

Filial Piety, Living Arrangements, and Well-being of Urban Older Adults in Southern China

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Abstract

This article examines the living arrangements and well-being of older adults in urban China. It draws upon the concept of filial piety and intergenerational care models to interpret findings regarding five different living arrangements for urban older adults: living alone (with a spouse or not), living with a son, living with a daughter, living in an institution (public or private), and other. Well-being is measured by activities of daily living, instrumental activities of daily living, and self-rated health questionnaires and the Center for Epidemiologic Studies Depression Scale. The findings have implications for policy makers addressing living arrangements and community-based care services for older adults.

Keywords: filial piety, living arrangements, well-being, older adults, community-based services

1. Introduction

According to the China Statistical Yearbook (2015), the number of people age 65 and older has reached 137 million, representing 10% of the total population. Though these statistics are already impressive, the elderly Chinese population is continuing to grow dramatically both in number and as a proportion of the overall population (Chen & Han, 2016). This trend will result in an increased demand for community-based services.

The elderly care policy and provisions in China have transformed gradually. Until recently, institutional elder care provision was rare and limited to the so-called “Three No’s”—people with no children, no income, and no relatives—who were publicly supported welfare recipients. Institutionalized elders were stigmatized. In the mid-1990s, China implemented reforms to decentralize the operation and financing of state welfare institutions. Since then, these institutions have shifted their financial reliance from public funding to more diversified revenue sources, including privately paying individuals. Elder care homes have proliferated, primarily in the private sector in urban areas. The Chinese government has actively promoted home-based care as the primary pillar of services for the aged. In recent years, the Chinese government has increased its efforts to build residential elder care services by actively promoting the construction of senior housing, homes for the aged, and nursing homes.

China has undergone an extraordinary economic transformation over the past 30 years. This transformation has remade the face of coastal China. Political change has occurred on a number of vitally important areas affecting the day-to-day existence of ordinary Chinese. In addition to political and economic changes, urbanization in China is also profoundly affecting living arrangements, which are central to elderly individuals’ well-being. Traditionally, co-residence with an adult child was a popular living arrangement in both urban and rural China.

China’s rapid urbanization, industrialization, and economic development were triggered by the economic reform that started in 1978. These effects were evident first in rural and then in urban areas. Around the same time, the Chinese government began to implement the One Child Policy. Since then, Chinese families have undergone noticeable changes in their structure and relationships. Rapid social change in China has also modified traditional attitudes toward filial piety and elders’ living arrangements. While traditional extended families exist, there are various forms of Chinese families, i.e., nuclear families, single-parent families, families with double income and no kids, single-person households and cohabitant households. Some scholars predict that China will follow in the footsteps of family modernization in Western industrial societies. They believe that the importance of marriage and family has declined in China. Scholars perceive that these changes have weakened family

functioning (Wu & Li, 2012), filial piety and familial collectivism and increased the emphasis on individualism, which will potentially lead to a crisis in elderly care (Li, 2011).

According to Confucianism, respect for parents is the highest virtue of all. As a Confucian concept, filial piety encompasses a broad range of behaviors toward parents and serves as the basis for traditional patterns of parent care and living arrangements in China and other East Asian countries, such as Japan, Korean, and Singapore (Cheng & Chan, 2006; Tsutsui, Muramatsu, & Higashino, 2013; Park, 2015; Lim et. al., 2016). According to Confucian understandings of filial piety, children must provide material and physical support to their parents, serving them with respect, obedience and loyalty. Urbanization and industrialization are rapid in urban areas, which contain a disproportionate share of the elderly. Thus, filial piety might diminish. Some people are concerned that because of the rapid urbanization and industrialization in urban areas, which contain a disproportionate share of the elderly, filial piety might diminish.

The Chinese family structure is complicated. Traditionally, a happy family was viewed as one in which all family members, including grandparents and great-grandparents, lived together. Now, the 4-2-1 family structure—which includes four older people (paternal and maternal grandparents), two parents, and only one child—has become more prevalent with the increase in the number of families with only one child. These changes in family structure in the past four decades have made it difficult for many people to fulfill filial care responsibilities. As a result, increasing numbers of elderly people are choosing to live alone or in an elder care institution (Zhan, Feng, & Luo, 2008). Given that elders have different possible living arrangements—living alone, with an adult child or in an institution—there is a need to determine how each can impact their well-being.

Although the living arrangements of older individuals in Western countries have been extensively studied (Zimmer & Korinek, 2010), the direct and indirect effects of living arrangements on the well-being of the elderly in China has only recently received research attention (Guo, Aranda & Silverstein, 2009; Ye & Chen, 2014). Studies have found that intergenerational co-residence might give older adults a sense of pride and success as they raise their children. On the other hand, as both children's and parents' understandings of filial piety and what it entails have changed, placing elders in institutions has also come to be viewed as an expression of filial piety in itself because it often still involves children providing their parents with financial support (Zhan, 2013).

In terms of psychological well-being, some studies have found that elders living with their adult children in China have a higher level of subjective well-being than those living alone (Chen & Short, 2008). In contrast, other research found that elders who lived with children actually reported a lower level of happiness than those living in an elder care institution (Zhan, Liu, & Guan, 2006).

In terms of physical health, Zhan, Liu and Guan (2006) suggested that elderly individuals with poor health may choose to live with their children. For example, the Chinese Longitudinal Healthy Longevity Survey found that older adults living with children are more likely to be disabled than those living independently, regardless of their "concordance status," or whether their expected and actual living arrangements are consistent (Sereny, 2011).

Despite the growth of research on living arrangements, several gaps in the literature remain. On the one hand, few studies have recognized how evolving cultural attitudes about elder care practice might be adaptive responses to changing demographic and social structures. Fewer still recognize how Chinese individuals may work to maintain traditional filial piety values when confronting changing family structures and responsibilities. On the other hand, the relationships among filial piety and the living arrangements and well-being of elders in China are not fully explored. To begin to address these gaps, this study aims to examine the influence of traditional cultural beliefs on elders' living arrangements (living alone with or without a spouse, living with a son, living with a daughter, living in an institution, or other) and how this results in societal dilemmas regarding elder care. The aims of this study are (1) to describe elders' present living arrangements in urban areas of coastal China, (2) to explain how filial piety impacts the living arrangements elders actually experience, and (3) to suggest a broad map for further research and elder care policies.

2. Methods

2.1 Data Sample

Guangdong Province has a population of 72 million people living in urban areas and 8.86 million people age 65 and older, who represented 8.27% of total population in 2014 (Guangdong Statistical Bureau, 2015). Because of its economic development, Guangdong is usually regarded as the southern gate of China. Guangzhou, which is also the capital city of the province, reported that 10.86% of its total population was age 65 or above in 2014, making it the city with the highest percentage of older adults among all cities in Guangdong Province

(Guangdong Statistical Bureau, 2015). These data suggest that the aging population of Guangzhou is representative of broader demographic patterns in Guangdong and thus is worthy of further research.

The data were collected in Guangzhou. For this study, the authors selected two urban residential communities in each city and combined these four communities into one list. The selected elders lived in the community and used community-based services. The provision of community-based services, adult day care centers nearby and financial assistance from government or other agencies are underdeveloped in these chosen communities. A combined list of all households with elders age 65 and older from each residential community resulted in a sample of 325 elders over age 65.

2.2 Data Collection

Interviewers were recruited from one university in Guangzhou, which also organized intensive interviewer training sessions. A standardized videotape was produced and used in all training sessions to avoid any inconsistency that might be caused by differences in teaching styles among trainers. The interview process was supervised by researchers from the university and by officials with more fieldwork experience from the Civil Affairs Bureau and the Statistics Bureau in Guangzhou. Each completed questionnaire was double-checked by the interviewers on the spot and then by their supervisors to guarantee that it was filled out properly. On average, interviews took about 40 minutes to complete. Of the 325 eligible older adults, a total of 316 completed the interview process, for response rate of 97.2%.

2.3 Measurements

The dependent variables related to well-being in this study are activities of daily living disability (ADL), instrumental activities of daily living disability (IADL), self-rated health (SRH) and the Center for Epidemiologic Studies Depression Scale (CES-D). ADL and IADL are binary variables, ADL includes six items (bathing, dressing, indoor transferring, toileting, incontinence, and eating), and IADL includes five items (meal preparation, laundry, sweeping, carrying objects, and walking). If a respondent needed assistance in any of the above six ADL, he or she was considered disabled (code=1). Both ADL and IADL items were rated on a 3-point Likert scale of 1=not difficult at all, 2=a little bit difficult and 3=unable to do the task. The higher the cumulative score, the more limited the respondent's functional ability. The internal consistencies for ADL and IADL were 0.86 and 0.85, respectively.

A single item was used to assess self-rated health: "Would you say your health in general is: (1) very poor, (2) poor, (3) fair, (4) good, (5) very good?" A previous study showed that SRH is a good predictor of elderly health conditions (Beyer, Wolff, Warner, Schüz, & Wurm, 2015). Psychological wellbeing was determined based on how elders scored on the CES-D Scale for measuring depression. The CES-D Scale (Sanders et. al., 2016) has been used widely among Chinese populations in mainland China and the United States (Cheng & Chan, 2006; Yang, Jia, & Qin, 2015), and it has been confirmed as a reliable tool for these groups. For each item, respondents were asked how often they felt this way during the past month: almost every day, two or three times a week, two or three times a month, once a month, or never. The response categories were scored from 1 ("never") to 5 ("almost every day"). In the present study, Cronbach's alpha for the Chinese version of the scale was 0.77.

The independent variables in this study were captured through the Filial Piety Scale (FPS) and a recording of elders' actual living arrangements.

Filial piety scale. The 24-item FPS was used to measure filial piety. This tool was developed by adapting 16 items from the 22-item FPS, which measures traditional filial attitudes among people living in Confucian cultural contexts (Lum, et. al., 2015), and 8 items from the Obligation of Filial Piety Scale (OFPS) used in Yue & Ng's study (1999). Some modifications were made when this scale was translated into Chinese. Some items from the 22-item FPS and OFPS were modified to ensure that Chinese people would clearly understand what the tool was asking. For example, in the 22-item FPS, original text that read *Sons and daughters may protest against being unreasonably scolded by parents* was modified to *Do you think that children may protest against being unreasonably scolded by their parents?* In OFPS, the original item *look after them* was modified to *Do you think your child should look after you?* In response to the 24-item FPS, respondents were required to rate items on a five-point scale ranging from strongly disagree to strongly agree (strongly disagree=1, somewhat disagree=2, neutral=3, somewhat agree=4, strongly agree=5).

Actual living arrangements. Elders' actual living arrangements were coded as a categorical variable: 1=living alone (with spouse or not), 2=living with a son, 3=living with a daughter, 4=living in an institution (public or private) and 5=other.

The control variables were respondents' socio-demographic characteristics (age, gender, marital status, education

level and income). Age was measured in years, gender was coded as a dummy variable (0=male, 1=female), and marital status was also coded as a dummy variable (0=unmarried, 1=married). Education level was coded numerically (1=primary school or below, 2=junior high, 3=senior high, 4=junior college, 5=college or above), and monthly income was categorized numerically (1=below ¥3000, 2=¥3000-¥3999, 3=¥4000-¥4999, 4=over ¥5000).

2.4 Data Analysis

The authors divided the data into four groups: elders living alone (with a spouse or not), elders living with children (son or daughter), elders living in institutions, and other. Descriptive statistics (means, standard deviations, and percentage distributions) of dependent and independent variables were computed. To determine whether different factors might be better as predictors of depressive symptoms than others, separate logistic regression analyses were conducted to examine the associations between the predictors. A multicollinearity check was conducted, and the tolerance values of all independent variables were obtained before the regression models were performed. All tolerance values were greater than the common cutoff threshold, meaning that multicollinearity was at an acceptable level.

3. Results

3.1 Socio-demographic Characteristics and Actual Living Arrangements of Elderly

The respondents' socio-demographic characteristics are presented in Table 1. More than 50% of the respondents were in the 60-69 age group, and over 33% were in the 70-79 age group. Over 50% of respondents were female and married. Approximately 90% of the respondents' education level was below junior high. Approximately 80% of the respondents' income level was less than ¥3000 (\$500) per month.

Table 1. Socio-demographic Characteristics of Study Participants (N=316)

Variables	%
Age	
60-69	55.51
70-79	36.23
80 or older	8.26
Gender	
Male	45.30
Female	54.70
Marital status	
Married	55.71
Others	44.29
Education level	
Illiterate	42.21
Junior high	45.21
Senior high	10.23
College or above	2.35
Income per month (RMB)	
Less than 2000	37.21
2001-3000	45.23
3001-4000	14.12
More than 4001	3.44

3.2 Living Arrangements and Health of the Elderly

Table 2 shows the mean SRH, the percentage of the sample with poor SRH, and the percentage of the sample requiring assistance with ADL and IADL, stratified by type of living arrangement. Across living arrangement types, the mean SRH and the percentage of the sample with poor SRH are similar, while ADL disability scores range from 9.81 to 33.11, and IADL disability scores range from 10.23 to 32.29. The data indicate that those living in institutions have the highest incidence of disability that requires assistance with ADL and IADL.

Table 2. Living Arrangements and Health

	Mean of Self-rated health (higher is worse)	% of sample that SRH as poor	% of sample with ADL	% of sample with IADL	N
Living alone (with spouse or not)	2.38	47.12	10.22	11.45	96
Living with son	2.56	50.21	11.12	12.11	118
Living with daughter	2.54	52.21	9.81	10.23	85
Living in institutions	3.01	58.91	33.11	32.29	10
Others	2.67	46.34	14.23	13.23	7

3.3 Filial Piety, Living Arrangements and Well-being of Elderly

Table 3 shows the results of the logistic regressions related to older adults' living arrangements. Although the regression model was statistically significant, some determinants were not significant. The regression model identified that the main effects on actual living arrangements for all significantly related variables were age, marital status, education, filial piety, ADL, IADL, self-rated health status, and CES-D. The authors divided elders into three age groups: a young-old group (60-69 years old), an old-old group (70-79 years old), and an oldest-old group (over age 80). Respondents who were 60-69 years old, married, had a college education or above and scored high in SRH were more likely to live alone than other older adults in the sample. Respondents who were 70-79 years old, were married, had a junior high level of education, and scored high in FPS, ADL and IADL and low in SRH were more likely to live with their adult children. Respondents who were age 80 or above, had no spouse, had an education level grade 12 or above, and scored high in FPS, ADL, IADL and CES-D and low in SRH were more likely to live in institutions. Each of these variables that were significantly related to older adults' living arrangements are discussed more fully below.

Table 3. Logistic Regression of Actual Living Arrangements on Independent and Control Variables

	Living alone (with spouse or not)		Living with children (with son or daughter)		Living in institutions		Others	
	B	Odds-ratio	B	Odds-ratio	B	Odds-ratio	B	Odds-ratio
Control variables								
Age (60-69)								
70-79	0.53	2.01	0.43	2.01	0.38	1.01	0.12	1.02
80 and above	0.09	1.08	0.09	1.08	0.69**	2.08	0.23	1.04
Gender (Female)	0.23	1.35	0.32	1.33	0.22	1.02	0.28	1.11
Marital status (Married)	0.68**	1.89	0.23	1.22	0.18	1.20	0.15	1.03
Education level (illiterate)								
Junior high	0.32	1.25	0.66**	1.88	0.32	1.21	0.34	1.01
Senior high	0.38	1.22	0.45	0.99	0.31**	1.23	0.42	1.05
College or above	0.22**	1.06	0.11	0.23	0.56**	1.68	0.51	1.01
Independent variables								
FPS	0.33	1.31	0.68**	1.35	0.48**	0.96	0.30	0.89
ADL	0.18	1.18	0.61**	1.56	0.78**	1.15	0.45	0.99
IADL	0.23	1.04	0.63**	1.48	0.79**	1.11	0.43	1.02
SRH	0.43**	1.22	0.23	1.33	0.36	1.35	0.56	1.12
CES-D	0.38	1.27	0.58	1.35	0.65**	1.12	0.71	1.21
Constant		1.05		1.02		0.98		0.92
Model chi-square		18.85*		21.23**		27.65**		12.11

Note. *p<0.05; **p<0.01.

FPS (Filial Piety Scale); ADL (Activities of Daily Living); IADL (Instrumental Activities of Daily Living); SRH (Self Rated Health); CES-D (Center for Epidemiologic Studies Depression Scale).

4. Discussion

China's rapidly growing aging population represents a crisis because societal institutions and families are not prepared to address the associated challenges. This study describes filial piety in relation to the living arrangements and well-being of urban elderly people in two cities in China. In the following sections, age, gender, marital status, education level, income, health status, filial piety, and elderly well-being are discussed in more detail.

Age. Wilmoth (2016) demonstrated that adults aged 75 and older in the United States have a greater chance of living with their children because of their increasing likelihood of having physical limitations. Contrary to Zhan, Feng, & Luo's (2008) findings, the results of our study suggest that with the growing life expectancy, more older people in China will be living with an adult child than in the past. The likelihood of living with their children decreased with age for the young-old group but increased with age for the older-old group.

Education level. Education level is found to impact the living arrangements of elders, as the education level of older adults is negatively related to the probability that they co-reside with their children in China (Guo, Aranda, & Silverstein, 2009). Respondents with higher education are less likely to live with their children; this finding suggests that they do not view shared households as ideal residential arrangements.

Marital status. Married couples are more likely to live independently when they are healthy. Older adults who live alone may be vulnerable to social isolation and adverse health outcomes. Although close relationships can provide emotional and instrumental support, social networks can also have negative effects on health and well-being (Rook, 2014).

Income. The living arrangements vary substantially between elderly people urban and rural China. In urban areas, affluent elderly people are less likely to live with their children, which suggests that they can support their daily needs without depending on their adult children.

Health status. Consistent with the findings of Yan, Chen and Yang (2003), our research shows that elders who have more difficulty functioning physically are also more likely to live with their children, specifically because they require assistance with ADL.

Filial piety. A significant relationship was found between elders feeling like their children were filial and elders actually living with their adult children, suggesting that filial piety remains still a strong family norm (Yasuda, Iwai, Yi, & Xie, 2011; Rosenzweig & Zhang, 2014).

Elders' well-being. Elders who lived with their children reported that living together has advantages; for example, they can easily receive care from their children while also enjoying their grandchildren. However, this living arrangement also has disadvantages. For instance, two generations may have conflicts because of different life habits, and some people find that living with parents can create a strange dynamic.

The above findings represent a significant knowledge base that can be used to inform policy makers who aim to address the needs of the increasing numbers of older adults and their families in China.

5. Implications

Since older adults are increasingly living separately from their adult children, community-based services are needed to support them in their own homes and to prevent them from being placed in nursing homes. Compared with those in Western countries, community-based long-term care services in China are in the early stages of development, and they are vital in meeting the needs of a growing elderly population.

Although Guangzhou has some unique characteristics as the most developed city in China, this study offers some broad recommendations for social services and long-term care. These include identifying ways to fully utilize adult day care centers, giving financial assistance to caregivers, creating age-friendly communities, investing more government funding in social services for older adults, and establishing multi-channel financial mechanisms for community-based services.

5.1 Making Full Use of Adult Day Care Centers

One strategy that national and local governments should consider is to more fully utilize adult day care centers as a central component of community-based long-term services and support. The Guangzhou Civil Affairs Bureau has been establishing publicly funded community day care centers in every neighborhood since 2011 (Guangzhou Civil Affairs Bureau, 2016), but their impact on well-being is relatively limited because many of the centers lack transportation to the sites and offer limited activities; therefore, many families prefer to hire a nanny (*bao mu*) to come into their homes instead of fully relying on these centers for care. In addition to providing respite care for families, day care centers should provide more diversified services—for example, practical care

services such as medication monitoring, transportation, and expanded social activities.

5.2 Giving Financial Assistance to Families

The Guangzhou municipal government began giving cash subsidies to registered permanent residents over the age of 60 or any people over age 80 in 2005, but it then stopped these cash subsidies in 2009 and instead offered coupons as a way to ensure that the money was being spent on the intended services. The question of whether it is better to give cash directly to elders or to give them coupons for services is still a matter of debate. It can be very difficult for families to afford to hire a nanny (*bao mu*) to provide elderly care. The monthly salary for a full-time nanny ranges from ¥3,500 to ¥5,000 per month (equivalent to \$530 to \$760) in Guangzhou, which is much more than the monthly income of most elderly individuals or their children. Considering the abovementioned problems, the government should consider more strategies to give financial assistance to families through a range of support options, such as cash subsidies or coupons.

5.3 Creating Age-Friendly Communities

Government, community agencies and enterprises should cooperate to create age-friendly communities for elders, where older adults are viewed as active contributors to their social environments. Additionally, housing developers should incorporate the distinctive housing needs of older people into their architectural designs. The needs of frail elderly people and people with disabilities should also be addressed through both appropriate community services and skilled nursing facilities.

5.4 Establishing Multi-Channel Financial Mechanisms for Community-Based Services

Public financing cannot fully cover the costs associated with using community-based services to meet all of the needs of China's rapidly growing older population. Though the Chinese government is trying to establish a new social welfare system, more financial resources must be channeled into community-based services for that system to be successful. One attempt at investment was when China's Department of Civil Affairs initiated the "*Xing Guang* (Star Light) Project" in 2000. The department allocated approximately 20% of the social welfare lottery money to building community service centers and home care programs for poor and frail elders. In Guangzhou, most of these funds, which totaled over two billion yuan, were spent building 916 "*Xing Guang*" centers, 400 community health service centers, and 20 day care centers (Finance Commission of Guangzhou Municipality, 2015). However, these investments alone cannot address the city's growing needs. For that purpose, multi-channel financing mechanisms, including private investment, are needed (Wu, Carter, Coins, & Cheng, 2005).

5.5 Divide Responsibilities among Family, Community and Institutional Care

As a result of the rapid aging of the population, elderly care has become an important issue in urban China. Despite the implementation of care service provision, the responsibilities among family, community and institutional care should be divided in the future. The government is funding seniors who need care that they cannot afford on their own, but the amount of funding is still negligible. More hospital and nursing home beds will be needed for senior care over in less than five years. The government is making important efforts in building quality standards for caregivers in order to ensure trust and security, with a view toward long-term investment. China is orienting its policy so that real estate developers build entry-level residential senior care into their developing infrastructure, as middle-class elderly Chinese people will need this service very soon. To reach this goal, financial incentives have been settled: Elderly care services in China (entertainment and medical service) are exempt from business tax, and non-profit nursing homes are exempt from corporate income tax and from administrative fees.

6. Study Limitations

This study has some limitations. First, it studies elders from only one province, so its findings cannot serve as a national profile of elders in China. Second, non-sampling error affected the accuracy of the survey findings. The number of respondents was relatively small, and probability sampling methods were not used, which could have caused bias in the results. Third, elders' living arrangements would ideally be divided into more categories, such as living alone, living with a spouse only, living with other relatives, and living with grandchildren. Fourth, the authors used only a single scale (CES-D) to measure emotional well-being rather than combining multiple scales to measure happiness, life satisfaction, etc. Fifth, the high non-response rate affected the study's findings. Some older adults declined to participate in this questionnaire survey, and some did not answer all questions. Sixth, because China is experiencing such dramatic and rapid economic development at the same time that social, demographic and cultural changes are taking place, the results of this study may not be applicable to other countries. Nevertheless, future studies that address these limitations have the potential to further improve policy

and practice in relation to older adults who are living in the community independently of their adult children.

7. Conclusions

This study examined the different living arrangements of older adults in urban China. According to traditional norms in Chinese society, parents both desire and expect to have support from their children in old age, particularly through co-residence. In light of the current and future aging of the Chinese population and a deficit in state programs to support elderly people, it is important to study the extent of intergenerational support and co-residence. In Western societies, intergenerational co-residence declined over the twentieth century, but it is yet unclear to what extent co-residence will decline in China. In this study, the education level of the 60-69 age group was higher than that of the over-age-80 group. As identified in this study, educated people are less likely to live with their adult children; this may be because they have better health and access to health care. If attitudes are indeed changing and better-educated parents do not expect the same level of support as they did in the past, then there may be less cause for concern about the well-being of older adults who are not living with their children. Instead, future cohorts of elders who are better educated and wealthier may be less in need of care provided by their adult children through co-residence and proximity.

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