RESEARCH Open Access



Eldercare or childcare: intergenerational distribution in Chinese families facing care deficits

Xiaohui Zhong^{1,2} and Minggang Peng^{3*}

*Correspondence: pengminggang@gzhu.edu.cn

¹ Center for Chinese Public Administration Research, Sun Yat-Sen University, Guangzhou, People's Republic of China ² School of Government, Sun Yat-Sen University, Guangzhou, People's Republic of China ³ School of Public Administration, Guangzhou University, No. 230 Guangzhou University City Outer Ring Road, Guangzhou 510006, People's Republic of China

Abstract

In the face of an aging population and declining birth rates, urban Chinese families are grappling with a new challenge of simultaneously caring for both elderly parents and children. This study employs a three-generational analytical framework and a mixed research method to examine the intergenerational distribution of care resources and its consequences for urban Chinese families. The findings reveal intergenerational competition for care resources within families, with a general tendency to prioritize children and only respond to crisis situations for elderly parents; this leads to a care deficit for older individuals. Furthermore, social care resources are ineffective in bridging this care gap, thereby inducing anxiety within families as they strive to balance the care needs of both elderly parents and children. The study argues that insufficient support from care policies exacerbates the resource squeeze on the elderly side by the children's side within families, which calls for enhancing the policy support system to help families balance eldercare, childcare, and work commitments.

Keywords: Care deficits, Intergenerational competition, Intergenerational distribution, Three-generational framework

Literature review and research questions

Population aging is increasing the demand for eldercare in Chinese families. Adult children are the main caregivers for elderly parents and provide daily living assistance and care during illness recovery (Du et al. 2016a, b; Lu and Zhang 2018). However, with the acceleration of aging and long-term low fertility rates, Chinese families are encountering a new caregiving scenario in which they are required to care for both elderly parents and children simultaneously. On the one hand, the increasing lifespan of older people requires more family investment in eldercare. On the other hand, decreasing family size results in fewer family members available to provide this care. At the same time, delayed marriage and childbirth create potential overlap between child and eldercare within families. According to the latest data from the 2019 Chinese Social Survey (CSS2019), approximately 27% of urban Chinese households have children under 14 and elderly parents over 60, representing an increase of 2.95% since 2008. This suggests that many Chinese families may face future pressure from the simultaneous demands of caring for



© The Author(s) 2024. **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/.

elderly parents and children. With the implementation of the three-child policy (TCP), the number of children will increase, further increasing the potential overlap between eldercare and childcare (Yan 2016a, b), leading to a scarcity of family care resources.

A care deficit, also known as a care resource shortage, is defined as a decline in the ability of a society or family to meet the care needs of children, elderly parents, and other individuals (Beneria 2008; Williams 2010). Extensive research in the field of social policy on family care deficits primarily focuses on the impact of welfare systems and care policies (Wu 2020; Ngok and Fang 2017). However, Chinese care research shows a noticeable trend toward "fragmentation." Eldercare and childcare are often treated as separate issues, assuming that families face care pressure for children or elderly parents. However, Chinese family care encompasses both ends of the age spectrum (Peng and Hu 2015; Wang 2008). Additionally, family care and social care are often discussed separately, ignoring their intersection (Xiao and Jian 2020). However, market-oriented social care services in urban China are growing rapidly and play a significant role, second only to family care (Shi and Luo 2017). Therefore, examining Chinese care practices within the "two-generation framework" of elderly parents and children does not align with China's perception of family care responsibility and fails to reflect the differences in family care at both ends of the age spectrum.

Based on the above considerations, this study adopts a three-generation analytical framework to examine the process of organizing and allocating care resources within Chinese families when the care needs of elderly parents and children overlap. Inspired by the work of Di and Zheng (2016), who employed a "three-generation framework" to examine intergenerational economic resource allocation in rural eldercare, this study situates caregiving practices within the "three-generation chain" comprising elderly parents, adult children, and underage grandchildren. This approach allows for an investigation of how care resources are allocated to meet both eldercare and childcare needs in urban Chinese families. Additionally, this study integrates social care into the analytical framework, viewing it as a strategy employed by families to address the deficit of care resources.

This study examines the allocation of family resources from a social policy perspective, particularly emphasizing how government actions influence family caregiving decisions. The state plays a pivotal role in shaping family caregiving attitudes and arrangements by formulating policies related to caregiving, thereby influencing the division of care responsibilities between the state and the family. Family members, in turn, actively arrange care according to situational constraints, such as their own economic and social conditions, family structure, and cognitive concepts (Daly and Lewis 2000; Ngok 2018). Existing studies typically examine the impact of state policies on family caregiving decisions through the lens of three policy tools: financial provisions, leave arrangements, and social care services (Bettio and Plantenga 2004; Daly and Ferragina 2018). These policy tools correspond to the main resources required for organizing caregiving activities within families: money, services (labor), and time (Daly 2021). In the following section,

¹ Xiao and Jian (2020) comprehensively analyzed the "public-private divide" in care research. In addition, Chen Lu, Liu Baihui, Ji Jingyao, and other scholars have performed in-depth analyses of the relationship between social care and family care for older people from different perspectives. However, overall, relevant research is still lacking.

this study provides a brief literature review and evaluation of how care policies in China influence family caregiving across these three dimensions.

Money is indeed a crucial material resource for caregiving. In China, the state provides financial support to increase families' ability to purchase social care services, education, medical services, and goods, or to compensate for income loss due to family caregiving. The pension and medical insurance systems enhance older people's economic independence and have a certain crowding-out effect on adult children's economic investment (Liu 2015). However, due to significant regional differences in social insurance in China and the long-term care insurance system still being in its trial phase, eldercare service subsidies are limited to low-income older people. Consequently, the economic capacity of older people remains constrained. Research has shown that, in addition to pensions, adult children are the second largest source of income for older people; the more economic support they receive from their children, the greater their ability to purchase social care services (Du et al. 2016a, b; Liu and Hou 2016). On the other hand, the marketization of childcare services and child education is encouraged and rapidly developing in China. The cost of childcare and education is increasing rapidly (Ngok and Fan 2018), but childcare and education subsidies for ordinary families are quite limited. Although the state has increased its financial investment in childcare in recent years, it has focused mainly on preschool education for those 3-6 years old rather than childcare for those 0-3 years old (Ma 2020). Research has also found that young parents invest significantly in marketized goods and services, with this investment exhibiting notable class differences (Lin 2019; Wang 2017).

Time is an important nonmaterial resource in caregiving. Family members need to invest sufficient time to provide companionship, assistance, and care. Therefore, a shortage of care resources is often considered time poverty rather than merely a lack of money (Harvey and Mukhopadhyay 2007). To address the conflict between work and care needs for dual-income families (especially women), welfare states generally implement measures to balance work and family. These measures are mainly related to childcare, with few leave arrangements for eldercare (Bettio and Plantenga 2004). In China, some provinces have established family leave only for adult children, but this leave is relatively short. Studies have shown that 60% of urban disabled older people in China are primarily taken care of by adult children. However, approximately 55% of disabled older people receive less than 36 h of care per week from their adult children (Li and Liu 2019). Regarding childcare, in China, female employees are entitled to 98 days of maternity leave, while male employees are granted 10 to 15 days of paternity leave. Some local governments have recently extended maternity leave to approximately 180 days for female employees. However, parental leave for children aged 0-3 years is rarely covered by care policies. Prior studies have shown that Chinese families in urban and rural areas need to enlist grandparents to increase the time spent caring for their children (Zhong and Guo 2017; Chen et al. 2011).

The importance of service (labor) resources is tied to the distinctive nature of care work, which involves intimate physical contact and emotional bonding (Xiao and Jian 2020). Ensuring care quality requires sufficient caregivers who meet professional standards and possess a sense of moral obligation. China's care industry is severely understaffed, with a high turnover rate and a notable lack of professional caregivers. Research

has shown that more than 90% of disabled older people in China rely mainly on family care and infrequently use social care services (Su et al. 2015). The use of social services by older people is influenced by factors such as the degree of disability, family economic level, and number of adult children (Zhang and Wei 2014; Du and Wang 2017; Du et al. 2016a, b). In the area of childcare, since the 1980s, public nurseries and facilities for children aged 0–3 years have gradually disappeared, and many public kindergartens have either been converted or closed. At the same time, private nurseries and kindergartens have emerged and grown rapidly, although the service quality can vary greatly. In the twenty-first century, public services for children aged 0–3 years are still scarce (Ngok and Fan 2018). Research has shown that the primary caregivers for children aged 0–3 years in China are parents (especially mothers), followed by grandparents, live-in caregivers, and finally, nurseries or kindergartens (Zhang 2016). With the advent of marketization, cultural norms have gradually formed that view mothers as the "ideal caregivers" for children and fathers as the "ideal workers" (Tao and Feng 2020).

The literature suggests that China's current care policies do not provide sufficient support for ordinary families, leading families to rely mainly on their own resources for eldercare and childcare. This situation can create potential intergenerational competition for care resources, particularly when the demands of caring for children and kanle parents overlap. The middle generation, who must care for elderly parents and underage children, often finds itself in a dilemma, which scholars have already noted (Liu 2021; Saraceno 2010). How does the middle generation choose and allocate care resources in intergenerational competition?

Although few studies discuss the allocation of family care resources from a three-generation framework, research on intergenerational relationships in Chinese families suggests two possible decisions for allocating care resources. One possibility is the trade-off theory of prioritizing children over elderly parents. Studies have shown that China's family ethics and culture have shifted toward a new "child-centered" ideology, with care and material resources leaning toward the younger generation, resulting in an "inverted family" (Yan 2021). This intergenerational imbalance can be found in phenomena such as "the flow of favors downward" in rural areas and "elderly-devouring" in urban areas (He 2009; Wu 2015). Therefore, when faced with intergenerational competition, the middle generation may primarily allocate care resources to children, potentially disadvantaging eldercare.

Another possibility is the equal emphasis on eldercare and childcare. Studies have shown that both eldercare and childcare are equally important for a fulfilling life, negating the need to prioritize one over the other (Liu 2021). Scholars argue that in the process of individualization, individuals striving for success are placed in a risky situation, and the family provides protection for individuals to resist these risks. Therefore, the importance of family to individuals in China has increased (Yan 2016a, b). The return to parental authority, filial piety, and intergenerational intimacy is a reflexive mechanism of the process of individualization, and the younger generation's sense of filial responsibility has strengthened (Liu 2017; Liu and Li 2020). Therefore, even if there is a trend of prioritizing resource allocation to (adult) children rather than older people, this is an ethical shift rather than a collapse of filial piety (Yang and Li 2009; Croll 2006; Di and Zheng 2016). It can be inferred that in the face of intergenerational competition, the middle

generation may allocate some resources to elderly parents or seek eldercare services to supplement family care resources, thereby achieving a balance between eldercare and childcare.

The question remains: is it favoring children over elderly parents or caring for both? This study examines intergenerational resource allocation decisions in Chinese families facing care deficits from a three-generation perspective. This study specifically addresses three questions. First, does intergenerational competition exist for care resources between elderly parents and children in Chinese families? Second, how does the middle generation consider and make care arrangements if competition exists? Third, if family care resources are insufficient, how does the middle generation seek marketized social care services to meet the needs of elderly parents? This study aims to reveal the risk groups facing care deficits in families and discuss how the government should adjust the division of caregiving responsibilities between families and the state in light of the TCP.

Analytical framework and research methods

Analytical framework

This study examines the dynamics of the intergenerational allocation of family care resources and its consequences within a three-generation analytical framework. First, it is important to analyze the relationship between family care and social care under this framework. When care pressure accumulates and overlaps, family resources may be severely lacking, necessitating the introduction of social care resources. However, limited research examines the relationship between family care and social care. Therefore, it is necessary to investigate how the middle generation understands the opportunities and constraints provided by care policies and how they make resource allocation decisions.

Second, within the three-generation framework, it is important to analyze the differences in allocating and converting care resources across multiple dimensions. Existing studies mainly focus on the intergenerational distribution of economic resources. However, when care pressure is superimposed, human resources and time also become elements of resources, and economic resources can be converted into social care services under certain conditions. In addition, existing research has shown that urban Chinese parents have a set of scientific parenting knowledge and skills, but little research has been conducted on middle-generation parents' understanding of eldercare knowledge. Studies in gerontology have shown that acquiring basic eldercare knowledge and skills can improve the quality of care and alleviate caregiver stress (Given et al. 2008). Therefore, it is necessary to examine care resource allocation from different dimensions, especially with regard to the reserve of eldercare knowledge resources.

Third, within the three-generation framework, it is particularly important to analyze gender and class inequalities that may be embedded in family care deficits. The elderly parents are important childcare providers, relieving the pressure on working mothers. Elderly disability not only means a reduction in family childcare resources but also that the middle generation needs increased resources for eldercare. This pressure may accumulate on women. Therefore, examining the impact of older people's physical condition on resource allocation is necessary, especially for families with poorer economic conditions and women.

Mixed research methods

This study adopts a mixed research method that combines quantitative and qualitative approaches to investigate how Chinese families address the overlapping demands of caring for children and elderly parents. A mixed research method helps researchers avoid the limitations of using a single method in terms of research depth and representativeness (Mason 2017; Lieberman 2005). This study performed a quantitative analysis based on large-scale survey data to examine whether there is intergenerational competition for care resources in urban families and the basic characteristics of the intergenerational distribution of care resources. Qualitative analysis, on the other hand, provides a more in-depth analysis of the dynamics of the allocation process and its consequences within families. For example, how do family caregivers (mainly the middle generation) cope with the difference between caring for children and caring for elderly parents, how do they understand the meaning of caregiving for elderly parents, children, and themselves, and how do they view the difference between social and family care, among others? These "process-oriented" and "meaning-oriented" inquiries are better suited for qualitative research, which helps to unravel the dynamic process of allocation decisions and the respondents' interpretation of caregiving meaning (Chen 2020).

According to a three-generation framework, the allocation of family care resources is influenced by care policies. When the care needs of elderly parents and children overlap, the middle generation may make different decisions about allocating care resources in different contexts. Based on the willingness of the middle generation to care for elderly parents and children, this study proposes Hypothesis 1.

Hypothesis 1 When the care needs of elderly parents and children overlap, there is intergenerational competition for family care resources, and a "children-first" strategy is adopted. The more the middle generation supports policies favoring family care for children, the more they are likely to favor social care service policies for elderly parents.

When family care needs overlap, the "child-first" allocation strategy tends to be highlighted, leading the middle generation to allocate a majority of their care resources to children, which can be detrimental to eldercare. At the same time, given the common practice of grandparenting in Chinese families, elderly parents who initially receive care may transit into childcare giver roles under the "child-first" strategy. In addition, an increase in the number of children can result in older people spending more time caring for their grandchildren, thereby changing the intergenerational distribution of family resources (Liu and Wang 2022). Therefore, this study proposes Hypothesis 2.

Hypothesis 2 The number of children has a moderating effect on the positive correlation between willingness to adopt family care for children and willingness to use social care services for elderly parents.

In summary, the quantitative analysis seeks to reveal whether children and elderly parents compete for care resources from the middle generation when their needs overlap and whether the allocation of family resources follows a "children-first" strategy. The qualitative analysis further shows the process of intergenerational family resource distribution under this competitive pattern from four dimensions: time, labor/services, knowledge, and financing. It particularly focuses on the decision-making process of the middle generation within the constraints of care policies, examines the disparities in resource allocation for elderly parents and children by the middle generation, and explores how the middle generation leverages social resources to meet the care needs of elderly parents.

Data source and operationalization

The quantitative data for this study are derived from the "National Survey on Public Attitudes toward Welfare" conducted by the School of Government at Sun Yat-sen University in 2021 across three provinces: Guangdong, Jiangsu, and Shaanxi. The survey targeted residents aged 18 and above in these three provinces and used a multistage, stratified, and random sampling approach to conduct telephone surveys in 44 prefecture-level cities. A total of 8868 respondents were successfully surveyed. The survey was localized and improved to fit specific research questions, and the data used in this study were derived from the "work ethics," "social care," and "respondent personal information" sections. In accordance with the purpose of this study, respondents with a rural hukou/household status, an unmarried status, and an age of 60 and above were removed,² and we received a sample of 2439 urban respondents.

The willingness to provide eldercare and childcare is mainly measured with questions regarding care policies for supporting eldercare and childrearing in questionnaires. This study uses the first question in the fourth part of the questionnaire, "What social support provided by care policies do you think is most needed for caring for elderly family members? (multiple choices available)" and the second question, "What support measures do you think are most needed for the universal three-child policy? (multiple choices available)." The first question included nine categories of social support, and the second question included 11 categories of supporting measures commonly mentioned in government reports and media coverage. Consistent with the research by Lu and Zhang (2018), this study uses the "demand" dimension to measure individual "willingness." In the study of attitudes toward welfare policies, theoretical perspectives based on the self-interest of individuals have emphasized that instrumental rationality and personal gains and losses are closely related to personal preferences and willingness (Ngok 2018). Since willingness is a multidimensional and inclusive concept and demand is a rather important aspect of willingness construction, respondents' willingness to care for elderly parents is more likely to be an expression of their needs in the face of a series of objective constraints on themselves or their families and has the characteristic of "situational rationality." Considering data availability and feasibility, this is currently the best way to operationalize variables.

 $^{^2}$ Unmarried respondents are likely to give "guesswork" responses, and as this study explores the willingness of the middle generation to take care of both children and elderly parents, unmarried respondents and those aged 60 and above were excluded from the sample.

Regarding attitudes toward policies supporting childrearing, "increasing investment in compulsory education" had the highest support rate (75.93%), followed by "increasing maternity leave and parenting leave for mothers" (73.88%), and "increasing paternity leave and parenting leave for fathers" (72.04%). Among the 11 maternity support measures, options related to middle-generation family care rank higher, indicating that respondents tend to favor parental care in childcare. This finding is consistent with the literature, which suggests that mothers are considered the ideal childcare givers in modern society, and other forms of care are secondary choices (Wu and Niu 2019). Regarding attitudes toward social support provided by care policies for eldercare, "accompanying the elderly to see a doctor" had the highest support rate (72.08%), followed by "solving technical problems of online and mobile internet eldercare services for the elderly (such as online registration)" (65.68%) and "home visits" (59.40%). Options supporting community home-based eldercare rank relatively high, a ligning with the findings of existing literature on the willingness of elderly parents to age in place (Du et al. 2016a, b).

When conducting regression analysis, the dependent variable is the willingness to use social care services for elderly parents, which is measured by whether the respondent chose a "daycare center or eldercare center." Care services in eldercare centers and daycare centers differ from traditional family care and are similar to institutional care (such as nursing homes) in social care mode⁴ (Du et al. 2016a, b; Lu and Zhang 2018). In this study, the dependent variable is measured as a binary variable and assigned values of 1 and 0. Two independent variables are incorporated into the analysis. The first independent variable is the willingness to adopt family care for children, which is measured by whether the respondent chose "increasing maternity leave and parenting leave for mothers" or "increasing paternity leave and parenting leave for fathers," both of which are measured as binary variables and assigned values of 1 and 0. The second independent variable is the number of underage children in the family. The number of underage children will affect the distribution of family care resources in terms of money, time, services, and knowledge, affecting the allocation of family care resources. The number of underage children included in the survey questionnaire was included in the statistical analysis.

The control variables include age, gender, income level, perceived gender division of labor in the family, education level, marital status, and residential area. Age is an important control variable because it indicates the possibility of fertility at different birth policy nodes, which affects the distribution of family care resources. Perceptions of the gender division of labor in the family can affect the willingness to care, as people who have more children are likely to hold more traditional perceptions of the gender division of labor in the family (Torr and Short 2004), which will affect their willingness to adopt social care for the parents. The variable of perceived gender

 $^{^3}$ Community home-based eldercare services do not necessarily mean relying solely on a dult children for care. It can also include spousal care or self-care.

⁴ Academic researchers have different definitions for the classification of eldercare models. According to the study by Lu and Zhang (2018), eldercare demand patterns can be classified into three types: "traditional care mode," and "socialized care mode." The "socialized care mode" mainly refers to care services provided by the government or the community. The "daycare center or eldercare center" option in the questionnaire was more closely related to the category "socialized care mode." Moreover, the study by Du et al. (2016a, b) considered "daycare centers and eldercare centers" to be important components of social care facilities.

Table 1 Descriptive statistics of the main variables (N = 2439)

Variables	Mean	S.D	Min	Max
Willingness to use social care services for elderly parents (daycare center or eldercare center)	0.529	0.499	0	1
Willingness to adopt family care for children (increasing maternity leave and parental leave for mothers)	0.739	0.439	0	1
Willingness to adopt family care for children (increasing paternity leave and parental leave for fathers)	0.720	0.449	0	1
Willingness to use social care services for children (increasing investment in care services for infants and young children under three years old)	0.593	0.483	0	1
Number of underage children	1.081	0.854	0	5
Age	40.389	8.291	20	59
Gender $(1 = male)$	0.478	0.499	0	1
Income level (1 = less than 22,000 yuan, 2 = 22,000 yuan to 80,000 yuan, 3 = 80,000 yuan to 150,000 yuan, 4 = 150,000 yuan and above)	2.616	0.895	1	4
Education level (1 = no schooling, 2 = elementary school, 3 = junior high school, 4 = technical secondary school, 5 = technical school, 6 = vocational high school, 7 = general high school, 8 = college, 9 = undergraduate, $10 = master$, $11 = PhD$)	7.281	2.273	1	11
Marital status (0 = divorced, 1 = married)	0.961	0.191	0	1

division of labor in the family is measured with three questions in the "work ethics" section, namely, "men work outside the home, women work inside the home"; "if one person needs to take care of the family, women are more suitable"; and "if the wife earns more than the husband, more family problems arise" (Likert 5-point scale), which includes attitudes toward the family division of labor and gender awareness. Measurements were performed through factor analysis (principal component analysis) (Bartlett's sphericity test; $Prob > chi^2 = 0.000$; KMO = 0.714). The descriptive statistics of the main variables are shown in Table 1. The quantitative part of this study uses descriptive statistics and binomial logistic regression.

The qualitative analysis in this study draws on data from in-depth interviews with two groups of people: urban middle-class families and nursing home and live-in caregivers. The middle-class families were purposively sampled because their relative financial capability allows them to use private care services. This helps researchers to examine the integration of social care resources within families. Nursing homes and live-in caregivers for elderly parents were also selected because they represent typical forms of social care for older people in urban families. Their work choices and work experiences offer an alternative perspective on how families use social care resources to care for their elderly members.

Data related to middle-class families were obtained through in-depth interviews with 12 families in Guangzhou conducted from September to November 2021. Each interviewed family had at least one member aged over 60 years, one child under 14 years, and owned a minimum of two local properties. The interviews with urban families included ten adult children, i.e., the middle-generation members and two elderly parents. Data on nursing homes and live-in caregivers were collected through interviews conducted between 2016 and 2021 with 16 caregivers across Shanghai, Beijing, and Guangzhou. The distribution included six nursing home caregivers from Beijing, eight nursing-homes caregivers from Shanghai, and two live-in caregivers

from Guangzhou. In total, the qualitative research comprised 28 interviewees, each lasting approximately one hour on average. This study used a three-generation analytical framework to conduct a thematic analysis of the interview data and compare different types of care and family cases.

Research results

Intergenerational competition under dual care pressure

This study used a binomial logistic regression model for quantitative analysis to explore intergenerational competition for care resources. Model 1 in Table 2 measures the willingness to adopt family care for children by "increasing maternity leave and parental leave for mothers." The results of the binomial logistic regression model show that controlling for age, number of underage children, gender, income level, perceived gender division of labor in the family, education level, marital status, and residential area, the willingness to adopt family care for children has a significant positive effect on the willingness to adopt social care for elderly parents. The respondents who choose to increase maternity and parental leave for mothers are 3.199 times (e^{1.163}) more likely to be willing to use social care services for elderly parents than respondents who do not choose to increase maternity and parental leave for mothers.

Model 2 in Table 2 uses "increasing paternity leave and parental leave for fathers" to indicate the willingness to adopt family care for children. Similar to the results of Model 1, the willingness of families to adopt family care for children has a significant positive effect on the willingness to use social care services for elderly parents, and the respondents who choose to increase paternity leave and parental leave for fathers are 3.655 times (e^{1.296}) more likely to be willing to use social care services for elderly parents than those who do not.

In Model 3, the maternity, paternity, and parental leave of both mothers and fathers are incorporated as measurements for the willingness to adopt family care for children, and the results are similar to those of Models 1 and 2. Respondents who choose to increase maternity and paternity leave are $1.696~(e^{0.528})$ and $2.611(e^{0.960})$ times, respectively, more likely to be willing to use social care services for elderly parents than those who do not.

In summary, the results in Table 2 show that using mothers' maternity leave and fathers' paternity leave as measures of willingness to adopt family care for children has a significant positive effect on willingness to adopt family care for children and to use social care services for elderly parents. The more supportive the respondents are of family care packages and policies for children, the more likely they are to choose elderly care services. Therefore, it can be inferred that there is intergenerational competition for family care resources when faced with multiple and overlapping caregiving demands for both children and elderly parents.

Age, number of underage children, and income level also impact respondents' willingness to take care of elderly parents through social means to varying degrees. The results of Model 3 show that respondents born in 1975–1984 and 1985–1994 were 1.211 times ($e^{0.192}$) and 1.033 ($e^{0.033}$)times, respectively, more willing than respondents born before 1975 to use social care services for elderly parents. These age groups are still in their childbearing years, and with the implementation of the universal TCP,

Table 2 The influence of the willingness to adopt family care for children on the willingness to use social care services for elderly parents (binomial logistic regression)

	Model 1	Model 2	Model 3
Willingness to adopt family care for children (increasing maternity leave and parental leave for mothers)	1.163*** (0.099)		0.528*** (0.131)
Willingness to adopt family care for children (increasing paternity leave and parental leave for fathers)		1.296*** (0.098)	0.960*** (0.128)
Age (reference group = born before 1975)			
Born in 1975–1984	0.322* (0.161)	0.267* (0.134)	0.192* (0.094)
Born in 1985–1994	0.193* (0.096)	0.074* (0.037)	0.033* (0.016)
Born after 1995	- 0.066 (0.354)	- 0.214 (1.322)	- 0.019 (0.018)
Number of underage children (reference group = no un	nderage child)		
Having only one underage child	- 0.158 (0.125)	- 0.185 (0.126)	- 0.179 (0.127)
Having two or more underage children	- 0.231* (0.116)	- 0.268* (0.131)	- 0.255* (0.128)
Gender $(1 = male)$	- 0.173* (0.087)	- 0.168 (0.088)	- 0.166 (0.087)
Income level (reference group = below 22,000 yuan)			
22,000 yuan to 80,000 yuan	0.076 (0.175)	0.080 (0.175)	0.057 (0.176)
80,000 yuan to 150,000 yuan	0.082 (0.187)	0.134 (0.186)	0.108 (0.098)
150,000 yuan and above	0.132* (0.065)	0.192* (0.097)	0.076* (0.037)
Perceived gender division of labor in the family	0.063 (0.044)	0.059 (0.044)	0.057 (0.044)
Education levels (1 = no schooling, 2 = primary school, 3 = junior high school, 4 = technical secondary school, 5 = technical school, 6 = vocational high school, 7 = general high school, 8 = college, 9 = undergraduate, $10 = master$, $11 = PhD$)	0.076*** (0.021)	0.072*** (0.023)	0.073*** (0.020)
Marital status (1 = $married$)	0.046 (0.038)	0.041 (0.056)	0.040 (0.076)
Province (1 = Guangdong Province)	- 0.008 (0.080)	- 0.040 (0.132)	- 0.035 (0.089)
Constant	- 1.707* (0.812)	- 1.742*** (0.315)	- 1.861*** (0.317)
Log likelihood	- 1584.356	- 1563.999	- 1556.004
Pseudo-R ²	0.062	0.073	0.077
Obs	2439	2439	2439

(1) The sample excludes respondents who are farmers, singles, and those aged 60 and over. (2) The numbers in brackets are standard errors. (3)*p < 0.05, **p < 0.01, ***p < 0.001

the possibility of caring for both elderly parents and children will increase. Therefore, compared with respondents born before 1975, they are more inclined to take care of elderly parents through social means to alleviate dual pressure. Compared with lowincome respondents (annual income below 22,000 yuan), respondents with a personal annual income of more than 150,000 yuan are more willing to use social care services for elderly parents. In contrast, other income categories of respondents show no significant difference, indicating that economic factors influence the willingness to use social care services for elderly parents. Moreover, among respondents with two or more underage children, the odds of their willingness to use social care services for elderly parents is 22.51% (e^{-0.255}) lower than that of respondents without underage children. This may be due to the "children-first" care resource allocation strategy: when the number of underage children increases, elderly parents who should have been taken care of become childcare providers, forming an intergenerational cooperative childrearing pattern within the family. In addition, education level significantly influences the willingness of elderly parents to accept social care. No significant effects were found for the other control variables in Model 3.

Table 3 Analysis of the relationship between the willingness to use social care services for children and the willingness to use social care services for elderly parents (binomial logistic regression)

	Model 4 (full sample)	Model 5 (Married with
Willingness to use social care services for children (increasing investment in care services for infants and young children under 3 years old)	0.283 (0.178)	0.394 (0.246)
Age (reference group = born before 1975)		
Born in 1975–1984	0.142 (0.078)	0.225* (0.088)
Born in 1985–1994	0.297** (0.110)	0.374* (0.163)
Born after 1995	0.176 (0.367)	0.098 (0.378)
Number of children (reference group = no underage child)		
Having only one underage child	- 0.147 (0.129)	
Having two or more underage children	- 0.221 (0.142)	- 0.107* (0.053) [ref = only one underage child]
Other variables	controlled	controlled
Constant	- 2.165*** (0.328)	- 1.207*** (0.354)
Log likelihood	- 1508.042	- 1140.846
Pseudo-R ²	0.106	0.072
Obs	2439	1778

⁽¹⁾ The sample excludes rural households, unmarried respondents, and respondents aged 60 and above. (2) The numbers in brackets are standard errors. (3)*p<0.05,**p<0.01, ****p<0.001.(4) Other control variables such as gender, perceived gender division of labor in the family, income level, marital status, and province have been included in the analysis of models 4 and 5, and the results are not listed due to space limitations

To strengthen the robustness of the above statistical inferences and avoid statistical bias, this study further analyzes the relationship between the willingness to use social care services for children and for elderly parents (see Table 3), using the option of "increasing investment in care services for children under three years old" to measure the willingness to adopt social care for children. Model 4 is the analysis of the full sample, and Model 5 is the analysis of the sample of married respondents with children. The results show that the influence of the willingness to use social care services for children on the willingness to use social care services for elderly parents is not statistically significant. This may be due to two reasons: first, the "arena" of intergenerational competition for care resources discussed in this study is within the family rather than within the social support arena; second, families may consider factors such as service quality and economic affordability more when choosing social care services for childcare, which are not directly related to the willingness to use social care services for elderly parents.

Intergenerational distribution strategies: children first, crisis response only for the elderly

To further analyze the caregiving resource allocation strategies, this section explores the moderating effect of the number of underage children on the relationship between willingness to provide family care for children and willingness to use social care services for elderly parents. Models 6 and 7 in Table 4 show that after incorporating the interaction term between the number of underage children and the willingness to provide family care for children, neither the category "only one underage child" nor its interaction term passed the 5% level of significance test. However, the category "two or more underage children" and their interaction terms with the willingness to

Table 4 The moderating effect of the number of underage children on the relationship between the willingness to adopt family care for children and the willingness to use social care services for elderly parents (binomial logistic regression)

	Model 6 (increasing maternity leave and parental leave for mothers)	Model 7 (increasing paternity leave and parental leave for fathers)
Willingness to adopt family care for children	0.613** (0.227)	0.844** (0.329)
Number of children (reference group =	= no underage child)	
Having only one underage child	- 0.267 (0.206)	- 0.051 (0.214)
Having two or more underage children	- 0.083* (0.042)	- 0.075* (0.037)
Willingness to adopt family care for children × only one underage child	0.250 (0.241)	0.133 (0.297)
Willingness to adopt family care for children × two or more underage children	- 0.165* (0.082)	- 0.215* (0.108)
other variables	Controlled	Controlled
log likelihood	- 1588.665	- 1602.874
Pseudo-R ²	0.071	0.084
Obs	2439	2439

(1) The sample excludes rural households, unmarried respondents, and respondents aged 60 and above. (2) The numbers in brackets are standard errors. (3)*p < 0.05,**p < 0.01, ***p < 0.001. (4) Due to space limitations, other control variables are not shown in Table 4

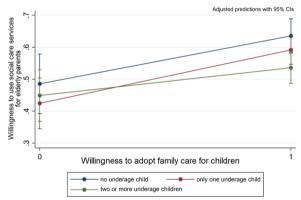


Fig. 1 The moderating effect of the number of underage children on the relationship between the willingness to adopt family care for children and the willingness to use social care services for elderly parents. *Note*: the willingness to adopt family care for the children is measured by whether the respondent chooses "increasing maternity leave and parenting leave for mothers", and the willingness to use social care services for the elderly is measured by whether the respondent chooses "daycare center or eldercare center"

provide family care for children both passed the 5% and above level of significance test, and their interaction coefficients were negative, indicating that as the number of underage children reached two or more, the positive relationship between the willingness to provide family care for children and the willingness to use social care services for elderly parents decreased. This study visualizes the moderating effect of the number of underage children, and Fig. 1 shows that compared to respondents with fewer underage children, those with two or more underage children have a flatter predicted line and a lower slope, which is consistent with Hypothesis 2.

It can be further inferred from the results of the moderating effect that "children first" is, to some extent, a principle in allocating resources for family care. Specifically, compared to those without underage children or with only one underage child, in the group with two or more underage children, the positive relationship between the willingness to provide family care for children and the willingness to adopt social care services for elderly parents will be weakened. As the number of underage children in the family increases, elderly parents who should be cared for likely become caregivers, establishing intergenerational cooperation in childrearing. However, the transition of elderly parents from care recipients to caregivers also depends on their health conditions. Therefore, the "children-first" principle of care resource allocation still needs to be further identified in different family and caregiving situations.

Time imperative for childrearing and crisis-driven emergency response in eldercare

The interviews revealed that the middle generation lacked time, and their limited time was mostly devoted to childrearing. The interviewed parents showed a high sense of responsibility and a great urgency in regard to investing time in their children. The time points of "three years old," "six years old," "ten years old," "middle school entrance examination," and "university entrance examination" were repeatedly mentioned. This is a long-term plan rather than a temporary arrangement. Parents consider the period from birth to high school a critical stage of children's growth and development, involving their sense of security, self-expression, communication skills, learning interest and competence development, and value formation. In a plan that spans more than ten years, each time node is similar to an engineering acceptance date, with different tasks and requirements for parents and a sense of urgency permeating daily life.

The mothers interviewed generally highly identified themselves as the primary caregivers for their children. They indicated that if a mother does not provide sufficient companionship (including care, guidance, and supervision) during this critical stage, it will be difficult for the child to achieve success in the future and may even suffer from physical and mental problems. The mother in Case 1 resigned from her job after the child was born. She mentioned that the family was under financial pressure, but she did not intend to go out and find a job.

As a mother, I am primarily responsible for parenting... What children need most is companionship, to give them a sense of security, especially during the ages of 3 and 6... Many parents are too busy with work, and their children develop depression and a sense of emptiness in their teenage years. What's the point of earning an extra 200,000 yuan a year? In terms of a child's growth, time cannot be regained, and there is no way to turn back the clock (Case 1).

Providing sufficient companionship during critical periods is also crucial for building parent—child relationships and meeting the emotional needs of both children and mothers. Expectations for children's achievements and health, as well as the demand for intimacy, make parents (especially mothers) highly responsible for childcare. Therefore, when the family's economic conditions permit, mothers are willing to compromise career development, economic independence, and leisure freedom.

This compromise, while ostensibly a negotiation between couples or a decision by women, is intrinsically linked to China's parental leave policy. The mother in Case 5 often works overtime and is apprehensive about taking leave to attend to her family for fear of its potential impact on her career advancement, a concern that her male peers do not share. Despite having comparatively flexible working hours, the mother in Case 4 still experienced a lack of time.

What is most lacking is time. It is not like giving me a few thousand or tens of thousands of Yuan and I will be absolved of these responsibilities. Raising a child is not too difficult, but I hope she can succeed. The most crucial stage of a child's growth is from 3 years of age until they start middle school, and it is difficult to rely solely on family members. Maternity leave now adds at most one or two months, which still cannot solve the lack of accompanying time (Case 4).

The identity of being the primary caregiver requires a mother to invest a significant amount of time in accompanying her child's growth. However, the lack of parental leave policies creates a serious conflict between a woman's work responsibilities and childcare duties. Childcare responsibilities impose rigid constraints on women, and the greater time investment required exacerbates gender inequality for women in the labor market.

In contrast, the time invested by the middle generation in caring for elderly parents is often a crisis-driven provisional response. Most interviewees admitted that they "rarely take care of their aging parents" on a regular basis, and we did not hear any time-nodes-based narratives about the physical and mental development of elderly parents during the interviews. In families where elderly parents are in good health, "haven't thought that far ahead," "haven't thought about it yet," and "will decide based on the situation" are phrases repeatedly used by interviewees. This indicates that the middle generation has not made plans for eldercare or made clear arrangements. This starkly contrasts the long-term planning for childcare, where the sense of urgency conveyed by the saying "When an adult child wishes to care for their elderly parents, they are no longer around" was not reflected in the interviewees' narratives.

Despite the perception that children are responsible for eldercare, in contrast to the perception of being the primary caregiver for children, many interviewees indicated the likelihood of resorting to professional social care service options in the future, such as nursing homes or live-in caregivers, for at least one of their two elderly parents.

However, when elderly parents can take care of themselves, almost none of the interviewees took action to visit nursing homes on the spot or search for information about them. This hesitation is closely related to elderly parents' rejection of institutional eldercare services. Overall, the elderly parents in the interviewed families preferred to stay at home with their spouses or adult children and did not agree to live in nursing homes. News reports about abuse by care workers and poor quality of care services in nursing homes have further increased the hesitation of adult children. Therefore, in addition to the time spent caring for children, the low willingness of elderly parents and the varying quality of marketized eldercare services have led to a lack of planning for adult children to care for elderly parents.

When elderly family members experienced serious illnesses or emergencies, the middle generation of the interviewed families (Cases 2/3/5/7/9/10) responded quickly, allocating a portion of their time and effort to care for the elderly parents. In some families (Cases 5/11/12), once the crisis has subsided, there is an inclination to transition from family care to social care. This is because elderly parents are incapable of self-care and require long-term care and assistance. We found that the middle generation who is only adult child faced a serious time deficit. Case 5 was an only adult child (daughter) with one disabled elderly parent, one elderly parent with cancer, and her 3-year-old daughter. Despite the employment of a live-in caregiver to care for her elderly parents, she still struggled with the "triple burn" of time poverty, her professional obligations, eldercare, and childrearing.

High-quality child companionship and eldercare dependent on kinship networks

The middle generation provides high-quality companionship for their children, while the elderly family members receive emergency care from their spouses or siblings, and the adult children mainly serve as medical agents. The middle generation interviewed, especially the mothers, were heavily involved in the care and education of their children. These parents believe that investing in their children's education, skills, hobbies, and relationships will pay off in the future and that their companionship, supervision, and guidance will ensure their investments are realized.

This high-quality companionship and attention involved in childrearing necessitate substantial human resource investment, posing a challenge for working mothers to maintain a balance. During the one-child policy (OCP) period, urban Chinese families effectively resolved the labor/service deficit in child-rearing for working mothers through intergenerational cooperation. Specifically, grandparents handled physiological needs, while parents took charge of social affairs (Xiao 2014). This is consistent with our findings that most interviewed families have adopted or previously adopted intergenerational cooperation in childcare. However, the introduction of universal TCP and the aging of grandparents, coupled with the increase in the number of children, have intensified this issue. Despite grandparents' involvement from both sides of the family in childcare, human and labor deficits remain significant challenges.

Most interviewed parents stated that increasing childcare services for children between zero and three years old is one of the top three childcare-supported measures that families need the most. However, parents emphasized the importance of safety in childcare services. Middle-class parents, with high-quality care of children by their mothers as a reference (Wu and Niu 2019), have high safety requirements for childcare services. This finding echoes the previous low ranking of childcare service options for those aged 0–3 years and the weak correlation between the willingness to utilize social care services for children and the willingness to adopt similar services for elderly parents, as indicated by the data in Table 3.

On the other hand, the daily lives of elderly parents who can care for themselves are characterized by self-care and mutual care by their spouses. The common understanding of the middle generation was that elderly parents "do not need me (to take care of them)," which contrasted with the emotional needs of children and the middle generation themselves. The middle generation considered whether or not to participate in eldercare primarily based on whether or not the elderly parents can care for themselves. They have two understandings of eldercare: one focusing on physiological needs and the

other on treatment and rehabilitative needs. The interviewed middle generation was not unaware of the emotional and companionship needs of elderly parents but they believed that these needs can be met through spouses, friends, or siblings and that they do not need to take on this role themselves.

In the interviews, we found that adult children assume the role of agents in dealing with the healthcare system in medical emergencies. As the father in Case 2 stated,

Before, when my mom had to undergo bypass surgery for her heart disease, we definitely went to the hospital on the day of the surgery. We had to communicate with the doctor beforehand, and my mom would also ask for my opinion on whether to have the surgery, use imported or domestic materials... Fortunately, my mom's sister was there, and they have a good relationship. She stayed overnight, and then we hired a care worker in the hospital. Now, my dad accompanies my mom for followup visits, and I look at her test results every time (Case 2).

As seen in Case 2, the specific responsibilities undertaken by adult children mainly included contacting hospitals, discussing surgical plans with doctors, communicating with elderly parents, arranging postoperative care and long-term care, and other social affairs. Although the interviewed families rarely had adult children who personally participated in caring for elderly parents, in families with multiple adult children, the middle generation had experience in or made plans for taking turns caring for elderly parents. Families with multiple adult children showed an advantage of human resource mobilization during crises, whereas only-child families faced a more significant challenge in addressing the human resource shortage for eldercare.

Abundant childrearing knowledge versus poor eldercare knowledge

Despite adult children taking on the role of agents in dealing with the health care system on behalf of elderly parents, most of them lacked knowledge about eldercare, according to the interviewees' accounts. This knowledge gap manifests as a lack of understanding of first aid knowledge and skills, uncertainty about how to address the psychological and mental health problems of elderly parents, unfamiliarity with community home-based eldercare services and nursing homes, and a lack of training on how to communicate with and seek help from doctors. Many interviewees typically learnt about relevant knowledge by asking doctors, nurses, relatives, and friends for information after their parents became seriously ill or disabled; they have been learning by doing and have gained experience slowly.

Additionally, the deficiency in knowledge among adult children concerning eldercare manifests in the absence of shared daily life experiences, particularly in families where the two generations reside separately. Case 3, who lived with her father, talked about her experience taking her father to see a doctor.

Accompanying an older person to see a doctor cannot be delegated to others because the older person may have communication barriers. Doctors may ask family members about the elderly parent's daily medical history. If you are not living with elderly parents or have not been with them for a long time, accompanying them to see a doctor may not be very useful (Case 3).

This passage emphasizes the importance of the daily life knowledge gained from shared living experiences in caring for elderly parents. The interviewed middle generation lacked the social knowledge needed to navigate the health care system for eldercare and the intimate knowledge that comes from daily life due to living apart; this could impact their ability to make informed decisions and manage emergencies effectively.

Young parents (i.e., the middle generation) of middle-class families are better educated overall, and they are very well informed about scientific knowledge and policy information, as well as about thoughts and reflections related to childcare. It is evident in many mothers' narratives that parents' knowledge of childcare begun before the birth of their children and was not an ad hoc occurrence in an emergency. These parents proactively learnt from multiple sources and strived to stay informed about the science and policies of childcare. Moreover, the childcare knowledge presented in parents' narratives was transferrable, allowing others to learn from, communicate about, and assist in these tasks. Conversely, eldercare was perceived as a specialized and professional field that was challenging for adult children to grasp and difficult for others to intervene.

High economic investment in childcare while subsidizing market-oriented social care services for the elderly

The primary economic resources of the middle generation predominantly flow toward their offspring. However, the majority of interviewees expressed a desire and provided some degree of financial support for the long-term care of their elderly parents. The economic standing of the interviewees' families was generally favorable, with some families owning three or more properties. The interviewees invested most of their economic resources in their children's health and education. This high expenditure lowered the quality of life for young parents and resulted in economic pressure, especially in families with two children, single-parent families, and families where one parent is a full-time caregiver. The interviewees indicated that public financial support for childcare is minimal, with only a monthly 1000 yuan personal income tax reduction for children's schooling, which is insufficient to meet the rising prices of goods and services needed for childcare. Therefore, even middle-class families face economic pressure when raising children.

Unlike the financial input of childcare, the financial support provided by the adult children of the families interviewed for the daily lives of elderly parents was more of a symbolic gift. However, when the elderly parents became seriously ill or required long-term care, all interviewees were willing to bear the costs, and some have also paid for their parents' hospitalization fees, medication expenses, hospital care worker fees, and live-in caregiver fees. The father of Case 2 said:

My parents' retirement pensions add up to more than 7000 yuan, and they also have health care insurance. When my mother had surgery, the cost was approximately 100,000 yuan, but after health care insurance reimbursement, we only paid more than 20,000 yuan. Some of my mother-in-law's cancer drugs used to cost thousands or tens of thousands per injection, but now, with the health care insurance reform, they only cost a few hundred Yuan, and it has turned into several thousand yuan a year. We had reserved more than 100,000 yuan for her treatment at that time, which may not even be used now (Case 2).

It can be seen that China's pension and health insurance systems have somewhat alleviated the economic burden of adult children in daily life and medical treatment for elderly parents. If elderly parents become disabled, pension and health insurance schemes alone are not sufficient to pay for care costs, which requires the contribution of their adult children. The spouse of Case 12 suffered a stroke and needed to hire a live-in caregiver. The older person said:

My husband's monthly pension is over 11,000 yuan, and I have 9400 yuan. The caregiver alone costs 8300 yuan each month. My husband's money is used to hire a caregiver, and I use mine for food and medical expenses, and it would be even more difficult if there were no health insurance reimbursement... As long as the two sons can handle themselves, that's enough. The younger son does not even have 4000 yuan (per month). Before my husband got sick, I had saved 500,000 yuan, and now there's only twenty or thirty thousand left, most of which has been spent on his treatment and care services (Case 12).

Even if elderly parents have good economic conditions, it is difficult for them to pay for long-term care services and medication expenses by relying solely on personal savings, pensions, and health insurance when one party becomes disabled or demented. If adult children have poor economic conditions and are unable to provide support, older people and their spouses may be at risk of care deficits. Elderly parents may receive more economic support in families with multiple adult children.

Case 11 involves an older woman whose 91-year-old mother resides in a nursing home. However, her mother's pension is not enough to cover the monthly cost of twenty to thirty thousand Yuan, requiring her four adult children to share the expense. Case 11 said that even if siblings share the burden, they cannot cope with it in the long term.

Difficulty of marketized care services in addressing eldercare deficits for families

We found that adult children are willing to provide financial support for long-term care services for their elderly parents, mainly for purchasing marketized social care services. This finding is consistent with the literature. However, the care sector cannot provide sufficient and affordable services to meet the care needs of disabled elderly parents. This was seen in the three interviewed families with disabled and demented elderly parents (Cases 5/11/12). While this is the case for middle-class families, it is even more difficult for families with average economic conditions to address their eldercare needs through marketized services.

We conducted a further analysis to understand why the care sector fails to meet the long-term care needs of elderly family members. Our interviews revealed two main findings. First, salary is the predominant factor influencing the job choices of care service workers. The low affordability of families to pay for care services for self-care elderly parents has resulted in a serious loss of the labor force in the eldercare sector. Interviews with eldercare givers in Beijing, Shanghai, and Guangzhou yielded consistent narratives, revealing the income hierarchy of China's urban social care sector. At the top of this hierarchy are caregivers during the confinement period and live-in childcare givers, followed by hospital care workers, housekeeping workers, and nursing-homes and live-in caregivers for older people (caring for self-care older people). The wage disparity between

eldercare and childcare makes care service workers prefer caring for children. As long as their language proficiency, skills, and qualifications meet the requirements of childcare work, they often switch from nursing home caregivers, live-in eldercare givers, or house-keeping workers to become live-in childcare givers or caregivers during the confinement period. For example, in 2003, the Shanghai Case ZL was employed as a live-in caregiver for older people, with a monthly wage of 1000 yuan. By the time of her departure from this position, her wage had increased to 1500 yuan, a fairly substantial sum for a caregiver for older people at that point in time. Upon obtaining her domestic helper qualification in 2007, she transitioned to a role as a caregiver for children, increasing her wage to 3000 yuan.

Second, live-in caregivers often opt for the more dignified childcare profession compared with eldercare. The societal value attributed to eldercare is often depreciated, even by the caregivers' own families, who associate it with illness, pain, dirtiness, and death. Regional and class disparities further intensify such depreciation. In contrast, childcare is associated with hope, progress, joy, and dignity.

Marketized social care resources also prioritize children, which in turn exacerbates the scarcity of social care resources for elderly parents, thereby increasing the cost of caring for disabled older people. As a result, the interviewed families struggled to find affordable, professional care services for disabled elderly parents, making it challenging for adult children to substitute family care with social care services.

Conclusion and discussion: care deficits and supportive systems

The main findings of this study are threefold. First, the combination of an aging population and declining birth rates has resulted in dual caregiving pressure on families, necessitating care for both the children and older family members simultaneously. On the one hand, the economic security and quality of life for urban older people have improved, leading to increased expectations for care and companionship from their adult children. On the other hand, modern life has fostered a "child-centered" family culture that requires parents to devote a significant amount of time, effort, and resources to the care and education of their children for decades. Therefore, middle-generation parents face the dual pressure of caring for children and elderly parents.

Second, the study revealed that care resources in urban families are insufficient to handle the dual pressure of caring for elderly parents and children simultaneously, resulting in a care deficit. This deficit is mainly observed in eldercare. When the care needs of elderly parents and children overlap, the two generations compete for family care resources, with the middle generation adopting a "child-centered" allocation pattern. Under this pattern, family care resources, such as time, labor, knowledge, and money, are prioritized for children, while eldercare is more of a crisis-driven response. Even in middle-class families, there are often insufficient investments in eldercare, especially in the emotional companionship and knowledge reserves of eldercare. The care deficit for elderly parents is even more pronounced in families with poor economic conditions, with disabled elderly parents, or with only one adult child. In families with both disabled elderly parents and young children, the life and work opportunities for middle-generation women are severely impacted.

Third, it is challenging for families to alleviate care deficits for elderly parents through social care services, mainly due to the lack of a mature and diversified care service market. The workforce that can provide social care services is short over a long period, with a significant gap in the supply capacity of eldercare services compared with childcare services; this is related to two factors.

First, society evaluates caregiving for older people and children differently, with the childcare occupation having a higher status than that of eldercare. Second, there are differences in the willingness and ability of families to pay for eldercare and childcare. There is less willingness to pay for eldercare services than for childcare services, and the pensions and health insurance of older people are also insufficient to cover long-term care service fees. Market-oriented social care resources cannot compensate for the lack of family care resources, causing many families to experience anxiety about balancing care for both children and elderly parents.

Overall, overlapping care needs, care deficits, and care anxiety interact with each other and become a dilemma faced by urban Chinese families in the context of an aging society. This study showed that inadequate support from care policies exacerbates resource competition between elderly parents and children within families. This issue deserves attention, especially regarding the older and female populations. Finally, from the perspective of social policy and care research, this study further discusses the following two aspects.

Care deficit beyond the nuclear family

Starting with Durkheim, the Western sociological tradition regards the nuclear family as an important indicator of social modernization. Within this tradition, social policy research closely examines the relationship between welfare states and family functions in the process of industrialization, with a particular focus on resolving the conflict between women's work and childcare responsibilities. The fundamental idea of the reforms in the 30 years after WWII was "defamilialization"; this was primarily manifested in the state's provision of childcare and education services and the establishment of pension and health insurance systems, thereby reducing family responsibilities for the care of children and elderly parents.

Since the 1990s, a new concept of "refamilialization" has emerged as a response to the "defamilialization" approach. This concept has readjusted the division of care responsibilities between the state and the family. The idea of refamilialization re-emphasizes the value and function of the family, positing that family care, especially companionship and emotional ties, holds significant value and should not be entirely replaced by state-provided care. Various policies under this approach can be referred to as work–family balance measures. In addition to childcare services, policy measures include parental leave policies, flexible work arrangements, family allowances, tax deductions, and private childcare vouchers. The policy goal is to enable families to invest more time, companionship, and emotion in care without compromising the individual development of family members.

This study has provided a fresh perspective on the long-standing debate in Chinese family research regarding prioritizing the children over the old or giving equal attention to both. Viewing Chinese urban families through the lens of caregiving reveals a three-generation structure, with caregiving serving as the connective thread binding these generations. The issues common to all three generations include enhancing caregiving awareness, allocating and managing care responsibilities, and providing care. This analysis of caregiving reveals a dual aspect of Chinese family values. On the one hand, there is an emphasis on private achievements, pleasure, and comfort for small/ nuclear families, mainly manifested through wealth accumulation and the pursuit of life opportunities. On the other hand, there is also a sense of responsibility toward large families, primarily demonstrated through the care and attention given to children and elderly parents. Methodologically, employing a three-generation framework as an analytical perspective is more suitable for studying Chinese families, particularly when examining caregiving practices. The nuclear/core family paradigm discussed in Western countries is situated within a two-generation framework. Research topics and policy debates derived from this framework are not entirely applicable to discussions of Chinese family issues. In the Chinese context, working parents have to raise children and care for elderly parents, adding another layer of caregiving pressure. We propose that the three-generation framework is a more applicable analytical tool that can help re-examine and promote real issues related to caregiving in China's aging process.

Since the reform and opening-up, China's care policy has distinctly shifted toward the "unsupported familialization" approach. This shift has led the government to reduce the provision of public care services for ordinary families while simultaneously promoting the growth of private care services. Despite this, the government has offered minimal financial support in terms of care subsidies, tax deductions, and other measures to help families purchase marketized care services. During the period of the OCP, families were able to meet their care needs through intergenerational support and other means. However, with the advent of an aging population and a declining birth rate, this model of intergenerational support has become unsustainable. While feeling a sense of responsibility toward caring for elderly parents, the middle generation also experiences a sense of helplessness; this is exacerbated by the fact that current care policies do not provide sufficient support for families, thereby leading to increased anxiety. This anxiety is particularly pronounced among dual-income families and women who are facing the "triple burden" of work, childcare, and eldercare.

Improving the policy support system for families

This study underscores the inadequacy of care policies in supporting family care, thereby intensifying the competition for resource allocation toward childrearing and creating a "crowd-out" effect on eldercare. Both the literature and this study highlight that a majority of older people in China prefer home-based care (Du et al. 2016a, b). From the perspective of a three-generation framework, there is an inherent structural tension in the allocation of care resources in families. We call for enhancing the policy support system to reduce this tension in two ways. The overarching idea is to address the low level of "defamilialization" in China's care policies and to accentuate the unique value of family care in providing companionship and emotional support.

First, it is imperative to establish a knowledge support system to address knowledge deficits in eldercare. A stark contrast is evident when comparing childcare and eldercare efforts within families using the three-generation framework. Families tend

to take a forward-thinking, proactive stance when it comes to childrearing, planning for issues well in advance. In contrast, eldercare tends to be reactive and crisis-driven, with challenges being addressed as they arise; this suggests that the deficit in eldercare is also a knowledge deficit. Both elderly parents and their adult children lack knowledge on identifying the needs of eldercare (especially mental and psychological needs), responding to emergencies, and preventing diseases. A societal lack of knowledge hampers effective eldercare and increases pressure on adult children. In promoting an active aging strategy, the government should establish a knowledge support system for families on eldercare; this would assist elderly parents and their adult children in acquiring essential knowledge, skills, and information about eldercare, fostering a positive and healthy aging mindset and preparing for inevitable aging life.

Second, improving the public resource support system is crucial; this includes two aspects. First, a comprehensive evaluation of the needs and capabilities of families in childrearing and eldercare should be conducted based on the three-generation framework. Support can take various forms, such as subsidies, allowances, tax deductions, and other measures specifically tailored for eldercare. Second, a concerted effort should be made to promote the growth of community home-based eldercare institutions and to increase the supply capacity of professional and personalized care services that cater to individual needs. These two points aim to help dual-income families obtain affordable, quality-standard eldercare services when necessary, enabling them to spend more time accompanying their older family members.

This study uses quantitative data from a survey conducted in urban areas across three provinces and qualitative data from research on middle-class families in Guangzhou. Therefore, the generalizability of the research findings is somewhat limited. Future research could broaden the survey scope under the three-generation framework (especially in rural areas and families with lower income) and further investigate the characteristics and mechanisms of intergenerational allocation of family care resources. Additionally, a more in-depth analysis is required to explore the statistical relationship between the four variables of willingness to provide family care for the elderly parents/children and willingness to receive social care for the elderly parents/children. Finally, this study observed that different dimensions of care resources play varying roles in caring for elderly parents and children. Future research could further explore the complexity and dynamics of care resource allocation to adjust the division of caregiving responsibilities between the state and the family for elderly parents and children.

Abbreviations

CSS Chinese Social Survey
WWII The Second World War
OCP One-child policy
TCP Three-child policy

Acknowledgements

Thanks to the School of Government at Sun Yat-sen University for sharing the data of the "National Survey on Public Attitudes towards Welfare". The survey project is supervised by Prof. Ngok Kinglun, with Prof. Zhong Xiaohui as a member of the project team. We are also grateful for the valuable suggestions from anonymous peer reviewers.

Author contributions

Xiaohui Zhong: conceptualization, data curation, funding acquisition, writing—original draft Minggang Peng: Methodology, Software, Formal analysis, Writing—Original Draft, Visualization, Writing- Reviewing and Editing.

Funding

Funding for this work was provided by National Social Science Fund of China (Grant No. 20BRK034).

Availability of data and materials

Authors used the survey data from the "National Survey on Public Attitudes towards Welfare". Data can be made available upon reasonable request from the School of Government at Sun Yat-sen University.

Declarations

Competing interests

There are no conflicts of interest to declare.

Received: 27 December 2023 Accepted: 5 June 2024

Published online: 02 July 2024

References

Benería, Lourdes. 2008. The crisis of care, international migration, and public policy. *Feminist Economics* 14(3): 1–21. Bettio, Francesca, and Janneke Plantenga. 2004. Comparing care regimes in Europe. *Feminist Economics* 10(1): 85–113. Chen, Feinian, Guangya Liu, and Christine A. Mair. 2011. Intergenerational ties in context: Grandparents caring for grand-children in China. *Social Forces* 90(2): 571–594.

Chen, Lu., and Wen Wan. 2021. Complement or substitution: Family care and community home-based care services. Chinese Journal of Health Policy 11: 35–42.

Chen, Xiangming. 2020. *Qualitative Research Methods and Social Science Research*. Beijing: Higher Education Press. Croll, Elisabeth J. 2006. The intergenerational contract in the changing Asian family. *Oxford Development Studies* 34(4): 473–491.

Daly, Mary. 2021. The concept of care: Insights, challenges and research avenues in COVID-19 times. *Journal of European Social Policy* 31(1): 108–118.

Daly, Mary, and Jane Lewis. 2000. The concept of social care and the analysis of contemporary welfare states. *The British Journal of Sociology* 51(2): 281–298.

Daly, Mary, and Emanuele Ferragina. 2018. Family policy in high-income countries: Five decades of development. *Journal of European Social Policy* 28(3): 255–270.

Di, Jinhua, and Zheng Dandan. 2016. Ethical lapse or ethical change: on rural China family resource allocation from modernization perspective. *Chinese Journal of Sociology* 36(1): 186–212.

Du, Hengbo, Zhang Tongquan, and Wei Yingying. 2016a. The factors affect the urban elderly people's choice of nursing home mode: Based on Grounded Theory. *Population & Economics* 3: 83–90.

Du, Peng, Sun Juanjuan, Zhang Wenjuan, and Wang Xuehui. 2016b. The demands of old-age care and the family and social tesources for the Chinese elderly: A study based on 2014 China longitudinal aging social survey. *Population Research* 40(6): 49–61.

Du, Peng, and Wang Yongmei. 2017. Determinants of utilization of social care service for older persons in China. *Population Research* 41(3): 26–37.

Given, Barbara, Paula R. Sherwood, and Charles W. Given. 2008. What knowledge and skills do caregivers need? *Journal of Social Work Education* 44(s3): 115–123.

Harvey, Andrew S., and Arun K. Mukhopadhyay. 2007. When twenty-four hours is not enough: Time poverty of working parents. Social Indicators Research 82: 57–77.

He, Xuefeng. 2009. The theory of rural intergenerational relations: Concurrently discussing the value basis of intergenerational relations. *Social Science Research* 5: 84–92.

Ji, Jingyao. 2020. A familial-social care model for home-based older adults in China. Population Research 44(3): 53–70.

Li, Yunhua, and Liu Yanan. 2019. Analysis on influencing factors of the children's care to the disabled elderly in cities and towns: Experience evidence from CLHLS 2014. The World of Survey and Research 1: 30–35.

Lieberman, Evan S. 2005. Nested analysis as a mixed-method strategy for comparative research. *American Political Science Review* 99(3): 435–452.

Lin, Xiaoshan. 2019. Purchasing hope: The consumption of children's education in urban China. *The Journal of Chinese Sociology* 6(1): 1–26.

Liu, Baihui, and Kou Enhui. 2015. The interaction mechanism of society care and family care under social elderly care trend. *Population & Economics* 1: 22–33.

Liu, Huijun, and Wang Hui. 2022. How does the number of young grandchildren affect grandparents' psychological well-being under the three-child policy in China: The mediating rffect of inter-generational allocation of family resources. *Population Journal* 44(2): 57–71.

Liu, Wenrong. 2017. Intergenerational emotion and solidarity in transitional China: Comparisons of two kinds of "ken lao" families in Shanghai.". *The Journal of Chinese Sociology* 4(1): 1–22.

Liu, Wenrong. 2021. Living in the Heart: Family Intergenerational Relationship and Filial Piety Practice in the Transition Period. Shanghai: Shanghai People's Publishing House.

Liu, Wenrong, and Li. Bojian. 2020. The returns of parental power and filial piety from the perspective of reflexive practice. *Youth Studies* 3: 80–96.

Liu, Xiguo. 2015. Can social security squeeze intergenerational economic support?: Based on the motivation perspective. Population & Economics 3: 116–126.

Liu, Xiaoting, and Hou Yuwei. 2016. A study on the financial support from children and informal care for disabled old people: An analysis based on CLHLS. *Journal of Zhejiang University (humanities and Social Sciences)* 46(04): 144–157.

- Lu, Jiehua, and Zhang Li. 2018. A study on Chinese elderly care demands pattern and its determinants: Based on the evidence of 2014 CLASS. *Population Journal* 40(2): 22–33.
- Ma, Chunhua. 2020. Modeling childcare policy: Gender and the welfare state". *Journal of Chinese Women's Studies* 5: 42–59.
- Mason, Jennifer. 2017. Qualitative Researching, 3rd ed. London: Sage Publications.
- Ngok, Kinglun. 2018. Introduction: Welfare attitudes: An input of the political sustainability of the welfare state. *Journal of Public Administration* 11(3): 50–54.
- Ngok, Kinglun, and Fang Ping. 2017. The development of the care study and its main themes: A literature review. Social Policy Research 4: 38–56.
- Ngok, Kinglun, and Fan Xin. 2018. Childcare policy in China: Review, reflection and reconstruction. *Social Sciences in China* 9: 92–111.
- Peng, Xizhe, and Hu. Zhan. 2015. The contemporary transition of the Chinese family and the reconstruction of family policy. *Social Sciences in China* 12: 113–132.
- Saraceno, Chiara. 2010. Social inequalities in facing old-age dependency: A bi-generational perspective. *Journal of Euro*pean Social Policy 20(1): 32–44.
- Shi, Renbing, and Luo Yan. 2017. The construction conception about supply system of elderly care with triangular pyramid in China. *Journal of Huazhong University of Science and Technology (social Science Edition)* 31(4): 103–109.
- Su, Qun, Peng Binxia, and Chen Jie. 2015. An analysis on long-term care and influencing factors of the disabled elders: Based on rural-urban difference. *Population & Economics* 4: 69–76.
- Tao, Yanlan, and Feng Xiaotian. 2020. Breaking the cultural norm of ideal caregivers: The key points of making policy for supporting mothers' participating in labor market. *Journal of Social Sciences* 4: 77–89.
- Torr, Berna Miller, and Susan E. Short. 2004. Second births and the second shift: A research note on gender equity and fertility. *Population and Development Review* 30(1): 109–130.
- Wang, Xiaolei. 2017. The quality of junior middle school and the inequality of shadow education opportunity: Taking CEPS 2013–2014 data as an example. *Social Sciences of Beijing* 9: 50–60.
- Wang, Yuesheng. 2008. A theoretical analysis of intergenerational relationships in Chinese families. *Population Research* 4: 13–21
- Williams, Fiona. 2010. Migration and care: Themes, concepts and challenges. Social Policy and Society 9(3): 385–396.
- Wu, Fan, and Niu Shaojun. 2019. The logic and game behind childcare in three perspectives. Shandong Social Sciences 10: 78–86.
- Wu, Xiaoying. 2020. Problematization of care and its policy choice: A discussion on the perspective of family change. Journal of Hangzhou Normal University (humanities and Social Sciences) 42(6): 80–90.
- Wu, Haixia. 2015. Living off parents or supporting for parents? research on intergenerational support in families parents living with child: An analysis based on the survey data of the seven provinces. Journal of Social Sciences 11: 82–90.
- Xiao, Suowei. 2014. "Yan Mu Ci Zu": The intergenerational collaboration and conflicts in childrearing among urban families in contemporary China. Sociological Studies 26(6): 148–171.
- Xiao, Suowei, and Yilun Jian. 2020. Care work and social inequality: Feminist scholarship and its implications for China. Journal of Chinese Women's Studies 5: 12–27.
- Yan, Ping. 2016a. The family caregiving's influence on the family fertility decision: Theoretical and empirical analyses. Journal of Beijing Administrative College 3: 109–116.
- Yang, Juhua, and Lulu Li. 2009. Intergenerational dynamics and family solidarity: A comparative study of the mainland of China, Japan. *Korea and China's Taiwan. Sociological Studies* 24(3): 26–53.
- Yan, Yunxiang. 2016b. The Individualization of Chinese Society. Shanghai: Shanghai Translation Publishing House.
- Yan, Yunxiang. 2021. Introduction: the inverted gamily, post-patriarchal intergenerationality and neo-familism. In *Chinese Families Upside Down: Intergenerational Dynamics and Neo-Familism in the Early 21st Century*, ed. Yunxiang Yan. Boston: Brill.
- Zhang, Hangkong. 2016. On the need of building early education and care service system for 0-3-year-old children based on the continuity and evolution of childcare in China. Studies in Early Childhood Education 9: 14–22.
- Zhang, Wenjuan, and Wei Meng. 2014. A study on the factors associated with preferences for institutional care of the elderly in urban China: Rvidences from Xicheng District of Beijing. *Population & Economics* 6: 22–34.

Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.