



# Family Connections and Subjective Wellbeing in Transitional China

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## Abstract

This study investigates inter-generational connections between adult children and elderly parents in China during a period of profound socioeconomic transformations and examine their impact on subjective wellbeing. Using data from the China Household Finance Survey, we examine whether adult children experience greater happiness when they maintain close connections with their aging parents. In addition to considering the well-established factors of age, health, homeownership, and financial resources, we specifically focus on living arrangements between adult children and aging parents and find living apart but in proximity has replaced co-residence as the dominant living arrangement in China and has a significant positive effect on wellbeing. Furthermore, we observe that strong intergenerational connections, encompassing emotional and material support, also significantly enhance wellbeing. This suggests that despite ongoing modernization and market transition in China, the enduring influence of Confucian values on family bonds persists, albeit with some contemporary adaptations, thereby promoting wellbeing. By examining inter-generational connections within extended families and their intersectionality with SWB, this study contributes to the literature on wellbeing by providing a familial perspective and studying a unique meso-level local contexts defined by family relations rather than spatial or administrative boundaries.

**Keywords** Intergenerational support · Aging · Family · Subjective wellbeing · Living arrangement · China

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## 1 Introduction

With significant implications for both individuals and the society as a whole, subjective wellbeing (SWB) has gained increasing attention across various disciplines, often referred to as the “happiness turn” (Frawley, 2015). This rapidly growing body of literature has primarily focused on identifying individual and national-level factors that predict SWB (see reviews by Fordyce, 1988; Ryan & Deci, 2001; Powdthavee, 2007; Veenhoven, 2015; Lijadi, 2018). However, there is a growing call to investigate the geography of SWB, examining regional and local influences (e.g., Morrison, 2011, 2021; OECD, 2014; Veneri & Edzes, 2019; Huang et al., 2023). Notably, neighborhood environments are increasingly recognized as crucial contexts that can shape SWB. In addition to physical factors such as air pollution and amenities such as open space and parks (Li et al., 2019; MacKerron & Mourato, 2009; Winters & Li, 2017), the social environment, including social networks and interactions, significantly impact SWB (Aslam & Corrado, 2007).

This paper builds upon prior research by examining a unique type of social environment defined by inter-generational connections within the extended family. Intergenerational connections offer potential avenues for improving health and wellbeing, while facilitating caregiving and extending social interactions, which are particularly valuable in an aging population. Current social dynamics have resulted in novel and arguably different social roles for family members. Adult children and older parents are increasingly relocating or being brought closer together, and the ubiquity of cell phones and video calls seems to diminish the significance of spatial distance between family members. The inter-generational family connections thus create a distinctive social environment with profound implications for SWB. Therefore, this paper explores the influence of this relatively unexplored meso-level social environment on SWB by addressing the following question: Do stronger family connections contribute to greater happiness?

China has a long history of strong familial relationships (Wang & Hsueh, 2000). Central to the deeply rooted Confucian culture is the concept of *filial piety*, which emphasizes the obligation of adult children to respect and care for their elderly parents. Despite the forces of modernization, increasing mobility, and urbanization, co-residence between adult sons and parents has remained prevalent in China (Chen, 2005; Logan et al., 1998). Even when living apart, adult children and parents maintain strong intergenerational ties, forming what is known as a “networked family” (Unger, 1993). However, recent research highlights a shift in living arrangements between adult children and parents in China during the second decade of the twenty-first century. Living apart but in close proximity, within the same city/county, has emerged as the most popular living arrangement. This shift is a result of not only negotiations between traditional and modern values but also improvements in housing and financial conditions (Huang et al., 2022). This evolving living arrangement has significant implications for intergenerational support and care. It introduces a spatial dimension to the extended family, potentially re-shaping family connections and creating a unique “neighborhood” environment that may influence SWB.

At the same time, China’s rapid economic development seems to be at odds with its relatively low ranking on the happiness index (Helliwell et al., 2019). The literature on SWB in China is marked by debates regarding its level and changes over time. Scholars have reported varying perspectives, ranging from “falling”, to “constant”, to “rising” SWB, even suggesting a U-shaped pattern as Chinese economy continues to grow (Brockmann et al., 2009; Burkholder, 2005; Cai et al., 2023; Clark et al., 2019; Crabtree and Wu 2011; East-erlin et al., 2012; Graham et al., 2017; Kahneman & Krueger, 2006; Knight & Gunatilaka,

2011). This confusion arises partly from the fact that most research has focused on individual or national level factors, despite China being a society undergoing rapid transition with significant variations in every dimension. Limited research on the geography of SWB in China has revealed substantial urban–rural disparities, yet no consensus on the roles of other regional factors (Huang, et al., 2023; Zhou & Yu, 2017). In contrast, neighborhood factors, such as the quality of neighborhood infrastructure, neighborhood safety, participation in local communities, and air pollution, have demonstrated a significant impact on SWB (Clark et al., 2019; Li et al., 2019). Surprisingly, the role of the extended family in SWB remains largely under-studied, even in China where extended families and strong family connections are deeply rooted traditions.

This paper aims to explore the dynamics of family connections between adult children and their aging parents in China, and the implications for SWB. Family connections encompass emotional, spatial, and material aspects, including closeness, living arrangements, reciprocal care giving and financial support. Our overarching hypothesis posits that strong family connections contribute to enhanced SWB for both aging parents and adult children. The first hypothesis is that living arrangement plays a significant role in SWB with adult children living apart but in proximity to their parents experiencing higher levels of SWB compared to those living together or further away. The second hypothesis is that adult children who maintain stronger emotional and material connections with their parents exhibit higher levels of SWB. These hypotheses will be further discussed in the context of existing research on SWB and family connections between adult children and their parents, and then tested empirically utilizing national survey data.

This paper makes two significant contributions to the existing literature. First, it addresses a crucial gap in the study of SWB by examining meso-level local contexts, which have received limited attention compared to micro- (individual) and macro- (national/regional) level analysis. By focusing on the extended family, this research significantly expands the meso-level analysis of SWB by studying a unique local context based on family connections. Unlike spatially defined local contexts such as neighborhoods in previous studies, the extended family transcends spatial boundaries and distances between family members, creating a *relational* context that holds significant implications for health and wellbeing. Second, this research enriches the literature on social contexts for SWB by considering not only emotional connections but also material and spatial dimensions within family relationships. While previous studies have primarily focused on individual and community connections, this research recognizes the critical role of the family as a fundamental social unit. With population aging and the reduced role of the state in service provision in the neoliberal era, family connections have gained increasing importance in areas such as eldercare and intergenerational support. Understanding the significance of family connections for SWB and overall health is crucial in this context.

## 1.1 Literature Review and Research context

This research is situated in two somewhat separate bodies of literature: SWB and living arrangements and reciprocal relationships between adult children and parents. In this paper, we aim to bridge these two bodies of literature by studying the intersectionality between SWB, living arrangement, and family relations, and by adopting a familial perspective on SWB. We examine how SWB is influenced by not only individual and regional factors but also emotional, material, and spatial connections between extended family members.

### 1.1.1 Subjective Well-Being

Since Easterlin's pioneering work in 1974, there has been a significant and growing body of literature on SWB across various disciplines. Many scholars have reviewed this literature extensively (see Fordyce, 1988; Lijadi, 2018; Ryan & Deci, 2001; Powdthavee, 2007; Veenhoven, 2015; Frawley, 2015); therefore, we will not delve further into those reviews here. The exiting literature has primarily focused on three main questions: (1) What and how do individual/household factors shape SWB? (2) why does SWB fail to improve with the increase of societal economic wellbeing, known-as the "Easterlin paradox" (Easterlin, 1974)? A related question is about the "urban paradox" as individuals in large cities tend to have lower levels of SWB. (3) What is the geographical variation in SWB and why does it occur?

Methodologically, the literature has devoted considerable effort to understanding the determinants of SWB at individual (micro-) and regional/national (macro-levels), but there has been limited attention to the meso-level environments. Recently, there is growing recognition that SWB varies across spatial scales, from neighborhoods, to cities and regions (e.g., Aslam & Corrado, 2007; Huang et al., 2023; Morrison, 2011; OECD, 2014). In particular, the urban–rural difference has gained significant attention, as urban residents, especially those in large cities, report lower levels of SWB even after controlling for individual socioeconomic factors (Berry & Okulicz-Kozaryn, 2011; Brereton et al., 2008; Burger et al., 2020; Ferrer-i-Carbonell & Gowdy, 2007; Sørensen, 2014). This phenomenon, known as the "urban paradox", refers to the situation where SWB increases during initial economic growth but declines as economic development in cities further progresses (Morrison, 2021). Plausible explanations for this paradox are various negative externalities associated with urban life, including high residential density, expensive housing, long commutes, stress from long work hours, and urban pollution (Brown et al., 2015; Okulicz-Kozaryn, 2015). Moreover, both physical and social neighborhood environments are increasingly recognized as important contexts that may shape SWB (e.g., Aslam & Corrado, 2007; Li et al., 2019; MacKerron & Mourato, 2009; Welsch, 2006; Winters & Li, 2017). However, few studies have focused on the familial context, specifically the extended family, and its role in SWB. Thus, this paper aims to fill this gap by examining extended families as a unique meso-level context and offering a new familial perspective on SWB.

Determinants of SWB are multilevel and multi-dimensional, encompassing physical, social, and economic factors at micro, meso, and macro levels (Huang et al., 2023). In addition to individual/household sociodemographic indicators and regional/national contexts, the quality of the physical environment such as the presence of amenities (e.g., beaches/lakes, greenspace) and high-quality physical infrastructure (e.g., road conditions) can positively influence SWB (Li et al., 2019; MacKerron & Mourato, 2009; Welsch, 2006; Winters & Li, 2017). Conversely, pollution has a detrimental effect on SWB (e.g., Li et al., 2019; Welsch, 2006). The roles of economic factors are complex and depend on the level of development, as indicated by research on the "urban paradox" and urban–rural disparities. Socially, social capital, social interactions, and community connections have positive effects on SWB (e.g., Aslam & Corrado, 2007; Portela et al., 2013). Institutional characteristics are place specific, such as trust in institutions, quality of local governments, and the decentralization of public expenditure or taxation, and they are crucial to SWB (Rodríguez-Pose & Maslauskaitė, 2011). Income level and its distribution within the city, or social justice, also play a role in SWB (Ballas 2013).

In other words, where and how we live significantly shape SWB through various complex ways, including access to the city and day-to-day interactions with our neighbors and the local built environment.

Research on SWB in China has gain traction in recent decades, especially after the finding of a seeming divergence between economic development and the happiness index. Similar to the Western literature, most research in China has focused on national or individual level of SWB. It is generally agreed that many factors important in the West also contribute to SWB in China. For example, being married, good health, income and employment, homeownership, and automobile ownership all positively contribute to SWB in China, while age has a U-shaped relationship (e.g., Cheng et al., 2016; Clark et al., 2019; Hu, 2013; Liu & Shang, 2012; Liu et al., 2021). Additionally, relative income, relative deprivation, and income expectations significantly impact SWB in China (Ding et al., 2021; Liu & Shang, 2012; Brockmann et al., 2009; Knight & Gunatilaka, 2011; Yang et al., 2019), which explains why reported wellbeing has declined despite China's spectacular economic growth. Social capital, measured by community participation, whether there were relatives nearby, perception on fairness, and feelings of security, also contribute significantly to SWB (Clark et al., 2019). However, Churchill and Mishra (2017) find general trust and social capital have less impact on wellbeing in China compared to trust in family and neighbors.

A unique institutional factor specific to the Chinese context is the Household Registration (hukou) System, which divides the population into groups with different hukou statuses and corresponding entitlements and opportunities (Cheng & Selden, 1994). Although it used to be a major socioeconomic obstacle for rural populations (Chan & Wei, 2019), ongoing reforms have reduced its role as a determinant of SWB (Zhou & Yu, 2017). Despite relative poverty in rural China, rural residents generally report higher levels of wellbeing than their urban counterparts (Clark et al., 2019; Knight & Gunatilaka, 2010; Zhou & Yu, 2017). SWB in rural areas has also increased more than in urban areas in recent years (Huang et al., 2023). However, rural-to-urban migrants still face marginalization in cities due to the persisting hukou system (Huang & Ren, 2022; Huang et al., 2020a, 2020b), leading to lower levels of SWB attributed to a sense of relative deprivation, lack of social support, and neighborhood social environment (Liu et al., 2017a, 2017b). Among migrants, there are significant cohort differences, with income enhancing wellbeing for first-generation migrants, while homeownership in the destination city plays a crucial role for the second-generation migration (Liao et al., 2022; Liu et al., 2021). The effects of income and homeownership are also mediated by migrants' perceived living standards related to various reference groups of schoolmates, neighbors, and local urban residents in the destination city. This is consistent with the aspiration adaptation theory, which suggests that people adjust their aspirations to their standard of living, affecting their SWB (Frey & Stutzer, 2002; Kahneman & Krueger, 2006).

Research on local contexts in China has primarily focused on significant urban-rural difference, with rural residents generally reporting higher levels of SWB despite rural poverty (Clark et al., 2019; Knight & Gunatilaka, 2010; Knight et al., 2009; Zhou & Yu, 2017). Studies on other regional variations are relatively limited. Zhou and Yu (2017) argue that regional effects on SWB are modest, while Wu and Li (2013) highlight the importance of regional differences in economic growth and income inequality. Using a multilevel place-based approach, Huang et al. (2023) find that spatial contexts are more important for SWB of rural residents than urban residents, and high quality social and physical infrastructure at city level promotes SWB in both rural and urban settings, whereas regional economic growth seems to be beneficial primarily in rural areas. The quality of neighborhood

infrastructure, such as the availability of parks, schools and hospitals, also positively contributes to SWB (Clark et al., 2019), while air pollution negatively affects SWB (Li et al., 2019; Smyth et al., 2008; Welsch, 2006).

### 1.1.2 Connections Between Adult Children and Older Parents

The connection between adult children and older parents is multifaceted, encompassing not only emotional, but also spatial and material dimensions. Living arrangement between aging parents and adult children is the key spatial dimension of family connections, which have significant implications for caregiving and intergenerational support. In traditional societies, parent–child co-residence was prevalent but declined significantly during modernization (Schoeni, 1998; UN, 2017). In the West, residential proximity between adult children and parents has replaced co-residence. For example, in the United States, the median distance that all children live from their mother is about 18 miles, and approximately only a fifth live more than two-hour drive from their parents (Bui and Miller 2015). Married couples on average live less than 25 miles away from their mothers (Compton & Pollack, 2015). Geographic proximity plays a crucial role in facilitating caregiving and reciprocal support between generations, with older parents assisting adult children with childcare and resources and adult children caring for aging parents (Compton & Pollock, 2009; Lin & Rogerson, 1995; Rogerson et al., 1997; Seltzer & Bianchi, 2013). As the aging process progresses, proximity becomes even more important for caregiving for frail elderly parents, especially when there are physical impairments involved.

In China, despite profound socioeconomic and political transformations, extended families and strong family connections continue to be a central core of Chinese society (Xu & Xia, 2014). Co-residence between parents and adult children remains high and stable in China over time (Chen, 2005; Logan et al., 1998; Tsui, 1989; Unger, 1993). The 2010 Census also shows that 54% of 65+ people live with their adult children (Zeng & Wang, 2018). This high rate of co-residence is attributed to Confucian values like filial piety and practical concerns such as housing shortage, limited resources, and inadequate childcare and eldercare services (Chen & Silverstein, 2000; Chu et al., 2011; Cong & Silverstein, 2011; Ma & Wen, 2016; Yang et al., 2012). However, in recent years, China has experienced rapid economic development, an unprecedented housing boom, significant expansion in service provision, and the rise of a middle class. As a result, there have been significant changes in living arrangements. Living apart but in proximity (in the same city/county) has become the dominant residential arrangement between aging parents and adult children, especially in developed cities and among the educated and better-off population (Huang et al., 2022). Additionally, the shifting economic landscape from the planned economy to a market economy has led to major changes in income and wealth distribution and has brought about uncertainty and instability in an individual and family's life (Xu & Xia, 2014). These structural shifts highlight the need for support from both aging parents (e.g., eldercare) and adult children (e.g., childcare, housing). In particular, adult children face a complex set of challenges, with the double responsibilities of caring for aging parents and young children, along with career and societal stresses in a rapidly changing society.

The question arises of how living arrangements and other family connections between aging parents and adult children affect SWB especially among adult children. Are we happier if we live near our parents and have stronger and regular connections? The literature on the relationship between adult children and their parents provides mixed results on whether the connections matter (Clark et al., 2017; Hansen et al., 2009; Scannell &

Gifford, 2010, 2017; Zhang & Hayward, 2001). While there is a general perception that family connections are positive, previous studies have shown inconsistent findings. Place attachment is multidimensional and involves social networks across families, which contribute to wellbeing (Coleman, 1988). Some studies have examined the impact of having children on wellbeing for older parents (Hansen et al., 2009). There is some evidence that intergenerational proximity does play a role in feelings of connectedness and belonging (Breheny & Stephens, 2009; Hjälml, 2012) and support amongst family members (Bordone, 2009; Seltzer & Bianchi, 2013). For the aging population, family connections become even more important, and have been found to positively impact life satisfaction of older parents (Hansen et al., 2009; Margolis and Myrskylä 2011). In China, where institutionalized eldercare and childcare are still emerging, the role of family is even more important, which is further reinforced by cultural expectations and government legislation. Parents are expected to care for grandchildren and support their adult children (Xu & Xia, 2014), which can alleviate stresses faced by adult children thus promote their SWB. Meanwhile, the government promotes aging at home and eldercare by the family (CPG, 2012), which potentially impose heavy burdens on adult children.

There is a gap in the SWB literature regarding connections between parents and adult children and their role in SWB. This study aims to address this gap by focusing on intergenerational connections and considering the extended family as a relational local context, and thus enriches the literature on SWB both conceptually and methodologically. The overarching hypothesis is that family connections, whether spatial, material, or emotional, increase the level of SWB, which will be tested empirically in the following section.

## 1.2 Data

This study utilized data from the 2013 China Household Finance Survey (CHFS), a nationally representative household questionnaire survey conducted by the China Household Finance Survey and Research Center at Southwestern University of Finance and Economics. The survey employed a three-stage probability proportional to size (PPS) sampling method, with counties, residential communities/villages and households as sampling units. While CHFS has been conducted every two years since 2011, only the 2013 survey has questions on SWB and connections between parents and adult children. It included 28,141 households in 167 communities in 29 provinces/autonomous regions,<sup>1</sup> of which 68.25% households are in urban areas.

The CHFS collects detailed demographic and socioeconomic information about households. One of the questions in the survey asked, “Overall, do you feel happy (xing fu) now?” The respondent answered on a five-point scale: very happy, happy, neutral, unhappy, or very unhappy. This question has been widely used across different nations, and is considered robust (Diener et al., 1985). However, cultural and language factors can affect responses to this question (Carlquist et al., 2017; Lomas, 2016; Lu & Gilmour, 2004; Tiberius, 2004; Veenhoven, 2015). For instance, in some languages including Chinese, “happiness” is the idea of luck or good fortune, while in other languages (e.g., Italian, Spanish) it suggests intimate satisfaction of one’s desire, goals, and enjoyable experiences. In Chinese culture, modesty is valued highly, which is found to be positively related to modest behaviors (Bond et al., 2012; Cai et al., 2011). This “cultural response bias” leads people

<sup>1</sup> Xinjiang, Tibet, Macao, Hong Kong and Taiwan are excluded from these provincial regions.

to report lower levels of SWB compared to equivalent samples in the West (Chen et al., 1995; Gullone & Cummins, 2012; Lee et al., 2002; Lai et al., 2013). Nonetheless, SWB is considered a stable indicator, and falls within the normative range in China (Davey & Rato, 2012).

In addition to information about household members living with the respondent, this survey collects basic information about extended family members who do *not* live with respondents, such as parents and adult children. In addition to emotional closeness, monetary gifts, and willingness of parents to care for grandchildren, this survey collected data on living arrangement between adult children and their parents: living together, living in a different unit in the same community/village, living in a different community/village but in the same city/county, living in a different city/county. This information is rare in conventional household surveys, making the CHFS unique and suitable for studying family connections and their impact on SWB. However, the question on happiness was asked only to respondents (adult children), not their parents, thus we can only study how family connections affect adult children's SWB. When data is available, it would be interesting to study how living arrangement has different impact on SWB of adult children and aging parents.

To answer our research question, cases where both parents were deceased and cases with missing information and obvious mistakes are excluded. Cases where respondents were younger than 23 years old were also excluded (23 is the age for college graduation). The resulting sample consisted of 13,077 cases (9506 urban households), which will be weighted using sample weights in the subsequent analysis.

The CHFS differentiates between the urban and rural areas based on the definition by the State Statistics Bureau, and people living in urban or rural areas are identified as urban sample or rural sample, respectively. While migrants tend to have lower level of SWB compared to urban local residents (Liu et al., 2017a, 2017b), recent hukou reforms have significantly weakened the impact of hukou status on SWB (Zhou & Yu, 2017). The differentiation between agricultural and non-agricultural hukou officially ended in 2014, and migrants are allowed to apply for long-term resident hukou especially in smaller cities (State Council, 2014). However, the urban and rural areas still have different systems that encompass many aspects of the economy (including homeownership, land, state resources) and society (including labor and welfare provision) (Chan & Wei, 2019), contributing to the urban–rural divide in SWB (Clark et al., 2019; Knight & Gunatilaka, 2010; Zhou & Yu, 2017). Therefore, the analysis will be conducted separately for the national sample, urban areas, and rural areas to control contextual factors. We first investigate the overall patterns of SWB. We then study the relationships between living arrangements and other family connections and SWB. Finally, we estimate explanatory models of wellbeing considering family connections and other sociodemographic factors.

## 1.3 Descriptive Analysis

### 1.3.1 High Level of Subjective Well-Being

Chinese generally report a relatively high level of wellbeing. Approximately 57% of the respondents state they are happy or very happy, while 36% report feeling neutral, and only about 7% report being unhappy or very unhappy (Table 1). However, it is important to consider the potential influence of aforementioned “cultural response bias”, which may lead to underreporting of unhappiness. There is a significant urban–rural difference in SWB, as indicated by the Chi-square test. People living in rural areas are slightly more likely to



**Table 1** Weighted percentages for different levels of subjective well-being

Weighted %	Nation	Urban areas	Rural areas
Very happy	14.82	15.86	12.88
Happy	42.03	43.32	39.63
Neutral	36.02	35.00	37.93
Unhappy	6.11	5.06	8.06
Very unhappy	1.02	0.76	1.50
Total %	100	100	100
Total N (Unweighted)	13,077	9506	3571

A chi-square test shows significant association between regions (urban and rural area) and subjective wellbeing:  $\chi^2(4) = 697.08, P < .001$

report being unhappy and very unhappy (9.6% in rural areas vs. 5.8% in urban areas). Conversely, individuals in urban areas are more likely to reporting being happy or very happy (59% in urban areas vs. 52% in rural areas). Due to the small percentages of people reporting being very unhappy, “unhappy” and “very unhappy” are combined into “unhappy” for the following analyses.

Table 2 demonstrates noticeable SWB differences across gender, age, health, and education, and significant Chi-square tests confirm that these disparities hold true at both the national level and within urban and rural areas. Women generally exhibit higher levels of SWB than men especially in urban areas, and younger people generally report higher levels of happiness than older people with one notable exception. Individuals in their 40 s, who might face increased job and family related stresses and responsibilities, demonstrate the lowest levels of happiness. Consistent with existing literature, people with good health are much happier (71% for those with very good health vs. 40% for those with bad health reporting being “happy”/“very happy”). While people with primary school or less education are more likely to report being “unhappy”, those with some college or more education in urban areas and those with junior high school + in rural areas seem to be more likely to report being “happy”.

### 1.3.2 Strong Family Connections

Despite profound social and economic transformation in China, spatial connections between adult children and parents remain strong. Table 3 reveals the prevalence of co-residence and geographic proximity in living arrangements. Nearly 48% of adult children nationwide either live with their parents or in the same community and 79% live either with their parents or in the same city/county. This trend is even more pronounced in rural areas with nearly 31% adult children co-residing with parents, 41% living in the same village, and an additional 20% residing in the same county. Living arrangement by age group (not shown in the table) demonstrates a natural decline in co-residence as adult children age. However, there is a small increase in co-residents among the population over 60, reflecting the likelihood of adult children taking on the role of caregivers for their aging parents.

In addition, the emotional and material connections between adult children and parents remain robust. Approximately 80% of adult children report having a very close relationship with their parents. The economic ties between parents and adult children are also substantial and reciprocal, with 50% of respondents providing/receiving financial assistance to/from parents in the previous year. In addition, about 70% of parents express willingness to

**Table 2** Subjective well-being by demographic characteristics

	Weighted %	Very happy	Happy	Neutral	Unhappy	Total	$\chi^2$	<i>p</i> -value
<i>Nation</i>								
Gender	Female	15.84	43.44	34.46	6.26	100.00	21.96	<0.001
	Male	13.91	40.78	37.42	7.90	100.00		
Age	< =30	17.85	45.66	32.20	4.29	100.00	106.00	<0.001
	31–40	15.26	43.30	35.92	5.52	100.00		
	41–50	12.63	39.46	39.28	8.63	100.00		
	51+	15.89	42.31	33.35	8.46	100.00		
Health	Very good	24.10	46.85	25.43	3.62	100.00	4300	<0.001
	Good	12.06	50.57	32.90	4.47	100.00		
	So-so	9.68	36.91	46.00	7.41	100.00		
	Bad	10.03	30.31	39.33	20.33	100.00		
Education	Primary school or less	12.68	38.00	37.06	12.27	100.00	622.05	<0.001
	Junior high school	14.64	41.76	37.93	5.67	100.00		
	High school	16.60	42.82	34.93	5.64	100.00		
	Some college+	15.93	46.53	32.62	4.92	100.00		
<i>Urban areas</i>								
Gender	Female	16.86	44.55	33.77	4.82	100.00	36.93	<0.001
	Male	14.78	41.99	36.34	6.89	100.00		
Age	< =30	18.33	46.13	31.52	4.03	100.00	45.86	<0.001
	31–40	16.33	44.12	34.64	4.91	100.00		
	41–50	14.25	40.76	38.34	6.65	100.00		
	51+	15.60	43.81	33.25	7.35	100.00		
Health	Very good	24.29	47.81	24.44	3.46	100.00	2600	<0.001
	Good	13.22	49.43	33.25	4.10	100.00		
	So-so	10.24	37.51	45.52	6.73	100.00		
	Bad	10.47	32.71	40.34	16.48	100.00		
Education	Primary school or less	14.51	41.40	34.95	9.14	100.00	204.46	<0.001
	Junior high school	14.90	42.13	37.50	5.46	100.00		
	High school	17.56	42.23	34.86	5.35	100.00		
	Some college+	16.07	46.32	32.54	5.07	100.00		
<i>Rural areas</i>								
Gender	Female	13.24	40.60	36.23	9.94	100.00	34.88	<0.001
	Male	12.67	39.04	38.96	9.33	100		
Age	< =30	15.63	43.46	35.38	5.54	100.00	104.05	<0.001
	31–40	12.80	41.42	38.86	6.91	100.00		
	41–50	10.30	37.61	40.63	11.46	100.00		
	51+	16.30	40.19	33.49	10.02	100.00		
Health	Very good	23.61	44.45	27.91	4.03	100.00	1400	<0.001
	Good	9.23	53.35	32.05	5.37	100.00		
	So-so	8.75	35.91	46.81	8.53	100.00		
	Bad	9.66	28.28	38.47	23.59	100.00		
Education	No schooling at all	11.81	38.61	32.99	16.59	100.00	191.86	<0.001
	Primary school	11.62	35.45	39.59	13.34	100.00		
	Junior high school+	13.88	42.50	37.68	5.94	100.00		

Chi-square tests show that there are significant disparities in SWB across population groups by gender, age, health and education

**Table 3** Weighted descriptive statistics for variables on inter-generational family connections

Weighted %	Nation	Urban	Rural	$\chi^2$	<i>p</i> -value
<i>Living Arrangement</i>	100.00	100.00	100.00	1700	<0.001
Live together	22.83	18.47	30.93		
The same village/community	25.08	16.35	41.29		
Different village/community in the same county/city	31.00	36.87	20.11		
Different city	21.09	28.31	7.67		
<i>Relationship with parents</i>	100.00	100.00	100.00	65.49	<0.001
Very Close	78.61	79.02	77.86		
Close	13.94	14.79	12.36		
Ordinary	7.45	6.19	9.79		
<i>Mutual economic support last year</i>	100.00	100.00	100.00	6.31	<0.05
Yes	51.41	52.20	49.96		
No	48.59	47.80	50.04		
<i>Parents' willingness to care grandchildren</i>	100.00	100.00	100.00	62.12	<0.001
Yes	69.59	72.12	64.90		
No	30.41	27.88	35.10		
Total N (unweighted)	<b>13,077</b>	<b>9,506</b>	<b>3,571</b>		

Chi-square tests demonstrate significant differences between urban and rural areas in different dimensions of family connections

care for grandchildren, a figure surprisingly higher in urban areas than in rural areas. This disparity may be a result of higher cost of childcare in cities potentially offset by the high financial support by adult children to parents.

### 1.3.3 Family Connections and Subjective Well-Being

The findings on inter-generational connections provide compelling evidence for the enduring and strong relationships between adult children and aging parents, aligning with the perspective put forth by Xu and Xia (2014) that extended families remain influential in transitional China. These findings prompt us to examine whether these strong connections have implications for the levels of SWB in the Chinese society. Specifically, do these connections influence how individuals perceive their lives and experience happiness?

The levels of well-being are remarkably high across various living arrangements (Table 4). However, we do observe a slight decrease in SWB for those who live together with parents. This finding is unsurprising, as intimate living arrangements can be challenging in any cultural context. Nonetheless, it is noteworthy that more than 50% of respondents express being “happy” or “very happy” when living with parents. However, living apart but in the same community or the same city/county yields the highest levels of well-being. Similar patterns are observed in rural areas, albeit with much lower levels of satisfaction for those living with parents and residing far away. While the differences in SWB across different living arrangements are modest, they do confirm the expectation that living in proximity with some distance from parents is generally more favorable than either living together or living with significant physical distance between adult children and parents.

Furthermore, SWB varies based on the degree of other family connections. Individuals with close relationships with their parents tend to experience greater happiness, and

**Table 4** Weighted proportions of different levels of subjective well-being by family connections

Weighted %	Very happy	Happy	Neutral	Unhappy	Total	$\chi^2$	<i>p</i> -value
<i>Nation</i>							
Living Arrangement						84.74	<0.001
Live together	12.02	39.16	39.21	9.61	100.00		
The same village/community	15.10	42.60	35.25	7.05	100.00		
Different village/community in the same county/city	16.6	42.76	35.17	5.47	100.00		
Different city	14.9	43.39	34.74	6.96	100.00		
Relationship with parents						197.05	<0.001
Very Close	16.35	42.85	34.07	6.73	100.00		
Close	9.3	42.67	41.60	6.43	100.00		
Ordinary	9.02	32.21	46.20	12.56	100.00		
Mutual economic support last year						3.46	0.325
Yes	14.85	41.32	36.78	7.05	100.00		
No	14.79	42.79	35.23	7.20	100.00		
Parents' willingness to care grandchildren						53.47	<0.001
Yes	15.13	43.00	35.73	6.13	100.00		
No	14.11	39.81	36.69	9.39	100.00		
<i>Urban</i>							
Living arrangement						43.47	<0.001
Live together	13.07	41.04	38.57	7.33	100.00		
The same village/community	18.25	43.67	32.78	5.3	100.00		
Different village/community in the same county/city	16.89	43.43	34.75	4.93	100.00		
Different city	14.96	44.49	34.28	6.27	100.00		
Relationship with parents						134.28	<0.001
Very Close	17.38	44.21	33.03	5.38	100.00		
Close	10.47	42.38	41.38	5.77	100.00		
Ordinary	9.39	34.26	44.86	11.5	100.00		
Mutual economic support last year						0.85	0.836

**Table 4** (continued)

Weighted %	Very happy	Happy	Neutral	Unhappy	Total	$\chi^2$	<i>p</i> -value
Yes	15.68	43.08	35.54	5.71	100.00		
No	16.06	43.59	34.41	5.93	100.00		
Parents' willingness to care grandchildren						34.32	<0.001
Yes	16.39	43.94	34.50	5.17	100.00		
No	14.50	41.74	36.29	7.47	100.00		
<i>Rural</i>							
Living arrangement							
Live together	10.86	37.08	39.93	12.14	100.00	22.65	<0.05
The same village/community	12.77	41.82	37.07	8.34	100.00		
Different village/community in the same county/city	15.61	40.5	36.6	7.28	100.00		
Different city	14.48	35.84	37.94	11.74	100.00	58.01	<0.001
Relationship with parents							
Very Close	14.4	40.28	36.02	9.29	100.00		
Close	6.69	43.31	42.11	7.89	100.00		
Ordinary	8.6	29.81	47.78	13.81	100.00	4.72	0.194
Mutual economic support last year							
Yes	13.25	37.89	39.19	9.67	100.00		
No	12.52	41.36	36.67	9.45	100.00		
Parents' willingness to care grandchildren							
Yes	12.54	41.07	38.27	8.12	100.00	17.89	<0.001
No	13.52	36.96	37.28	12.24	100.00		

Chi-square tests show significant differences in SWB among different degrees of family connections (except for mutual economic support)

parents' willingness to care for grandchildren is associated with a significantly higher level of wellbeing. However, the provision or receipt of economic assistance between parents and adult children does not appear to have a substantial impact on the SWB of adult children. These patterns hold true for urban and rural areas, although the overall levels of unhappiness are generally higher in rural areas and there are more pronounced variations in SWB based on different degrees of family connections. This discrepancy may be attributed to the lower level of socioeconomic development and greater regional disparities prevalent in rural China compared to urban areas.

### 1.3.4 Regression Analysis

To test our hypotheses, we estimated a set of ordered logistic regressions. Again, separate regressions are conducted for the nation, and rural and urban areas, to control unmeasured socioeconomic and institutional factors specific to each context. The dependent variable is an ordinal variable representing SWB: unhappy (including very unhappy), neutral, happy, very happy. Key independent variables measure various aspects of inter-generational connections, including living arrangement between adult children and parents, emotional relationship with parents (very close, close, ordinary), parents' willingness to care for grandchildren (yes/no), and mutual economic support in the previous year (yes/no). While the actual amount of monetary gifts between parents and adult children are available, due to a significant number of missing values, we include only a dummy variable indicating whether there is monetary exchange. These key independent variables are chosen to test our hypotheses on the effect of inter-generational connections on SWB.

The following control variables are included: age, age<sup>2</sup>, gender and married status, education (with distinct categories for urban and rural areas), hukou status (urban local, rural local, urban migrants, rural migrants), homeownership (no, own only one house, own more than one house), the number of young children (< 7 yrs old), the number of siblings, self-reported health (very good, good, so-so, bad); whether both parents are alive (yes/no), household income and assets (in quartiles). Furthermore, city tiers (for urban model) and regions (Eastern, Central, Western for national and rural model) are included to account for variations within urban and rural areas.<sup>2</sup> Descriptive statistics for regression variables are presented in Table 5 and regression results are provided in Table 6.<sup>3</sup>

First and foremost, the analysis reveals that living arrangement has a significant and robust impact on well-being in both urban and rural areas. The lowest level of well-being is observed among those living together with parents, followed by living in different cities/counties. On the other hand, individuals who live apart but in proximity (in the same city/county) experience the highest level of wellbeing, regardless of whether they live in the same community or not. The pattern holds true for both urban and rural areas, underscoring the crucial role of living arrangements in shaping well-being.

Secondly, strong emotional and material intergenerational connections contribute to a higher level of SWB. Adult children with close or very close relationships with parents

<sup>2</sup> In China, cities are grouped in a four-tier system: the First-Tier cities are the very large cities, including Beijing, Shanghai, Tianjin, Guangzhou and Chongqing; Second-Tier cities include provincial capitals, cities of 3–15 million; Third-Tier cities are prefecture capitals of 150,000 to 3 million, and Fourth-Tier cities are county level cities. The Third-Tier and Fourth-Tier cities are smaller cities and they are somewhat difficult to separate and thus they are often combined.

<sup>3</sup> Unweighted regression results are listed in Table 7 in Appendix.

**Table 5** Descriptive statistics of regression variables

Weighted %	Nation	Urban	Rural
<i>Dependent Variables: SWB</i>			
Very happy	14.82	15.86	12.88
Happy	42.03	43.32	39.63
Neutral	36.02	35.00	37.93
Unhappy	7.13	5.82	9.56
<i>Independent variables: inter-generational family connections</i>			
<i>Living Arrangement</i>			
Live together	22.83	18.47	30.93
The same village/community	25.08	16.35	41.29
Different village/community in the same county/city	31.00	36.87	20.11
Different city	21.09	28.31	7.67
<i>Relationship with parents</i>			
Very Close	78.61	79.02	77.86
Close	13.94	14.79	12.36
Ordinary	7.45	6.19	9.79
<i>Mutual economic support last year</i>			
Yes	51.41	52.2	49.96
No	48.59	47.8	50.04
<i>Parents' willingness to care grandchildren</i>			
Yes	69.59	72.12	64.9
No	30.41	27.88	35.1
<i>Control variables</i>			
<i>Age</i>			
< =30	13.96	17.69	7.04
31–40	27.74	29.67	24.16
41–50	35.78	32.37	42.11
50+	22.51	20.27	26.68
<i>Gender*Marital status</i>			
Married son	46.67	41.31	56.63
Married daughter	41.64	44.79	35.78
Single son	6.27	6.65	5.56
Single daughter	5.43	7.25	2.03
<i>Education</i>			
Primary school or less (Rural: No schooling at all)	24.46	13.46	9.25
Junior high school (Rural: Primary school)	34.93	31.4	35.65
High school (Rural: Junior high school+)	20.1	24.94	55.1
Some college +	20.51	30.19	
<i>Hukou status</i>			
Urban local		57.76	
Rural local		24.37	
Urban migrant		6.11	
Rural migrant		11.76	
<i>Health</i>			
Very good	32.1	35.30	26.17

**Table 5** (continued)

Weighted %	Nation	Urban	Rural
Good	19.8	21.60	16.44
Neutral	36.39	34.84	39.28
Bad	11.71	8.26	18.12
No. of siblings (Mean)	2.77	2.48	3.30
<i>Whether parents both alive or not</i>			
Yes	54.4	59.74	44.49
No	45.6	40.26	55.51
Number of children under 7 yrs old	0.19	0.19	0.18
<i>Homeownership</i>			
No house	7.93	11.12	2.00
Only one house	80.02	75.26	88.87
More than one house	12.05	13.63	9.12
<i>Median non-housing asset</i>			
(Thousand yuan)	112.04	137.79	76.55
0%–25%	15.08	14.57	15.78
25%–50%	56.42	57.38	55.17
50%–75%	155.39	156.85	152.69
75%–100%	1132.26	1246.23	750.24
<i>Median household income</i>			
(Thousand yuan)	42.00	53.40	26.33
0%–25%	– 3.27	– 8.90	1.64
25%–50%	27.68	28.19	26.96
50%–75%	56.79	57.19	55.59
75%–100%	189.67	198.49	145.21
<i>City Tiers</i>			
First tier (Nation and Rural: East)	44.03	9.55	35.03
Second tier (Nation and Rural: Middle)	30.82	19	37.05
Third tier + (Nation and Rural: West)	25.15	71.45	27.93
Observations (unweighted)	13,077	9,506	3,571

report higher levels of SWB, consistent with previous research by Churchill and Mishra (2017). Similarly, having parents who are willing to care for grandchildren is associated with increased wellbeing. This willingness not only alleviates financial burdens but also reduces psychological stress related to childcare, thereby promoting the wellbeing of adult children. In contrast, economic support between parents and adult children does not have a significant impact on wellbeing, despite positive coefficients. It is worth noting that the inclusion of monetary support in both directions (from parents to children and vice versa) may obscure the results.

Thirdly, most control variables reveal findings consistent with existing literature. For example, good health, homeownership especially multiple homeownership, higher household income, and greater assets significantly contribute to SWB. Age exhibits a U-shaped relationship with well-being, declining initially and then increasing after reaching the turning point around 43 years old in both urban and rural areas. This aligns with previous



**Table 6** Ordered logistic regression on subjective well-being (weighted, 0-unhappy, 1-neutral, 2-happy, 3-very happy)

	Nation	Urban	Rural
<i>Inter-generational connections</i>			
Living arrangement (Ref: Different village/community in the same city)			
Live together	<b>- 0.432<sup>***</sup></b> (0.07)	<b>- 0.395<sup>***</sup></b> (0.08)	<b>- 0.647<sup>***</sup></b> (0.15)
The same village/community	<b>0.009</b> (0.06)	<b>0.068</b> (0.07)	<b>- 0.162</b> (0.11)
Different city/same province	<b>- 0.131<sup>**</sup></b> (0.06)	<b>- 0.118<sup>**</sup></b> (0.07)	<b>- 0.232</b> (0.17)
Relationship with parents (Ref: Ordinary)			
Very close	<b>0.604<sup>***</sup></b> (0.08)	<b>0.623<sup>***</sup></b> (0.10)	<b>0.586<sup>***</sup></b> (0.12)
Close	<b>0.243<sup>***</sup></b> (0.09)	<b>0.264<sup>**</sup></b> (0.11)	<b>0.218</b> (0.14)
Mutual economic support last year (Ref: No)			
Parents' willingness to take care of grandchildren (Ref: No)	<b>0.206<sup>***</sup></b> (0.05)	<b>0.208<sup>**</sup></b> (0.07)	<b>0.183<sup>**</sup></b> (0.09)
No. of children under 7 yrs old	<b>- 0.033</b> (0.05)	<b>0.014</b> (0.06)	<b>- 0.107</b> (0.09)
No. of siblings	<b>- 0.001</b> (0.01)	<b>0.012</b> (0.02)	<b>- 0.018</b> (0.02)
Both Parents alive (Ref: One deceased)	<b>- 0.018</b> (0.05)	<b>0.021</b> (0.06)	<b>- 0.084</b> (0.08)
Health (Ref: Bad condition)			
Very good	<b>1.274<sup>***</sup></b> (0.08)	<b>1.190<sup>***</sup></b> (0.11)	<b>1.274<sup>***</sup></b> (0.13)
Good	<b>0.806<sup>***</sup></b> (0.08)	<b>0.690<sup>***</sup></b> (0.11)	<b>0.889<sup>***</sup></b> (0.13)
So-so	<b>0.333<sup>***</sup></b> (0.08)	<b>0.208<sup>**</sup></b> (0.10)	<b>0.417<sup>***</sup></b> (0.12)
Age (Square)			
Age	<b>- 0.163<sup>***</sup></b> (0.01)	<b>- 0.151<sup>***</sup></b> (0.02)	<b>- 0.186<sup>***</sup></b> (0.03)
Age*Age	<b>0.002<sup>***</sup></b> (0.00)	<b>0.002<sup>***</sup></b> (0.00)	<b>0.002<sup>***</sup></b> (0.00)
Gender *Marital status (Ref: Single daughter)			
Married son	<b>0.327<sup>***</sup></b> (0.09)	<b>0.316<sup>***</sup></b> (0.10)	<b>0.516<sup>*</sup></b> (0.29)
Married daughter	<b>0.567<sup>***</sup></b> (0.09)	<b>0.574<sup>***</sup></b> (0.09)	<b>0.653<sup>**</sup></b> (0.29)
Single son	<b>- 0.398<sup>***</sup></b> (0.11)	<b>- 0.439<sup>***</sup></b> (0.12)	<b>- 0.158</b> (0.32)

Table 6 (continued)

	Nation	Urban	Rural
Education level (Ref: Primary school or less; Rural: No schooling at all)			
Junior high school (Rural: Primary school)	<b>0.076</b> (0.06)	<b>- 0.063</b> (0.08)	<b>- 0.107</b> (0.14)
High school (Rural: Junior high school+)	<b>0.041</b> (0.06)	<b>- 0.022</b> (0.09)	<b>0.049</b> (0.14)
Some college +	<b>- 0.125*</b> (0.07)	<b>- 0.194**</b> (0.10)	
Mobility (Ref: Urban local)			
Rural local		<b>0.026</b> (0.07)	
Urban migrant		<b>- 0.003</b> (0.11)	
Rural migrant		<b>- 0.049</b> (0.10)	
<b>Homeownership (Ref: no house)</b>			
Only one house	<b>0.141**</b> (0.07)	<b>0.115</b> (0.07)	<b>0.534**</b> (0.25)
More than one house	<b>0.273***</b> (0.08)	<b>0.314***</b> (0.09)	<b>0.492*</b> (0.27)
Non-housing asset (Ref: Lowest quartile)			
25%–50%	<b>0.139**</b> (0.06)	<b>0.233***</b> (0.08)	<b>0.025</b> (0.10)
50%–75%	<b>0.325***</b> (0.06)	<b>0.357***</b> (0.08)	<b>0.262**</b> (0.11)
75%–100%	<b>0.452***</b> (0.07)	<b>0.496***</b> (0.08)	<b>0.358***</b> (0.12)
Household income (Ref: Lowest quartile)			
25%–50%	<b>0.115**</b> (0.06)	<b>- 0.004</b> (0.07)	<b>0.205**</b> (0.09)
50%–75%	<b>0.212***</b> (0.06)	<b>0.049</b> (0.07)	<b>0.395***</b> (0.10)
75%–100%	<b>0.402***</b> (0.07)	<b>0.199**</b> (0.08)	<b>0.762***</b> (0.12)
City Tiers (Ref: Third tier)			
First tier		<b>- 0.020</b> (0.08)	
Second tier		<b>- 0.034</b> (0.06)	
Regions (Ref: West)			
East	<b>0.075</b> (0.05)		<b>0.152*</b> (0.09)
Central	<b>0.261***</b> (0.05)		<b>0.407***</b> (0.09)
Cut1	- 3.791	- 4.044	- 3.557

**Table 6** (continued)

	Nation	Urban	Rural
Cut2	− 1.299	− 1.455	− 1.172
Cut3	0.93	0.77	1.077
<i>Log pseudolikelihood</i>	− 4.085e <sup>10</sup>	− 2.637e10	− 1.437e <sup>10</sup>
<i>Pseudo R</i> <sup>2</sup>	0.0585	0.0527	0.0691
<i>N</i>	13,077	9506	3571
Age U-shape test			
Utest	10.03***	8.03***	5.47***
Extreme point (Turning point)	42.82	43.41	42.69
95% Fieller interval for extreme point	[41.26, 44.28]	[41.37, 45.40]	[39.70, 45.13]

Standard errors are in parentheses. \*\*\* $p < 0.01$ ; \*\* $p < 0.05$ ; \* $p < 0.1$ ; Ref. = reference category

research (e.g., Liu & Shang, 2012; Hu, 2013; Cheng et al., 2016; Liu et al., 2021; Clark et al., 2019) and likely reflects the stresses associated with balancing work and family life, as noted by Switek and Easterlin (2018). Being married is associated with higher levels of happiness in both urban and rural areas, consistent with the literature. Despite prevailing patriarchal tradition, women in urban areas tend to be happier than men, regardless of their marital status. In rural areas, married daughters report higher levels of happiness than married sons, while there are not significant gender differences among singles. This gender-difference might be attributed to the pressure stemming from both the labor market and the marriage market, where men face increasing material expectations, including homeownership (Huang et al., 2020a, 2020b). The literature on gender difference in SWB presents mixed findings (Batz & Tay, 2018). Surprisingly, hukou status is not significant, contradicting some existing studies (e.g., Liu et al., 2017a, 2017b). However, the coefficients for migrants are negative, suggesting that they have slightly lower levels of SWB compared to urban local residents. Additionally, having some college education or higher in urban areas is negatively associated with SWB, possibly due to the fact that educated individuals tend to have more stressful occupations, reside in larger cities, and are more cognizant of social problems such as inequality and corruption.

Lastly, the results somewhat support the “urban paradox” hypothesis (Morrison, 2021; Morrison & Weckroth, 2018). While not statistically significant, residents in larger cities (first tier and second tier) tend to be less happy than those in smaller cities. In rural areas, individuals in more developed Eastern and Central regions report higher levels of SWB compared to those in the relatively poorer Western region. Notably, individuals in Central rural China exhibit the highest level of wellbeing.

## 2 Conclusions and Discussion

China has experienced a profound socioeconomic transformation in the last five decades, and this has had significant impact on family dynamics (e.g., sharp decline in fertility and household size, rising divorce rate, rising mobility, and rapid population aging) on the one hand, and wellbeing on the other hand. While there is a growing body of literature on both topics, there is limited research bridging these two and exploring implications of family changes on SWB. Existing literature on SWB has also focused mostly on individual and

national factors influencing SWB, with limited studies on meso-level local contexts. To fill both substantive and methodological gap, this research addresses the intersection of family dynamics and SWB and adopts a *familial* perspective to study intergenerational connections within the extended family and their implications for SWB. As population aging accelerates in both China and globally, inter-generational support has become increasingly important to eldercare, health, and SWB, and have significant implications for individuals/families and the society (Hansen et al., 2009; Margolis and Myrskylä 2011).

Using a national survey, this study shows that most Chinese report a high level of SWB in 2013, which has also been increasing over time in recent years (Huang et al., 2023). This seems to dismiss the pessimism on happiness in China (e.g., Easterlin, 2009; Easterlin et al., 2012; Helliwell et al., 2019), and is probably not surprising given rapid economic development in China and massive investment in poverty reduction and infrastructure development in recent decades (Clark et al., 2019). Findings on the role of age, health, marital status, homeownership, and financial resources are consistent with the literature.

Notably, despite profound socioeconomic transformation in China, family connections between adult children and aging parents remain strong due to the influence of traditional culture, which emphasizes inter-generational mutual support. Most adult children maintain close relationships and engage in monetary exchange with parents, while parents are willing to care for their grandchildren. These strong family connections generally contribute to higher levels of SWB, consistent with previous research emphasizing the positive impact of trust in family and neighbors (Churchill and Mishra (2017). Regarding living arrangements, most adult children either live with or in close proximity to their parents, particularly in rural areas. Living apart but in proximity, within the same city or county, emerges as the dominant spatial family connection, significantly promoting SWB compared to living far apart or co-residence.

These findings have important implications for policy making in China. While economic growth has been the primary focus in the past four decades, recent policy objectives have shifted towards creating a 'harmonious society' and promoting "common prosperity", with an increased emphasis on reducing social inequality and enhancing wellbeing (Graham et al., 2017). Some local governments have even adopted happiness indexes as a supplement to more traditional measures of development (Liu & Shang, 2012; Zhou & Yu, 2017). This study's findings on the positive impact of strong family connections and living apart in proximity provide concrete evidence for the government to prioritize facilitating family connections as another strategy to promote SWB, along with equitable and inclusive social and economic policies and programs. Urban and housing planning should consider the needs of both the elderly and young families, aiming to provide housing tenures, designs, and amenities to facilitate living in proximity between adult children and aging parents, thereby fostering intergenerational support and enhancing SWB.

This study acknowledges two main limitations due to data constraints. Firstly, the dataset lacks information on SWB of family members other than the household head, which limits the study of the impact of family connections on SWB of elderly parents. Future research should address this gap, particularly as the Chinese population and the world at large experience rapid aging. Secondly, this study is based on cross-sectional analysis, using data from a single survey, as subsequent surveys do not provide needed information for this analysis. Future research should adopt a longitudinal perspective to capture the dynamic nature of these family connections and their influences on SWB. Nonetheless, this research makes significant contributions to both bodies of the literature conceptually by studying the impact of connections within the extended family on SWB, and methodologically by

adopting a familial perspective and studying a unique meso-level context defined by relations rather than spatial or administrative boundaries.

## Appendix

See Table 7.

**Table 7** A Ordered logistic regression on subjective well-being (unweighted, 0-unhappy, 1-neutral, 2-happy, 3-very happy)

	Nation	Urban	Rural
<i>Inter-generational connections</i>			
Living arrangement (Ref: Different village/community in the same city)			
Live together	<b>- 0.447***</b> (0.06)	<b>- 0.427***</b> (0.06)	<b>- 0.583***</b> (0.15)
The same village/community	<b>- 0.011</b> (0.05)	<b>0.021</b> (0.06)	<b>- 0.134</b> (0.11)
Different city/same province	<b>- 0.143***</b> (0.05)	<b>- 0.161***</b> (0.06)	<b>- 0.151</b> (0.17)
Relationship with parents (Ref: Ordinary)			
Very close	<b>0.617***</b> (0.07)	<b>0.601***</b> (0.08)	<b>0.655***</b> (0.12)
Close	<b>0.211***</b> (0.08)	<b>0.207**</b> (0.09)	<b>0.233*</b> (0.14)
Mutual economic support last year (Ref: No)	<b>0.058</b> (0.04)	<b>0.041</b> (0.04)	<b>0.095</b> (0.10)
Parents' willingness to take care of grandchildren (Ref: No)	<b>0.195***</b> (0.04)	<b>0.188***</b> (0.05)	<b>0.185**</b> (0.09)
No. of children under 7 yrs old	<b>- 0.013</b> (0.04)	<b>0.036</b> (0.05)	<b>- 0.112</b> (0.09)
No. of siblings	<b>0.001</b> (0.01)	<b>0.001</b> (0.01)	<b>- 0.001</b> (0.02)
Both Parents alive (Ref: One deceased)	<b>- 0.005</b> (0.04)	<b>0.025</b> (0.05)	<b>- 0.072</b> (0.08)
Health (Ref: Bad condition)			
Very good	<b>1.322***</b> (0.06)	<b>1.322***</b> (0.08)	<b>1.227***</b> (0.13)
Good	<b>0.902***</b> (0.07)	<b>0.875***</b> (0.09)	<b>0.899***</b> (0.13)
So-so	<b>0.371***</b> (0.06)	<b>0.325***</b> (0.08)	<b>0.409***</b> (0.12)
Age (Square)			
Age	<b>- 0.148***</b> (0.01)	<b>- 0.136***</b> (0.01)	<b>- 0.174***</b> (0.03)
Age*Age	<b>0.002***</b> (0.00)	<b>0.002***</b> (0.00)	<b>0.002***</b> (0.00)

**Table 7** (continued)

	Nation	Urban	Rural
Gender *Marital status (Ref: Single daughter)			
Married son	<b>0.275***</b> (0.08)	<b>0.265***</b> (0.08)	<b>0.388</b> (0.29)
Married daughter	<b>0.506***</b> (0.08)	<b>0.526***</b> (0.08)	<b>0.513**</b> (0.29)
Single son	<b>- 0.459***</b> (0.10)	<b>- 0.479***</b> (0.11)	<b>- 0.297</b> (0.32)
Education level (Ref: Primary school or less; Rural: No schooling at all)			
Junior high school (Rural: Primary school)	<b>0.059</b> (0.05)	<b>- 0.008</b> (0.07)	<b>0.034</b> (0.14)
High school (Rural: Junior high school +)	<b>0.023</b> (0.05)	<b>- 0.008</b> (0.07)	<b>0.125</b> (0.14)
Some college +	<b>- 0.113*</b> (0.06)	<b>- 0.160*</b> (0.08)	
Mobility (Ref: Urban local)			
Rural local		<b>0.007</b> (0.05)	
Urban migrant		<b>0.073</b> (0.09)	
Rural migrant		<b>- 0.006</b> (0.08)	
Homeownership (Ref: no house)			
Only one house	<b>0.147**</b> (0.06)	<b>0.134**</b> (0.07)	<b>0.505**</b> (0.25)
More than one house	<b>0.285***</b> (0.08)	<b>0.314***</b> (0.08)	<b>0.499**</b> (0.27)
Non-housing asset (Ref: Lowest quartile)			
25%–50%	<b>0.154***</b> (0.05)	<b>0.221***</b> (0.06)	<b>0.039</b> (0.10)
50%–75%	<b>0.327***</b> (0.05)	<b>0.337***</b> (0.06)	<b>0.300***</b> (0.11)
75%–100%	<b>0.460***</b> (0.06)	<b>0.493***</b> (0.07)	<b>0.378***</b> (0.12)
Household income (Ref: Lowest quartile)			
25%–50%	<b>0.063</b> (0.05)	<b>- 0.040</b> (0.06)	<b>0.191**</b> (0.09)
50%–75%	<b>0.183***</b> (0.05)	<b>0.065</b> (0.06)	<b>0.366***</b> (0.10)
75%–100%	<b>0.337***</b> (0.05)	<b>0.192***</b> (0.07)	<b>0.714***</b> (0.12)
City Tiers (Ref: Third tier)			
First tier		<b>- 0.150**</b> (0.06)	
Second tier		<b>- 0.082</b> (0.05)	

**Table 7** (continued)

	Nation	Urban	Rural
Regions (Ref: West)			
East	<b>0.066</b> (0.04)		<b>0.076</b> (0.09)
Central	<b>0.241***</b> (0.05)		<b>0.366***</b> (0.09)
Cut1	- 3.519	- 3.635	- 3.349
Cut2	- 1.033	- 1.086	- 0.961
Cut3	1.202	1.153	1.289
<i>Log pseudolikelihood</i>	- 14,809.54	- 10,702.65	- 4072.17
<i>Pseudo R<sup>2</sup></i>	0.0581	0.0551	0.0640
<i>N</i>	13,077	9506	3571
Age U-shape test			
Utest	10.97***	8.80***	5.65***
Extreme point (Turning point)	43.09	43.55	42.69
95% Fieller interval for extreme point	[41.67, 44.44]	[41.67, 45.39]	[39.70, 45.13]

Standard errors are in parentheses. \*\*\* $p < 0.01$ ; \*\* $p < 0.05$ ; \* $p < 0.1$ ; Ref. = reference category

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