 2017) was used to conduct the path analysis and accommodate multiple independent variables, mediators, and moderators (Stride et al., 2015). Standardised coefficients for the direct, indirect, and total effects are reported. Because of the skewed distribution of the indirect effects, a 95% CI was calculated using 10,000 bootstrap samples.

7.5 Results

7.5.1 Descriptive Analysis

Older migrants with permanent settlement intentions accounted for 44% of the sample (Table 7.1). Moreover, 44.70% of the migrants expected to primarily rely on their children for late-life care. The average age of the sample was 63.38 years, and migrants intending permanent settlement were slightly older at 64.66 years. A higher proportion of older migrants with permanent settlement intentions had resided in the host city for more than eight years. Most older migrants (71.43%) had more than one child. More than half of their adult children (55.32%) had resided in the host city for more than ten years, with most children having transferred their hukou to the host city (65.61%) and owning homes there (59.14%). Migrants with permanent settlement intentions scored higher on family social capital, community structural social capital, and place attachment than did those without such intentions.

Table 7.1. *Descriptive Statistics of Study Sample*

	Permanent settlement intention		F/ χ^2
	Whole sample	Yes Others	

	(n = 602)	(265, 44.00%)	(337, 55.98%)	
<i>Personal characteristics</i>				
Age	63.38 (6.73)	64.66 (7.15)	62.37 (6.20)	4.972***
<i>Sex</i>				
Female	369 (61.30%)	163 (61.51%)	206 (61.13%)	0.009
<i>hukou status</i>				
Urban	271 (45.02%)	149 (56.23%)	122 (36.20%)	24.033***
<i>Income</i>				
<1,000	189 (31.40 %)	57 (21.51%)	132 (39.17%)	21.513***
1,000–3,999	248 (41.20 %)	124 (46.79%)	124 (36.80%)	
>=4,000	165 (27.41 %)	84 (31.70%)	81 (24.04%)	
<i>Education</i>				
Primary school and below	224 (37.21%)	73 (27.55%)	151 (44.81%)	22.697***
Middle school	154 (25.58 %)	69 (26.04%)	85 (25.22%)	
High school and higher	224 (37.21 %)	123 (46.42%)	101 (29.97%)	
<i>Residency duration</i>				
< 3 years	191 (31.73%)	62 (23.40%)	129 (38.28%)	19.877***
3-8 years	186 (30.90%)	81 (30.57%)	105 (31.16%)	
> 8 years	225 (37.38%)	122 (46.04%)	103 (30.56%)	
<i>Whether migrate with spouse</i>				
Yes	347 (57.64%)	166 (62.64%)	181 (53.71%)	4.848*
<i>Self-rated health</i>				
Good	388 (64.45%)	170 (64.15%)	218 (64.69%)	0.019
Contact with hometown	8.99 (2.74)	9.23 (2.71)	8.80 (2.75)	0.335
Social support network	19.72 (5.93)	20.28 (5.89)	19.28 (5.93)	2.063*
Welfare service benefits	2.59 (1.76)	3.00 (0.10)	2.26 (0.96)	5.191***
<i>Migration distance</i>				
Intraprovince	181 (30.07%)	76 (28.68%)	105 (31.16%)	0.433
Interprovince	421 (69.93%)	189 (71.32%)	202 (68.84%)	
Depressive symptoms	5.30 (4.45)	4.96 (4.41)	5.58 (4.47)	0.121^
<i>Grandparenting involvement</i>				
Yes	474 (78.74%)	204 (76.98%)	270 (80.12%)	0.872
<i>Family characteristics</i>				

<i>Whether only one child</i>				
Only one child	172 (28.57%)	86 (32.45%)	86 (25.52%)	3.495 [^]
<i>Child's sex</i>				
Female	196 (32.56%)	96 (36.23%)	100 (29.67%)	2.901 [^]
<i>Whether transferred hukou of the child</i>				
Yes	395 (65.61%)	207 (78.11%)	188 (55.79%)	32.776 ^{***}
<i>Child's residency duration</i>				
<5 years	78 (12.96%)	26 (9.81%)	52 (15.43%)	16.370 ^{***}
5-10 years	191 (31.73%)	68 (25.66%)	123 (36.50%)	
> 10 years	333 (55.32%)	171 (64.53%)	162 (48.07%)	
Child's social gathering frequency	2.76 (0.93)	2.82 (0.92)	2.69 (0.95)	2.836
Conflict with the child	5.89 (1.96)	5.94 (2.00)	5.95 (1.93)	0.600
<i>Host city</i>				
Shenzhen	356 (59.14%)	170 (64.15%)	186 (55.19%)	4.926 [*]
Guangzhou	246 (40.86%)	95 (35.85%)	151 (44.81%)	
<i>Social capital</i>				
Family social capital	28.05 (4.24)	28.41 (4.53)	27.76 (3.99)	4.770 [^]
Community structural social capital	7.11 (2.95)	7.92 (3.11)	6.47 (2.66)	10.500 ^{***}
Community cognitive social capital	11.24 (2.01)	11.29 (2.03)	11.20 (1.99)	0.063
Family enabling factors				
<i>Intended care arrangements</i>				
Rely on children	269 (44.70%)	156 (58.87%)	113 (33.53%)	38.528 ^{***}
<i>Host-city house ownership</i>				
Yes	356 (59.14%)	192 (72.45%)	164 (48.66%)	34.738 ^{***}
Place attachment	15.03 (2.90)	15.78 (2.64)	14.45 (2.97)	8.042 ^{***}

Note. M = Mean; SD = Standard Deviation. Chi-square tests for categorical variables and ANOVA for continuous variables were performed to compare group differences.

[^] $p < 0.01$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

7.52 Correlational Analysis

Table 7.2 presents the results of the bivariate correlations among the variables. Permanent settlement intentions were positively correlated with community structural social capital, place attachment, host-city house ownership, and intended care arrangements.

Table 7.2. Correlation Analysis

	1	2	3	4	5	6
1. Permanent settlement intention						
2. Family social capital	0.076					
3. Community structural social capital	0.243 ***	0.241 ***				
4. Community cognitive social capital	0.021	0.281 ***	0.139 ***			
5. Place attachment	0.228 ***	0.323 ***	0.329 ***	0.517 ***		
6. Intended care arrangements	0.253 ***	0.059 ***	0.060 ***	-0.042	0.048	
7. Host-city house ownership	0.240 ***	0.114 **	0.177 ***	0.090 *	0.151 ***	-0.048

Note. ** $p < 0.01$ *** $p < 0.001$

7.53 Regression Analysis

The logistic regression results for the direct influences of social capital, place attachment, and family enabling factors on permanent settlement intention are shown in Table 7.3. In Model 1, the results showed that, compared with those without permanent settlement intentions in the host city, older migrants with higher levels of community structural social capital have higher probabilities of having such intentions (RRR = 1.118, 95% CI [1.038 - 1.203], $p < 0.01$). In Model 2, considering place

attachment and family enabling factors, older migrants with higher levels of community structural social capital have higher probabilities of having the permanent settlement intention (RRR = 1.090, 95% CI [1.007 - 1.180], $p < 0.05$), compared to those without such intentions. Older migrants with higher place attachment also have higher possibilities to have the permanent settlement intention (RRR = 1.133, 95% CI [1.032 - 1.244], $p < 0.01$), compared to those without such intentions. Similarly, older migrants with the expectation towards children for late-life care have higher possibilities to have permanent settlement intention in the host city (RRR = 4.556, 95% CI [2.966 – 6.999], $p < 0.001$), compared to those without such intentions. Older migrants whose children have host-city house ownership also have higher possibilities to have permanent settlement intention in the host city (RRR = 2.290, 95% CI [1.379 - 3.804], $p < 0.01$), compared to those without such intentions. The family social capital and community cognitive social capital have non-significant direct associations with permanent settlement intention in both models.

Table 7.3. *Regression Results for Permanent Settlement Intention*

	Model 1		Model 2	
<i>Ref. Permanent settlement intention (Others)</i>	Permanent settlement intention (Yes)		Permanent settlement intention (Yes)	
	OR	95% CI	OR	95% CI
Family social capital	0.984	(0.936 - 1.034)	0.954	(0.903 - 1.007)
Community structural social capital	1.118**	(1.038 - 1.203)	1.090*	(1.007 - 1.180)
Community cognitive social capital	0.972	(0.897 - 1.054)	0.923	(0.833 - 1.022)
Place attachment			1.133**	(1.032 - 1.244)
Family enabling factors				
<i>Intended care arrangements</i>				
Rely on children			4.556***	(2.966 - 6.999)
<i>Host-city house ownership (ref. no)</i>				
Yes			2.290**	(1.379 - 3.804)
<i>Personal characteristics</i>				

<i>Hukou status (ref. rural)</i>				
Urban	1.260	(0.817 - 1.945)	1.451	(0.902 - 2.334)
<i>Whether migrate with spouse (ref. no)</i>				
Yes	1.177	(0.802 - 1.727)	1.182	(0.781 - 1.789)
<i>Education (ref. primary school and below)</i>				
Middle school	1.498	(0.921 - 2.439)	1.748*	(1.033 - 2.960)
High school and above	1.456	(0.878 - 2.414)	1.730	(0.988 - 3.028)
<i>Income (ref. < 1,000)</i>				
1,000–3,999	1.892**	(1.170 - 3.060)	2.241**	(1.333 - 3.768)
>=4,000	1.755	(0.972 - 3.168)	2.169*	(1.153 - 4.079)
Age	1.024	(0.991 - 1.059)	1.014	(0.979 - 1.051)
<i>Sex (ref. male)</i>				
Female	1.316	(0.884 - 1.957)	1.284	(0.850 - 1.940)
Contact with hometown	1.027	(0.955 - 1.103)	1.017	(0.942 - 1.097)
Social support network	1.003	(0.969 - 1.039)	1.004	(0.968 - 1.042)
Welfare service benefits	1.048	(0.923 - 1.189)	1.014	(0.890 - 1.155)
<i>Residency duration (ref. < 3 years)</i>				
3-8 years	1.640*	(1.011 - 2.660)	1.596	(0.953 - 2.673)
> 8 years	1.812*	(1.037 - 3.168)	1.903*	(1.052 - 3.442)
<i>Physical health status (ref. fair or poor)</i>				
Good	0.955	(0.623 - 1.463)	0.921	(0.591 - 1.437)
Depressive symptoms	0.996	(0.951 - 1.043)	0.993	(0.945 - 1.043)
<i>Migration distance (ref. interprovince)</i>				
Intraprovince	1.208	(0.795 - 1.834)	0.968	(0.623 - 1.504)
<i>Grandparenting involvement (ref. no)</i>				
Yes	0.615*	(0.380 - 0.997)	0.685	(0.415 - 1.130)
<i>Family characteristics</i>				
<i>Sex (ref. male)</i>				
Female	0.967	(0.629 - 1.487)	1.028	(0.640 - 1.653)
<i>Child Hukou status (ref. not transferred)</i>				
Transferred to the host city	1.364	(0.841 - 2.213)	1.379	(0.821 - 2.319)
<i>Whether is the only one child (ref. no)</i>				
Yes	0.769	(0.492 - 1.203)	0.814	(0.502 - 1.319)
<i>Child's residency duration (ref. < 5 years)</i>				
5-10 years	0.810	(0.428 - 1.531)	0.700	(0.358 - 1.371)
> 10 years	0.975	(0.499 - 1.907)	0.850	(0.419 - 1.722)
Child's social gathering frequency	0.988	(0.801 - 1.218)	1.015	(0.812 - 1.269)
Conflict with the child	0.986	(0.893 - 1.089)	0.980	(0.883 - 1.087)
<i>Host city (ref. Shenzhen)</i>				
Guangzhou	0.694	(0.453 - 1.064)	0.778	(0.500 - 1.209)
Constant	0.034*	(0.002 - 0.631)	0.025*	(0.001 - 0.511)
R ²	0.142		0.218	

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

7.54 Path Analysis

Using path analysis, we examined the mediating effects of place attachment on the relationship between social capital and settlement intention. Place attachment showed significant pathways in associations between family social capital, community structural social capital and permanent settlement intention. For the family social capital, the model fit statistics were as follows: $\chi^2(3) = 4.908$, $p = 0.179$, RMSEA = 0.033, CFI = 0.983, TLI = 0.950, SRMR = 0.026. As shown in Figure 7.2, family social capital was significantly associated with higher levels of place attachment ($\beta = 0.320$, $p < 0.001$), and place attachment was significantly associated with permanent settlement intention ($\beta = 0.279$, $p < 0.001$). The covariates of personal (including age, education, whether migrate with spouse, residency duration, contact with hometown, *hukou* status, self-rated health, depressive symptoms, migration distance and grandparenting involvement), and family characteristics (including sex, whether the only child, residency duration, and whether transferred *hukou* of the adult child) were controlled.

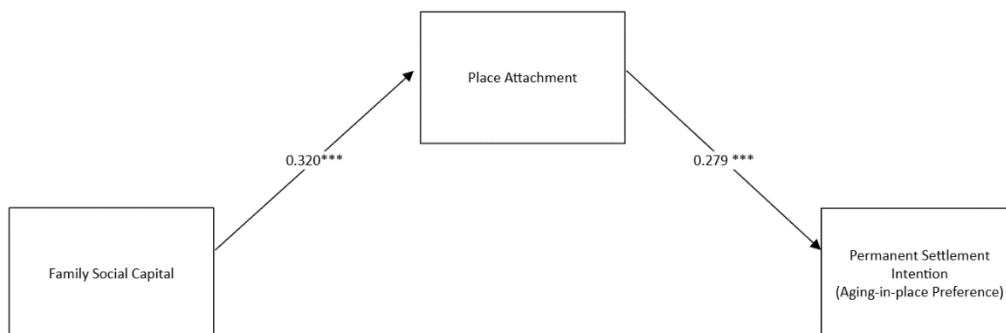


Figure 7.2. *Path Analysis of Family Social Capital on Permanent Settlement Intention*

Note. Model fit indices: Chi-Square (3) = 4.908, $p = 0.179$; root mean square error of approximation (RMSEA) = 0.033 (95% confidence interval [0.000, 0.082]); Standardised root mean square residual (SRMR) = 0.026; comparative fit index (CFI) = 0.983; Tucker-Lewis index (TLI) = 0.950. *** $p < 0.001$.

The model fit for community structural social capital was also satisfactory: $\chi^2(5) = 7.214$, $p = 0.204$, RMSEA = 0.027, CFI = 0.974, TLI = 0.933, SRMR = 0.062. As shown in Figure 7.3, community structural social was significantly associated with higher levels of place attachment ($\beta = 0.305$, $p < 0.001$), and place attachment was significantly associated with permanent settlement intention ($\beta = 0.177$, $p < 0.01$). Community structural social capital was also significantly associated with permanent settlement intention ($\beta = 0.174$, $p < 0.01$). The covariates of personal (including age, education, whether migrate with spouse, residency duration, contact with hometown, *hukou* status, self-rated health, depressive symptoms, migration distance and grandparenting involvement), and family characteristics (including sex, whether the only child, residency duration, and whether transferred *hukou* of the adult child) were controlled.

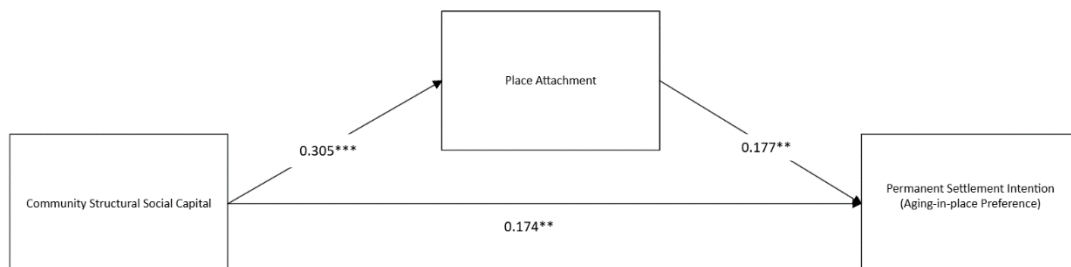


Figure 7.3. *Path Analysis of Community Structural Social Capital on Permanent Settlement Intention*

Note. Model fit indices: Chi-Square (5) = 7.214, $p = 0.204$; root mean square error of

approximation (RMSEA) = 0.027 (95% confidence interval [0.000, 0.067]); Standardised root mean square residual (SRMR) = 0.062; comparative fit index (CFI) = 0.974; Tucker-Lewis index (TLI) = 0.933. $**p < 0.01$, $***p < 0.001$.

The indirect effects, direct effects, and total effects on permanent settlement intention are shown in Table 7.4. As presented in Table 7.4, the total effect of family social capital on permanent settlement intention ($\beta = 0.089$, 95% CI [-0.005, 0.044], $p < 0.1$) was not significant. The direct effect of family social capital on permanent settlement intention ($\beta = 0.000$, 95% CI [-0.028, 0.022], $p > 0.05$) was also non-significant. The indirect effect of family social capital on permanent settlement intention via place attachment was significant ($\beta = 0.089$, 95% CI [0.013, 0.032], $p < 0.001$). If the research interest lies in the mediation effect only, as suggested by Kenny and Judd (2014), people still have adequate power to probe a significant indirect effect even if the total effect was statistically insignificant. In other words, a significant test of the total effect should not be viewed as a prerequisite for the presence of an indirect effect (Loeys et al., 2014). Hence, in this study, the indirect influence of family social capital on permanent settlement intention should be considered statistically significant and valid.

The total effect of community structural social capital on permanent settlement intention ($\beta = 0.227$, 95% CI [0.119, 0.357], $p < 0.001$) was significant. The direct effect of community structural social capital on permanent settlement intention ($\beta = 0.174$, 95% CI [0.072, 0.298], $p < 0.01$) was also significant. The indirect effect of community structural social capital on permanent settlement intention via place attachment ($\beta = 0.054$, 95% CI [0.019, 0.095], $p < 0.01$) was significant. The results indicated that place attachment partially mediated the associations between community structural

social capital and permanent settlement intention.

Table 7.4. *Direct, Indirect, and Total Effects of Social Capital on Permanent Settlement Intention Through Place Attachment*

Effect	Estimate	95% [CI]
Direct effect		
Family social capital —→ Permanent settlement intention	0.000	[-0.028, 0.022]
Indirect effects		
Family social capital → Place attachment → Permanent settlement intention	0.089***	[0.013, 0.032]
Total effect	0.089	[-0.005, 0.044]
Direct effect		
Community structural social capital —→ Permanent settlement intention	0.174**	[0.072, 0.298]
Indirect effects		
Community structural social capital → Place attachment → Permanent settlement intention	0.054**	[0.019, 0.095]
Total effect	0.227***	[0.119, 0.357]

Note. Confidence intervals (CI) for direct and indirect effects were estimated using bootstrapping. Path parameters are standardised coefficients.

** $p < 0.01$ *** $p < 0.001$.

7.55 Moderation Analysis

We further employed a moderated path analysis developed by Edwards and Lambert (2007) to test the moderation hypothesis. The interaction terms of “place attachment $\times$ intended care arrangements” and “place attachment $\times$ host-city house ownership” were included in the model, with only the latter yielding significant results. The results of the moderation on the indirect pathway from family social capital to ageing-in-place preference were shown in Table 7.5. The interaction term of “place attachment $\times$ host-city house ownership” was significant ($\beta = 1.663$, $SE = 0.382$, $p < 0.001$), indicating that house ownership moderated the link between place attachment and ageing-in-place preferences. Figure 7.4 illustrates the simple slope analysis of place attachment and ageing-in-place preferences across different house ownership statuses, revealing a steeper slope for homeowners. This indicates that the positive relationship between place attachment and ageing-in-place preference was significantly stronger among those who own homes in the host city.

Table 7.5. Standardised coefficients for the moderated indirect path from family social capital to ageing-in-place preference through place attachment

Variables	Ageing-in-place preference		
	β	SE	p
Independent variable			
Family social capital	0.012	0.050	0.807
Mediator			
Place attachment	0.151	0.050	0.002
Moderator			
Host-city house ownership	-1.536	0.382	0.000
Place attachment $\times$ host-city house ownership	1.663	0.382	0.000
Covariates			
Personal characteristics		Controlled	
Family characteristics		Controlled	

Note. β = standardised coefficient; SE = standard error.

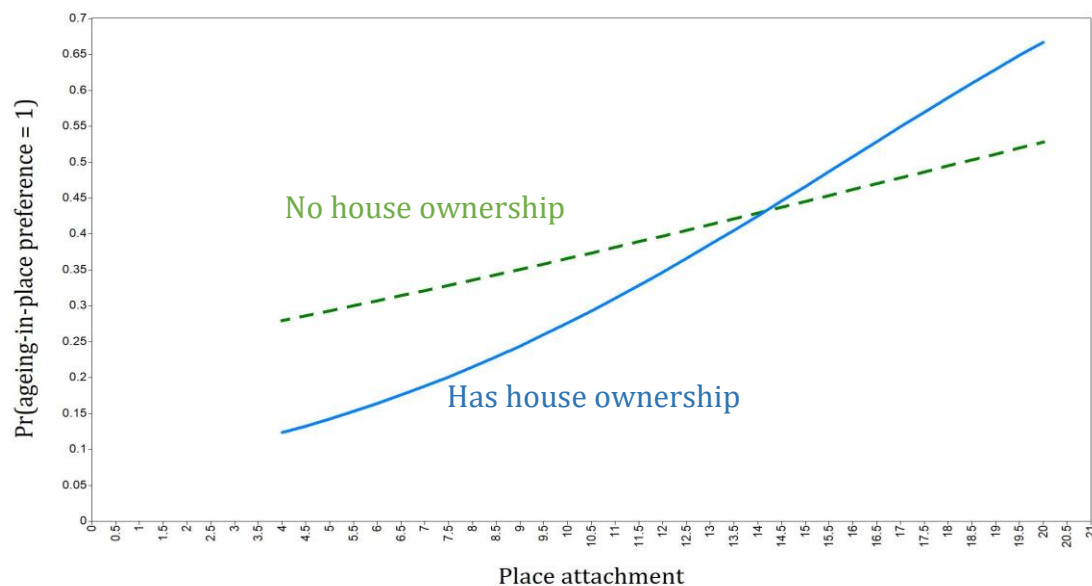


Figure 7.4. Slope analysis between place attachment and ageing-in-place preference at different statuses of host-city house ownership of the indirect path from family social capital

Table 7.6 showed the results of the moderated indirect path from community structural social capital to ageing-in-place preference. The interaction term of “place attachment $\times$ host-city house ownership” was significant ($\beta = 1.312$, $SE = 0.375$, $p < 0.001$), indicating that house ownership moderated the link between place attachment

and ageing-in-place preferences. Figure 7.5 illustrates the simple slope analysis of place attachment and ageing-in-place preference under different conditions of host-city house ownership. As place attachment increased, the slope for homeowners became steeper, suggesting that the positive relationship between place attachment and ageing-in-place preference was significantly stronger among those who own homes in the host city.

Table 7.6. *Standardised coefficients for the moderated indirect path from community structural social capital to ageing-in-place preference through place attachment*

Variables	Ageing-in-place preference		
	β	SE	<i>p</i>
Independent variable			
Community structural social capital	0.221	0.052	0.000
Mediator			
Place attachment	0.103	0.049	0.037
Moderator			
Host-city house ownership	-1.210	0.371	0.001
Place attachment $\times$ host-city house ownership	1.312	0.375	0.000
Covariates			
Personal characteristics		Controlled	
Family characteristics		Controlled	

Note. β = standardised coefficient; SE = standard error.

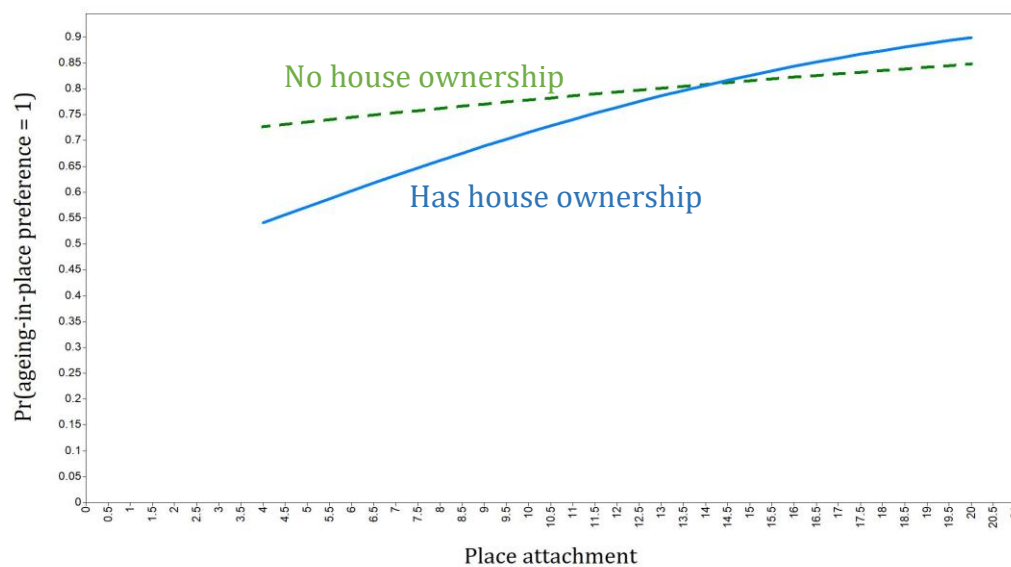


Figure 7.5. *Slope analysis between place attachment and ageing-in-place preference at different statuses of host-city house ownership of the indirect path from community structural social capital*

Table 7.7 showed the results of the moderated path models. Specifically, the indirect effects of family social capital ($B = 0.029$, $SE = 0.007$, $p = 0.000$), and community structural social capital ($B = 0.029$, $SE = 0.009$, $p = 0.002$) on ageing-in-place preference were significant among home owners. Similarly, these indirect effects remained significant among non-homeowners, though at lower magnitudes—family social capital ($B = 0.012$, $SE = 0.004$, $p = 0.003$) and community structural social capital ($B = 0.011$, $SE = 0.005$, $p = 0.049$). These findings indicate that host-city home ownership significantly moderates the indirect pathway between social capital and ageing-in-place preference through place attachment.

Table 7.7. *Conditional indirect effects of social capital on ageing-in-place preference through place attachment at different statuses of house ownership*

	Has house ownership			No house ownership		
	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>
Indirect path of family social capital	0.029	0.007	0.000	0.012	0.004	0.003
Indirect path of community structural social capital	0.029	0.009	0.002	0.011	0.005	0.049

Note. The coefficients of conditional indirect effects were unstandardised.

7.6 Discussion

This study examined how family and community social capital influence permanent settlement intentions among older internal migrants in China, focusing on the mediating roles of place attachment and moderating roles of family enabling factors. Community structural social capital was positively associated with permanent settlement intentions, partially through increased place attachment. Similarly, family social capital influenced permanent settlement intentions indirectly through place attachment, although its direct effect was nonsignificant. By contrast, community cognitive social capital had no

significant effect on settlement intentions. The intended care arrangement of relying on children for late-life care did not moderate the relationships between place attachment and settlement intentions, but it was directly associated with a greater likelihood of intending to settle permanently. Conversely, adult children's home ownership in the host city significantly moderated the relationship between place attachment and ageing-in-place preferences. These findings provide a clearer understanding of late-life migration and settlement dynamics among older internal migrants in China.

The regression results reveal a significant association between community structural social capital and permanent settlement intentions. This result is consistent with those of studies (Chen & Liu, 2016; Lu et al., 2023; Wu et al., 2023) that have underscored the importance of social participation and local networks to promoting migrants' intentions to settle permanently in host societies. Among the surveyed older internal migrants in China, participation in local community was associated with greater preferences to age in place, consistent with the theoretical framework of ageing in place, which highlights the role of environmental resources and social embeddedness in fostering residential stability (Bigonnesse & Chaudhury, 2022). These results underscore the value of community engagement in enhancing older migrants' intentions to remain in their host communities.

Interestingly, the regression analysis indicated that neither family social capital nor community cognitive social capital showed significant direct influences on permanent settlement intention. These findings highlight the complexity of migration and settlement dynamics, in which motivations extend beyond family-centred

considerations. The findings are also consistent with those of a previous study, indicating that subjective dimensions of social capital, such as emotional bonds, do not significantly predict permanent settlement intentions among migrants (Toruńczyk-Ruiz & Brunarska, 2018).

Path analysis results reveal that family social capital and community structural social capital influenced permanent settlement intentions indirectly through place attachment. These results support theoretical perspectives suggesting place attachment as a psychological mechanism linking social integration with settlement decisions (Lu et al., 2023). The findings highlight how motivations for family-based migration foster stronger local attachments that strengthen intentions to age in place. Intergenerational relationships, community involvement, and support networks are essential to cultivating a sense of rootedness that motivates settlement preferences (Bigonnesse et al., 2021; Clark et al., 2017).

Intended care arrangements did not significantly moderate the associations between place attachment and settlement intentions. Nevertheless, the direct effect of such arrangements on settlement intentions suggests that older migrants' expectations of receiving care from children independently influence their permanent settlement preferences. This finding likely reflects stable cultural orientations or personal values rather than an interactional influence. This interpretation is consistent with the findings of studies indicating that intended care arrangements are embedded in social norms and filial obligations, particularly in Asian societies such as China, where they may function as direct motivational drivers rather than conditional moderators (Bai, 2018; Xiao et al.,

2024). The significant direct association between intended care arrangements and permanent settlement intentions verified that older migrants anticipating care from their offspring were more likely to intend to settle permanently in host cities, consistent with the findings of studies on care-based migration decisions (Treas & Mazumdar, 2004; Zhao & Huang, 2021). These results demonstrate the central role of family care considerations in late-life migration.

The significant moderation effects of host-city house ownership on the associations of place attachment and ageing-in-place preferences aligned with previous studies (Clark et al., 2024). The results indicated the endowment economic effects and psychological ownership effects (Clark & Lisowski, 2017; Kahneman & Tversky, 2013). The results further illustrated that for family-reasoned older migrants, their ageing-in-place preferences would be shaped by the sense of psychological stability and the presence of family assets in the host city, as their place attachment was enhanced.

Chapter 8 Overall Discussion and Conclusions

8.1 Summary of Primary Findings and Examination of Hypotheses

8.1.1 Summary of Primary Findings

This thesis examined the influence of social capital on ageing well among older internal migrants in China. As described in **Chapter 2**, the study conducted a meta-analysis and systematic review to estimate the effect sizes of family and community social capital on well-being by using a random-effects model. The results indicated that family social capital and community social capital had significant positive effects on well-being. The results also revealed that the association between family social capital and well-being was moderated by migration patterns, with older migrants relocating to live with adult children and internal migrants experiencing greater benefits to well-being from family social capital.

Chapter 5 used latent profile analysis and identified four distinct social capital types: Strong Hometown–Weak Local Social Capital, Minimal Hometown and Local Social Capital, Diverse Local and Hometown Social Capital, and Strong Local–Weak Hometown Social Capital. By integrating the convoy model with a life-course perspective, this study differentiated between hometown and host city networks. Regression analyses indicated that older migrants with Diverse Local and Hometown Social Capital and Strong Local–Weak Hometown Social Capital had significantly

greater adaptation and well-being than those with Minimal Hometown and Local Social Capital, while those with Strong Hometown–Weak Local Social Capital experienced higher depressive symptoms. Additionally, having adult children who frequently engaged in social gathering was associated with an increased likelihood of having more adaptive social capital profiles, whereas family conflict was associated with a reduced likelihood of having such profiles.

Chapter 6 utilised regression and path analysis within the structural equation modelling framework to examine the community social capital pathways linking family social capital to adaptation and well-being among older migrants. The findings confirmed that family social capital significantly promoted adaptation and well-being, with its effects partially channeled through both community structural and cognitive community social capital pathways. For sociocultural adaptation, the community structural social capital pathway only had a marginal mediating effect. For positive affect, both pathways were operative mediators; for negative affect, only community cognitive social capital had a significant mediating effect.

Chapter 7 investigated the permanent settlement intention (preferences to age in place) in the host city among older migrants. Using logistic regression modeling, path analysis and moderation analysis within a structural equation modeling framework, the findings revealed that community structural social capital is positively associated with permanent settlement intention, partially through enhanced place attachment. Similarly, family social capital influenced settlement intention indirectly via place attachment, although its direct effect was not significant. Community cognitive social capital has

no direct or indirect influence on the permanent settlement intention. Additionally, intended care arrangement of relying on children for late-life care did not significantly moderate the relationships between place attachment and settlement intention, though they exerted a direct positive effect on permanent settlement intention. Host-city home ownership significantly moderated the relationship between place attachment and ageing-in-place preference.

8.12 Examination of Hypotheses

Table 8.1 presents a summary of the results of the hypothesis tests. All hypotheses were either fully or partially supported.

Table 8.1. *Summary of Results of Hypothesis Tests*

No.	Research Questions and Hypothesis	Results
RQ1	What are the social capital profiles that characterise older migrants?	
H1.1	Social capital profiles reflect combinations of and distinctions between hometown and local connections.	●
RQ2	Which factors influence the formation of these profiles, and how do the profiles influence adaptation and well-being?	
H2.1	Older migrants with higher socioeconomic status are more likely to have diverse social capital profiles.	●
H2.2	Older migrants whose children are more socially active are more likely to have greater local social capital.	●
H2.3	Older migrants who have more conflicts with their adult children are less likely to possess higher levels of local social capital.	●
H2.4	Compared with those in weak local and strong hometown social capital type or weak local and hometown social capital type, older migrants with strong local and weak hometown social capital type or diverse hometown and local social capital type would report better adaptation status.	●
H2.5	Compared with those in weak local and strong hometown social capital type or weak local and hometown social capital type, older migrants with strong local and weak hometown social	●

	capital type or diverse hometown and local social capital type would report better well-being status.	
RQ3	How do older migrants generate local community social capital to support their ageing-well process in the host city?	
H3.1	Family social capital has direct associations with adaptation and well-being.	●
H3.2	Family social capital indirectly influences adaptation through community structural and community cognitive social capital.	◐
H3.3	Family social capital indirectly influences well-being through community structural and community cognitive social capital.	◐
RQ4	How does social capital influence permanent settlement intentions (preferences for ageing in place) in the host city through place attachment under different statuses of family enabling factors?	
H4.1	Family and community social capital directly influence the permanent settlement intention among older migrants.	◐
H4.2	Family and community social capital indirectly influence the permanent settlement intention through place attachment pathways.	●
H4.3	Family enabling factors have direct associations with the ageing-in-place preferences, and moderate the indirect influences of family and community social capital on the permanent settlement intention.	◐

Note: RQ = Research questions; H = Hypothesis; ● indicates fully supported by the findings; ◐ indicates partially supported by the findings.

8.2 Contributions of Thesis

8.2.1 Theoretical Contributions

The thesis contributed to the understanding of ageing and migration by integrating temporal and spatial dimensions into social capital theory. By distinguishing between hometown and host city ties, this study conducted a context-specific analysis of older migrants' embeddedness in diverse social networks. This approach enabled the identification of distinct social capital profiles and clarified how different forms of social capital are associated with adaptation and well-being among older migrants.

Second, the thesis integrated social capital theory with the environment and ageing-well model to analyse the mechanisms through which family and community resources influence adaptation and well-being in late-life migration. The findings demonstrated that family social capital supported adaptation and well-being both directly and indirectly, consistently through community cognitive social capital. This integrated model extends the theoretical literature on migration by illustrating how social capital is transmitted and maintained within migrant families, facilitating a comprehensive perspective of the process of ageing well in host societies.

Third, this thesis extended the person–environment fit and social capital frameworks by examining the interplay among individual, family, and community resources. It demonstrated how intergenerational housing support shapes the way place attachment translates into anticipated person–environment fit, offering deeper insight into how these resources collectively influence ageing-in-place preferences. Furthermore, the interaction between housing support and place attachment indicates that tangible family assets can enhance the psychological comfort derived from feeling rooted in a familiar social and physical environment. Overall, these findings highlight the interconnected roles of familial, emotional, and spatial factors in shaping ageing-in-place intentions among older migrants.

8.22 Empirical Contributions

The systematic review and meta-analysis provided the first comprehensive effect size estimates of family and community social capital on well-being among older migrants,

illustrating the differential effects of migration patterns. By differentiating between family and community resources, the analysis clarified the critical role of proximal relational ties in supporting well-being among older migrants.

This thesis further incorporated adaptation as a central dimension of ageing well, empirically establishing that psychological identification and sociocultural integration are essential elements of ageing well in later-life migration. The findings were important in contributing to the understanding of the acculturation and integration process in the context of late-life migration. A notable insight was that adaptation and well-being are shaped by both social capital in the host city and ongoing ties to the hometown. For example, the finding revealed that older migrants with higher social capital in the host city and moderate connections with hometown ties could have a higher possibility of having better psychological adaptation status, compared to those with strong hometown connections and weak local social capital. This finding suggests that hometown ties must be considered when examining successful ageing in later-life migration.

By analysing the interplay between family and community social capital, this thesis revealed that family support enhance access to broader community resources, facilitating older migrants' adaptation to their host cities. These results reinforced the central role of intergenerational solidarity in promoting integration into host communities. Moreover, the findings reveal a dynamic association between proximal (family) and distal (community) social environments in family-motivated migration processes.

Finally, this study addressed the underexamined concern of permanent settlement intentions, which reflect older migrants' preferences for ageing in place within the host city. The results indicate that family solidarity and community engagement influenced permanent settlement intentions indirectly through place attachment. Intended care arrangements also exerted a direct effect on the intention to remain in the host city, underscoring the role of informal family care networks in shaping late-life settlement process. Furthermore, the host-city house ownership moderated the indirect paths from social capital to ageing-in-place preference through place attachment, which indicated that for homeowners, the increased place attachment would enhance their ageing-in-place preference in the host city.

8.23 Policy and Practical Implications

The findings of this thesis provide actionable insights for policymakers and practitioners seeking to enhance the well-being of older internal migrants in China. Specifically, the study highlights the critical role of host-city social capital in influencing their adaptation status. Accordingly, community service providers and policymakers should implement targeted programmes to facilitate local community integration, increase access to public and social service resources, and strengthen family cohesion within urban environments.

Special attention should be given to those who experience conflicts with adult children in the host city, as these individuals encounter greater obstacles in developing local social networks. Existing services have largely overlooked this group's needs,

leaving them vulnerable to social isolation and psychological stress. Tailored initiatives should therefore focus on alleviating intergenerational tensions and fostering more supportive family dynamics. Additionally, programs should encourage collaborations between local residents and older migrants to facilitate interaction, expand local networks, and strengthen psychological attachment to the urban community. Approaches that leverage intergenerational activities and community-based outreach can enhance integration and overall well-being for this population.

The analysis results also demonstrate that the preservation of hometown ties is a vital contributor to older migrants' well-being, which is an aspect often overlooked in previous programs. Programmes that encourage older migrants to maintain meaningful connections to their places of origin are essential to supporting well-being and integration in the host environment. Activities that promote the sharing of hometown culture and customs with new acquaintances in the local community can further strengthen social bonds and foster a deeper sense of belonging. The study findings reveal that a substantial proportion of older migrants reported low levels of social capital in both the host city and their hometown. This finding underscores the need for comprehensive services tailored to migrants with limited social networks. Interventions that foster social connections are critical to providing emotional and practical support during the adaptation process.

The pathways identified between family and community social capital and their associations with adaptation and well-being highlighted important directions for service provision. Specifically, family cohesion and expanded access to community

engagement are vital to the adaptation processes of older internal migrants. Therefore, promoting participation in community networks is essential to assisting older migrants with limited family support.

The thesis also examined the settlement intentions among older internal migrants, which emerged as a critical area for policy and program development. As more older migrants faced decisions about whether to age in place in the host city, it became clear that this choice was closely linked to the strength of family networks, the availability of care, the house ownership status, and the level of community engagement they experienced. Older migrants who intended to settle permanently benefited from tailored services and policies that strengthened family relationships, promoted participation in local community life, and supported emotional and psychological adjustment to their new environments.

The results further demonstrated that intended care arrangement of relying on children for late-life care had a direct influence on settlement intention, emphasizing the importance of recognizing older migrants' care needs and the key role of their family caregiving networks. Although current community-based ageing services do not comprehensively include older migrants, future improvements should incorporate tailored programs and policies that respond to their specific circumstances. Older migrants whose children own housing in the host city tend to express stronger ageing-in-place preferences, which are closely linked to their growing attachment to the local environment. Therefore, future policies should place greater emphasis on providing social housing or affordable long-term rental options for this population, alongside

improving access to community- and home-based care services and facilities. Such measures would help strengthen family-based care networks and support older migrants in achieving their preference to age in place together with their families.

8.3 Limitations and Directions for Future Research

Although this thesis provides valuable insights into the processes of ageing well of older internal migrants in China, it has several limitations that suggest directions for future research. First, the surveys were conducted exclusively in two developed cities in southern China. Although these sites have substantial older migrant populations, the diversity of sociocultural environments across China limits the generalisability of the findings to migrants in other cities. Future studies should include more diverse locations to compare adaptation experiences across settings and validate the results. Second, this study primarily addressed older parents relocating to live with adult children and did not systematically distinguish between mobility strategies. Although the findings provide a comprehensive overview of adult migrants' social capital profiles, a more detailed classification of mobility types and migration trajectories could elucidate older migrants' diverse needs and adaptation pathways.

Third, the cross-sectional study design precluded causal inferences, as did the one-time measurement of social capital and outcomes. To address these limitations, future research should apply more rigorous designs to investigate causal relationships, such as longitudinal studies, randomised control trials, or quasi-experimental approaches. Fourth, the measurements of family social capital were adopted from the

intergenerational solidarity framework. Considerable effort was made to select constructs with demonstrated relevance in the literature, but further development and empirical validation of measurement tools could help increase the precision and applicability of these constructs. Finally, although this study examined the associations between place attachment and intended care arrangements in shaping permanent settlement intentions, it primarily identified direct effects. Future studies should explore the complex links between care needs, integration, and the late-life settlement process by using mixed methods to capture quantitative patterns and qualitative experiences.

8.4 Conclusions

In summary, this thesis advanced understanding of how social capital shaped adaptation, well-being, and permanent settlement intentions among older parents who relocate to unite with their adult children in urban China. Through meta-analysis and systematic review, the findings showed that both family and community social capital had significant positive effects on the well-being of older migrants. Specifically, family-reasoned migration and internal migrants benefited more strongly from family social capital. By differentiating between hometown and local social capital, the thesis identified four distinct social capital profiles. Older migrants with Diverse Local and Hometown Social Capital and Strong Local–Weak Hometown Social Capital types experienced better adaptation and well-being than those with Strong Hometown–Weak Local Social Capital or Minimal Hometown and Local Social Capital types. The thesis also examined the interplay between local family and community social capital,

revealing that community cognitive social capital consistently mediated the relationship between family social capital and both adaptation and well-being. Additionally, the thesis explored the role of place attachment in shaping permanent settlement intentions, reflecting preferences for ageing in place among older migrants. Family and community structural social capital indirectly influenced these intentions through place attachment, while intended care arrangements of relying on children for late-life care had a direct effect. Host-city house ownership moderated the indirect pathways from social capital to ageing-in-place preference through place attachment. Overall, the findings provide a comprehensive understanding of the multifaceted role of social capital in the lives of older internal migrants in urban China. The findings offer valuable implications for future research, social policy, and practice to better support older migrants' adaptation, well-being, and relocation care arrangements.

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Appendix

Appendix I. Ethical Approval



To Bai Xue (Department of Applied Social Sciences)

From Siu Yuen Man, Delegate, Departmental Research Committee

Email judy.ym.siu@ Date 01-Sep-2023

Application for Ethical Review for Teaching/Research Involving Human Subjects

I write to inform you that approval has been given to your application for human subjects ethics review of the following project for a period from 18-Jul-2023 to 30-Jun-2024:

Project Title: Social capital and its influence on the well-being of Chinese older internal migrants

Department: Department of Applied Social Sciences

Principal Investigator: Bai Xue

Project Start Date: 18-Jul-2023

Project type: Human subjects (non-clinical)

Reference Number: HSEARS20230628002

You will be held responsible for the ethical approval granted for the project and the ethical conduct of the personnel involved in the project. In case the Co-PI, if any, has also obtained ethical approval for the project, the Co-PI will also assume the responsibility in respect of the ethical approval (in relation to the areas of expertise of respective Co-PI in accordance with the stipulations given by the approving authority).

You are responsible for informing the PolyU Institutional Review Board in advance of any changes in the proposal or procedures which may affect the validity of this ethical approval.

Siu Yuen Man

Delegate

Departmental Research Committee (on behalf of PolyU Institutional Review Board)

Appendix II. Consent Form



同意参加调查的声明

“随迁老人社会资本与主观福祉”是博士研究生康睿的研究项目，由香港理工大学应用社会科学系白雪教授负责统筹开展。此研究所得的资料会被严格保密，您的回答不会和任何能够表明您身份的信息产生联系，仅通过编码用于日后研究和发表。您参加这项调查完全是自愿的，如果您不愿意，您有权随时退出本次调查。您有权就访谈和问卷调查的任何部分提出疑问。本次调查的信息将严格保密，除了合格的研究人员，任何人不会接触到这些资料，该项目将持续进行至 2024 年 6 月，所收集的信息将保存至项目完成后 2 年。研究人员已向本人清楚解释研究程序，本人明了当中涉及的利益及风险，本人自愿参与研究项目。

被调查人签字：_____ 日期：_____

我断定被调查者是在自愿和了解这份声明内容的情况下，正式同意参加该项调查。我已经向被调查者（或其法定代表人）解释了被调查者所具有的权利。我相信被调查者理解这份文件的内容，并且自愿接受调查。我承诺会对受访者的信息予以严格保密，不会向任何第三方透露或提供任何受访者信息。

调查员签名：_____ 日期：_____

Appendix III. Questionnaire of Thesis

随迁老年人调查问卷

第一部分 A 基本信息

A1 您的户口： 1.农村户口 2.城镇户口 3.居民户口（以往为农村户口）

A2 您是随着子女一起来到广州居住的吗？ 1.是 2.否（调查结束）

A3 您是什么时候随子女流动（来）到广州的？ 阳历 □□□□年□□月

A4 您身份证上的出生年月？（调查对象需要大于或等于 50 岁） □□□□年□□月

A5 您随子女流动（来这里）的最主要原因是？（限选一个最主要的）

1.照料孙子女 2.方便子女给自己养老 3.给子女做后勤工作 4.想跟子女在一起
(或家庭团聚)

5.经商 6.务工/工作 7.照料怀孕的女儿或儿媳 8.其他 (请注明)

A6 您老家（户籍所在地）在哪： □□□□省□□□□市□□□□县（区）

A7 您的性别： 1.男 2.女

A8 您的受教育程度是：

1.没有上过学 2.小学 3.初中 4.高中 5.技校/中专 6.大专 7.本科及以上

A9 您目前的婚姻状况是：

1.已婚且与配偶住在一起 2.已婚但未和配偶住在一起 3.丧偶（跳至 A11）

4.离婚（跳至 A11） 5.从未结婚（跳至 A11）

A10 您与配偶的关系如何？

1.特别不好 2.不好 3.一般 4.比较好 5.非常好

A11 在这里，下面有哪些人现在跟您一起同吃同住？

1.配偶 2.儿子 3.女儿 4.儿媳 5.女婿 6.自己的父母

7.配偶的父母 8.（外）孙子女 9.子女配偶的父母 10.其他 (请注明)

A12 您现在的工作状态是

1.在工作，全职 2.在工作，兼职 3.没有在工作

A13 您现在或曾经（未退休前）从事的主要职业是： (如果不止一项工作，则以收入最多者为准)

1. 党政机关、事业单位、企业负责人/领导 2. 专业技术人员（如教师、医生、金融、工程技术人员）

3.职员（从事一般性事务工作或服务行业从业人员） 4.个体户 5. 农林牧渔人员

6.技术工人 7. 非技术工人 8.军人 9. 家庭主妇 10.学生

11.无业、失业、半失业者 12. 离退休人员 13.其他（请注明）

A14 您个人的平均月收入是多少(钱和物)？

1. <1,000 2. 1,000 – 1,999 3. 2,000 – 3,999 4. 4,000 – 5,999

5. 6,000 – 7,999 6. 8,000 – 9,999 7. 10,000 – 12,499 8. 12,500 – 14,999
9. 15,000 – 17,499 10. 17,500 – 19,999 11. 20,000 – 24,999 12. 25,000 元以上

A15 您目前收入的主要来源是：

1. 养老金 2. 劳动或工作所得 3. 子女提供 4. 亲属提供 5. 集体和政府补贴 6. 其它 (请注明) _____

A16 您是否打算在这里长期定居养老？

1. 是 2. 否 (或不知道)

A17 您是否计划把户口迁入本地？

1. 是 2. 否 3. 没想好 4. 户口已经迁入

A18 在需要时，以下几种选项中，哪一种最符合您未来希望的照顾模式？

1. 与子女同住，依赖家人提供的照顾
2. 只与伴侣同住，相互支持
3. 独立生活在家中，依赖社区长者照顾资源，如长者日间护理中心和综合家居照顾服务等
4. 住在机构中，例如安老院和长者公寓等
5. 还没想好

A19 下面我们想了解您对未来照顾方面的问题，请问以下陈述是否符合您的情况：

1. 非常不符合 2. 不太符合 3. 不确定 4. 比较符合 5. 非常符合

A19.1 与别人闲谈时令我想到未来可能会需要寻求协助或照顾。

A19.2 我尽量不去想未来生活无法自理等状况。

A19.3 我曾经在和医疗保健专家（医生、护士及家庭医疗保健机构）交谈时，得到关于未来生活照顾的资讯。

A19.4 当我需要寻求协助或照顾时，我可以从几种已经深入考虑过的照顾方式中进行选择。

A19.5 我已经向亲近的人解释过我希望得到的照顾安排。

第二部分 B 随迁子女情况与家庭代际关系

B1 您有几个子女？ (包括抱养和前次婚姻子女) ，其中几个儿子 ，几个女儿 。

B2 在这里，您现在和第几个孩子一起居住/相互照顾（孩子的排行）？

B3 这个孩子的出生年月？ 阳历 年月

B4 这个孩子居住在这个城市多久了？ 年个月

B5 这个孩子的户籍迁到这个城市了吗？

1. 是 2. 否

B6 这个孩子的性别为： 1. 男 2. 女

B7 这个孩子的受教育水平：

1. 没有上过学 2. 小学 3. 初中 4. 高中 5. 技校/中专 6. 大专 7. 本科 8. 硕士
9. 博士及以上

B8 这个孩子现在的职业：

1. 党政机关、事业单位、企业负责人/领导 2. 专业技术人员（如教师、医生、金融、工程技术人员）

3. 职员（从事一般性事务工作或服务行业从业人员） 4. 个体户 5. 农林牧渔人员

6. 技术工人 7. 非技术工人 8. 军人 9. 家庭主妇 10. 学生

11. 无业、失业、半失业者 12. 离退休人员 13. 其他（请注明） _____

B9 这个孩子平均每月的收入多少元：

1. <1,000 2. 1,000 – 1,999 3. 2,000 – 3,999 4. 4,000 – 5,999
5. 6,000 – 7,999 6. 8,000 – 9,999 7. 10,000 – 12,499 8. 12,500 – 14,999
9. 15,000 – 17,499 10. 17,500 – 19,999 11. 20,000 – 24,999 12. 25,000 元或以上

B10 这个孩子在这里是否有购买房子： 1.有 2.没有

B11 这个孩子现在的婚姻状况是：

- 1.已婚且与配偶同住 2.已婚但未与配偶居住在一起 3.离婚 4.丧偶 5.从未结过婚

B12 这个孩子现在的生育状况是：

- 1.已生育 2.未生育 **(跳至 B14)**

B13.下面我们将询问您这位孩子生育的具体情况，请您按照从大到小的顺序逐个告诉我。

询问的问题：	第一个孩子 a	第二个孩子 b	第三个孩子 c	第四个孩子 d
B13.1 孩子的性别：	男 ☐ 女 ☐	男 ☐ 女 ☐	男 ☐ 女 ☐	男 ☐ 女 ☐
B13.2 孩子的上学状态：	还未上学 ☐ 幼儿园/学前班 ☐ 小学 ☐ 中学 ☐ 高中及以上 ☐	还未上学 ☐ 幼儿园/学前班 ☐ 小学 ☐ 中学 ☐ 高中及以上 ☐	还未上学 ☐ 幼儿园/学前班 ☐ 小学 ☐ 中学 ☐ 高中及以上 ☐	还未上学 ☐ 幼儿园/学前班 ☐ 小学 ☐ 中学 ☐ 高中及以上 ☐

B14 在过去的 12 个月，这个孩子有多经常给您（或您配偶）钱、食品或礼物（只用于个人消费，不包含家用支出）？

1. 从来没有 2. 很少 3.一般 4. 经常有 5. 总是有

B15 您与这个孩子共同参加消遣娱乐活动（如散步/逛街/下棋等）、小型家庭聚会等的频率：

1. 从不 2. 每年至少 1 次 3.每月至少 1 次 4. 每周至少 1 次 5. 每天

B16 从各方面考虑，您觉得和这个孩子（感情上）亲近吗？

- 1.特别不亲近 2.不亲近 3.一般 4.比较亲近 5. 非常亲近

B17 您和这个孩子相处融洽吗？

- 1.非常不融洽 2.比较不融洽 3.一般 4.比较融洽 5.非常融洽

B18 整体而言，您与这个孩子在对待同一事物的看法上相似吗？

- 1.非常不相似 2.比较不相似 3.一般 4.比较相似 5.非常相似

B19 您与这个孩子就社会议题的意见相似吗？

- 1.非常不相似 2.比较不相似 3.一般 4.比较相似 5.非常相似

B20 就家庭和政府照顾老年人的责任方面，您与这个孩子的意见相似吗？

- 1.非常不相似 2.比较不相似 3.一般 4.比较相似 5.非常相似

B21 这个孩子会批评或指责您吗？

- 1.从来不 2.很少 3.一般 4.经常 5.总是

B22 这个孩子会对您的言行、工作或生活提出要求吗？

- 1.从来不提要求 2.很少提要求 3.一般 4.较多的提要求 5.经常提要求

B23 在过去 3 个月里，您与这个孩子是否有冲突、压力或意见不合？

1. 从来没有 2. 很少 3. 一般 4. 经常有 5. 总是有

第三部分 C 城市生活与交往

C1 在过去一年里，您是否在广州参加以下活动：【1.从不 2.偶尔 3.有时 4.经常 5.总是】

- 1 休闲活动（如看电视、跳广场舞等） 2 社区活动（如社区治安巡逻、讲座等）
3 社交活动（如串门、跟朋友、邻居交往等） 4 志愿活动或者慈善活动

C2 在过去一年里，您的孩子（同住在广州）进行社会交往活动的频率是怎样的（如与朋友聚会、跟朋友、邻居交往，带朋友来家中聚会等）：

1. 从不 2. 偶尔 3. 有时 4. 经常 5. 总是

C3 请根据您的实际情况回答以下问题：

1. 没有 2. 一个 3. 两个 4. 三-四个 5. 五-八个 6. 九个及以上

C3.1 您一个月至少能与几个家人/亲戚见面或联系？

C3.2 您能与几个家人/亲戚放心地谈您的私事？

C3.3 当您需要时，有几个家人/亲戚可以给您提供帮助？

C3.4 您一个月至少能与几个朋友见面或联系？

C3.5 你能和几个朋友放心地谈您的私事？

C3.6 当您需要时，有几个朋友可以给您提供帮助？

C4 请根据您的实际情况回答以下问题：

1. 差不多每天 2. 每周最少一次 3. 每月最少一次 4. 一年几次 5. 几乎没有

C4.1 您和您的子女不在一起住的时候，您多长时间他们通过电话、短信、微信、信件等联系一次？

C4.2 在这里，您与老家的亲戚多长时间联系一次？（通过电话、短信、微信、QQ 等方式）

C4.3 在这里，您与老家的朋友多长时间联系一次？（通过电话、短信、微信、QQ 等方式）

C4.4 在这里，您与老家的邻居多长时间联系一次？（通过电话、短信、微信、QQ 等方式）

C5 根据您对现在生活社区的体验，您是否同意以下说法：

1. 非常不同意 2. 不同意 3. 一般 4. 同意 5. 非常同意

C5.1 大部分的小区居民是可被信任的

C5.2 大部分的小区居民会相互帮助

C5.3 大部分的小区居民相互关心

C5.4 所居住的小区让您有归属感

C6 您是否同意以下说法

1. 非常不同意 2. 不同意 3. 一般 4. 同意 5. 非常同意

C6.1 我喜欢现在的居住地（广州）

C6.2 我关注我现在居住城市/地方的变化（广州）

C6.3 我很愿意融入本地（广州）

C6.4 我觉得我得到了本地人的接纳

C6.5 我觉得自己已是本地人了

C7 在广州生活，对你来说，要适应以下情况有多容易或多困难：

1. 非常困难 2. 很困难 3. 有点困难 4. 一般 5. 比较容易 6. 很容易 7. 非常容易

C7.1 对当地的气候（温度、降雨量、湿度）

C7.2 对当地生活作息，卫生习惯

C7.3 对当地的饮食习惯（吃什么，怎么吃，吃饭的时间）

C7.4 对当地人的消费习惯

C7.5 对当地语言（学习当地语言，与本地人沟通）

第四部分 D 健康与日常生活能力

D1 您认为您自己现在的身体健康状况: **(请将选项逐一念给被访者, 并请其选择其中一个)**

- 1.非常健康 2.良好 3.一般 4.较差 5.差

D2 您是否同意以下观点? 1. 非常不同意 2. 不同意 3.既不同意也不反对 4. 同意 5. 非常同意

D2.1 我现在的的生活基本上和我理想的生活一致

D2.2 我的生活条件很好

D2.3 我对我现在的生活很满意

D2.4 到现在为止, 我已经得到了生活中我想要的东西

D2.5 如果可以再活一次, 我基本上不会改变我的人生

D3 您在过去一周里有下面的感觉吗?

0.很少或从不 (少于一天) 1.偶尔 (一至两天) 2.有时 (三至四天) 3.经常 (五至七天)

D3.1我感到情绪低落

D3.2我觉得做任何事都很费劲

D3.3我的睡眠不好

D3.4我感到愉快

D3.5我感到孤独

D3.6我生活快乐

D3.7我感到悲伤难过

D3.8我觉得生活无法继续

D4 总的来说, 您的生活有多快乐? 请打分 (0 分非常不快乐 到 10 分非常快乐)

第五部分 E 公共服务政策

E1 在当地您享受到哪些社区服务: **(多选题)**

- 1.跨省异地就医结算 2.办理老年证, 享景区、公共交通等免费福利 3.建立居民健康档案
4.享受老年人高龄津贴 5.老年人免费体检 6.定期上门访问 7.生活帮扶 8.
大病医疗补助 9.免费的健康知识讲座 10.其他 **(请注明)** _____