The Peer Effects in Family Support for Parents: Evidence from China

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The issue of population aging is increasingly severe, and the associated elderly care problem has received considerable attention. Family care is one of the main means of elderly support. This article focuses on the emotional and financial aspects in adult children's caregiving for their parents. Research has found that in the decision-making process of adult children providing care for their parents, the phenomenon of peer effects plays an important role. In terms of emotional support, factors other than peer effects lead to certain members within the group having more frequent visits to their parents, and this influence spreads within the group at a rate of approximately one-fourth under the influence of peer effects. In terms of financial support, the choice of peers to provide financial assistance to their parents increases the likelihood of individuals providing financial support to their parents, and it may even create a sense of obligation for individuals to do so. Furthermore, this article discusses the underlying reasons for the existence of peer effects in adult children's caregiving for their parents, which is driven by the sociological learning mechanism influenced by filial piety culture. Providing care to parents aligns with the requirements of filial piety values and brings individuals a sense of moral fulfillment. Therefore, when individuals observe that the life satisfaction of their peers improves with an increased frequency of visits to their parents, they are also inclined to choose to visit their own parents more often.

JEL:
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I. Introduction

The demographic trend of aging populations poses an urgent and formidable dilemma faced by many countries and societies. One of the critical challenges associated with this trend is eldercare, which imperatively requires effective solutions. Family support primarily provided by adult children has been considered a indispensable means to meet the demands of the elderly, catering not only to their spiritual well-being but also alleviating the burden on the government in providing elderly care while improving intergenerational relationships (Jiang, 1997).

However, with the development of China's economy and society, scholars suggest that the role of family care in elderly support is gradually weakening. The weakening of family support has been analyzed from various aspects, such as family structure (Zhang and Xu, 2003; Zhong and Li, 2006; Long, 2007; Dong, 2014; Zhou, 2014; Huang and Yaqing, 2020), living arrangements (Mu, 2002; Li, Feldman and Le, 2003; He and Ye, 2010; Wang, 2013; Shi and Tao, 2013), and filial piety culture (Nie and Jie, 2009; Zhou and Li, 2013; Ren and Chu, 2014; Zhang and Hu, 2015; Huang and Jiang, 2016). Nevertheless, the importance of family support in providing financial, daily, and emotional care remains significant, and it has been recognized as a primary means to improve the overall welfare and standard of living of the aging population (Xiao, 1994; Yang and Li, 2009; Xu et al., 2019).

Family support can be categorized into three dimensions: financial, practical, and emotional support. These dimensions meet the diverse requirements of the elderly and aim to provide a higher quality of life in their later years. Financial support involves providing monetary assistance to older family members to help them meet their basic needs, such as housing, healthcare, and other essential things. Practical support involves providing practical assistance to older family members, such as help with daily living activities like grocery shopping, meal preparation, and house cleaning. Emotional support refers to providing emotional comfort, care, and companionship to older family members, including visiting them, listening to their concerns, and providing encouragement. This paper particularly focuses on the emotional and financial aspects of family support. The emotional needs of the elderly have become increasingly prominent due to the trend of smaller families and intergenerational isolation (Jiang, Sun and Zhang, 1998; Yang and He, 2014; Yu, Dai and Ma, 2017). In addition, older individuals heavily rely on their financial status to ensure the fundamental survival and enhance the quality of life (Zhang, 1996; Du and Wu, 1998).

Existing literature has explored the factors influencing filial support for parents from various dimensions. However, most studies have focused on individual, family, and societal characteristics while overlooking the important influence of social interactions in the decision-making process of family filial support. Filial piety is a fundamental element of traditional moral norms in Chinese culture which holds a significant position and role in the development of China over thousands

of years. The behavior of children providing support to their parents emerges and develops within this cultural context. Children's family support for parents is determined within the dynamic social environment, rather than solely relying on static characteristic variables. An individual's provision of support to their parents is likely to be influenced by the social environment, especially their peers in the surrounding community. When an individual is surrounded by peers who embrace the concept of filial piety and willingly support their parents, he is likely to be motivated and increase his own provision of support to parents. In this behavioral pattern, a self-reinforcing feedback mechanism for family support by children could inject new vitality into family-based elderly care and provide new perspectives for addressing the challenges of an aging population. Therefore, it is necessary to examine the influence of peers' supportive behavior on individuals to comprehensively understand the factors influencing family support by children. This would expand the application of peer effects in the context of family-based elderly care and contribute a new perspective to addressing the issue of population aging.

II.   Literature

A.   *Literature on Family Support for Old People*

The issue of population aging is an increasingly pressing concern, with support for older individuals occupying a central position in the priorities of many societies and countries. Family support is a particularly vital form of assistance for the elderly, particularly in cultures such as China that place significant emphasis on filial piety. There are three primary perspectives in domestic and international academia regarding the emergence and longevity of family eldercare: the interest mechanism, the power mechanism, and the culture mechanism.

The interest mechanism encompasses theories of production mode, economic exchange, and social exchange. The theory of production mode posits that the eldercare system is shaped by the prevailing mode of production and economic structure, evolving alongside their development (Yao, 2001). In agrarian societies where family units own the means of production, family members work together and share the wealth created, resulting in intra-family eldercare. As societies transition from agrarian to industrial, socialized production and division of labor replace family-based production and natural division of labor, leading to a shift from family eldercare to social eldercare. The theory of economic exchange argues that significant differences in resources and needs exist between the working-age group with labor capacity and the elderly or children, resulting in intergenerational exchanges involving material or monetary transactions (Du, 1990). The theory of social exchange surpasses the limitations of economic exchange by expanding the concept of exchange beyond economic dimensions to include emotions, services, time, and other non-economic realms (Cox, 1987; Xiong, 1998*b,a*; Guo, 2001).

Within the mechanism of power, the power and negotiation model suggests that the level of support provided by children to their parents in eldercare is positively correlated with the parents' control over resources (including material and non-material resources) (Goode, 1963; Caldwell, 1976; Chen and Silverstein, 2000). The more resources parents have at their disposal, the more support they receive from their offspring.

The mechanism of culture includes the theories of internalized responsibility and feedback. The theory of internalized responsibility posits that the obligation of caring for elderly parents has been internalized as an inherent sense of duty and responsibility among Chinese individuals due to the influence of Confucianism, becoming an integral part of their personality and evolving into a cultural phenomenon and psychological sentiment (Zhang, 1999; Fei, 2019). The feedback theory suggests that, unlike the Western intergenerational "relay model," the intergenerational relationship within Chinese families follows a "feedback model" where the older generation nurtures the younger generation, and the younger generation supports and cares for the older generation (Fei, 1983; Wang, 2008; Li, 2013).

Eldercare support provided by adult children to their aging parents is a multifaceted phenomenon that is influenced by various factors at different levels, as explored by scholars from individual, familial, and societal perspectives. At the individual level, several factors, such as gender, educational attainment, and income, significantly affect the provision of eldercare support by adult children. In traditional Chinese society, sons were primarily responsible for eldercare, while daughters played a supplementary role (Yang, 1996). However, daughters' role in family eldercare has become increasingly prominent with the development of society (Lee, Parish and Willis, 1994; Xu, 2015). Educational attainment has a positive correlation with the financial support provided by younger generations to their parents, implying that higher educational attainment leads to greater financial support (Lillard and Willis, 1997). Additionally, adult children with higher income are more likely to provide financial support to their parents (Hermalin, Ofstedal and Chang, 1996; Sloan, Zhang and Wang, 2002).

At the familial level, factors such as parental characteristics, family size, and living arrangements play a crucial role in determining the amount of eldercare support provided. Elderly parents with higher socioeconomic status and older age are likely to receive more support from their adult children (Grundy, 2005; Yang and Li, 2009; An, 2019). Furthermore, larger families tend to provide more intergenerational support to their parents (Zimmer and Kwong, 2003; Oliveira, 2016). Increasing spatial distance between children and parents, while making long-term care and emotional support provision difficult, does not significantly affect the economic support provided by adult children and may even lead to increased economic support to compensate for the lack of daily care (Crimmins and Ingegneri, 1990; Hugo, 2002; Yang and Li, 2009).

At the societal level, social factors such as population mobility and institutional

changes significantly influence the provision of family eldercare support. Population mobility may create spatial barriers to intergenerational communication and weaken the functionality of family eldercare (Mason, 1992; Zhang and Wu, 2003). However, some scholars suggest that when younger generations migrate for work, it can increase the family's income and enhance the level of family eldercare (Vanwey, 2004; Lu, 2012). Institutional factors such as the social security system may have a "crowding-out effect" on intergenerational economic support. If the elderly can meet their basic needs through social welfare support, they may require less economic support from their children (Reil-Held, 2006; Katz, 2009; Brandt, 2013).

B.   Literature on Peer Effects

In recent years, peer effects have become a significant focus for economists. Peer effects refer to the influence that individuals' peers, such as friends, classmates, or colleagues, have on their attitudes, behaviors, and decision-making processes. It suggests that individuals' choices and actions are not solely determined by their own characteristics or preferences but are also influenced by the behaviors and characteristics of those around them. The relative income hypothesis, which emphasizes the influence of habit formation and the social environment on individual consumption behavior, suggests that individuals' consumption is not only influenced by their own income level, but also by the income level and consumption behavior of their peers (Duesenberry et al., 1949). This hypothesis provided one of the earliest theoretical foundations for peer effects, which is similar to concept of endogenous social effects (Manski, 1993).

Scholars have been studying peer effects in various fields. In the area of consumer behavior, individuals tend to follow the consumption patterns of their peer groups (Maurer and Meier, 2008; Moretti, 2011; Bertrand and Morse, 2016; Ling, Zhang and Zhen, 2018) through mechanisms such as "keeping up with the Joneses," complementarity of information, and risk-sharing (Song and Zou, 2021). In the field of investment decision-making, social interaction plays an important role in individuals' investment choices (Abel, 1990; Hong, Kubik and Stein, 2004; Hvide and Östberg, 2015) even among professional fund managers (Pool, Stoffman and Yonker, 2015). In other fields, like juvenile offenders, individuals' demand for house quality, and children's skill acquisition peer effects play a role (Bayer, Hjalmarsson and Pozen, 2009; Patacchini and Venanzoni, 2014; Helmers and Patnam, 2014).

Despite extensive research on peer effects in various domains, accurately pinpointing the effects of peers on individuals continues to be a significant hurdle for researchers. Three potential issues arise when studying peer effects: self-selection of peers, correlated unobservable variables, and the reflection problem. To address these challenges, scholars have developed various methods to identify peer effects. Particularly, establishing an appropriate definition of a peer group is of utmost importance (Manski, 1993), as empirical and experimental methods have

been devised to tackle this challenge (Maurer and Meier, 2008; Duflo and Saez, 2003; Hanushek et al., 2003; Graham and Hahn, 2005; Liu, Sun and Zhao, 2014).

In conclusion, the literature on family support for the elderly and peer effects is extensive, and many important conclusions have already been drawn. However, as family support is a behavior that is shaped in the complicated society, little attention has been given to the influence of social interaction on it. The purpose of this paper is to combine the concepts of family support and peer effects to investigate the externality of children's support for their aging parents. By doing so, this study seeks to gain a deeper understanding of the mechanisms behind family support and to address the challenges arising from the aging population worldwide. Building on previous research and methods, this paper provides a modest contribution of some value to this field.

III. Data

TABLE 1—SUMMARY STATISTICS

Variable	N	Mean	Std. dev.	Min	Max
Family Support					
Frequency of Visiting Parents	32,674	7.9602	4.0616	1	14
Financial Support	28,390	0.5101	0.4999	0	1
Peer Variable					
Peer's Frequency of Visiting Parents	27,038	8.1948	1.6154	1	14
Peer's Financial Support	23,575	0.5101	0.1808	0	1
Individual Characteristic					
Age	59,581	43.2069	15.1303	16	70
Gender	59,581	0.4944	0.5000	0	1
Marital Status	58,360	0.7849	0.4109	0	1
Education	57,815	2.8116	1.4005	1	8
Work Type	47,602	0.5834	0.4930	0	1
Hukou Type	55,633	0.2549	0.4358	0	1
Trust in Parents	55,330	0.9609	0.1938	0	1
Family Characteristic					
Age of Parents	33,695	103.0652	28.0666	25^{1}	170
Education of Parents	78,523	4.0597	2.3437	1	16
Marital Status of Parents	67,122	1.3579	0.8723	0	2
Economic Relationship with Parents	90,084	0.8427	0.9355	0	2
Log Family Members Number	58,257	1.3323	0.5256	0	3.0445
Log Net Per Capita Family Income	59,008	9.5568	0.9994	0	15.5489
Community Characteristic					
Community Type	59,581	0.4852	0.4998	0	1
Log Community Members Number	50,656	7.6833	0.9351	4.6052	11.0974
Log Net Per Capita Community Income	37,126	8.3763	0.8718	5.0106	10.7144

[1] Within the sample, 90% of individuals have fathers and mothers aged 45 and above, respectively.

This paper relies on data from China Family Panel Studies (CFPS), a compre-

hensive longitudinal survey conducted biennially in 2016 and 2018. The CFPS dataset covers a vast territory including 25 provinces in China, and encompasses nearly 30,000 individuals from almost 15,000 families, making it a nationally representative sample. The dataset is particularly useful for the purposes of this paper, as it includes crucial information pertaining to children's support for their old parents, as well as detailed insights into individual, family, and community[1] characteristics.

For emotional support, the paper utilizes responses to the question "How often have you visited your father/mother in the past 6 months?" from the survey as the dependent variable. This variable[2] takes a value of 1 if the individual never visited the parent, 2 if the individual visited once in several months, 3 if the individual visited once a month, 4 if the individual visited two or three times a month, 5 if the individual visited once or twice a week, 6 if the individual visited three or four times a week, and 7 if the individual visited almost every day. To create a new comprehensive variable that measures the overall level of frequency of the respondent's visits to their parents, the paper processes the original father/mother variable. If the variables are available for both the individual's father and mother in the original dataset (ranging from 1 to 7), then the value of the new variable is the sum of the two original variables. If the variable is only available for the individual's father or mother, then the value of the new variable equals to the available one. After this processing, the new comprehensive variable, Frequency of Visiting Parents, ranges from 1 to 14. Other non-binary variables measuring the parents' situations [3] in the original dataset were treated in the same manner as described above.

For financial support, the paper utilizes responses to the question "Have you provided any financial assistance to your father/mother in the past 6 months, including both goods and cash?" from the survey as the dependent variable. The variable takes on a value of 1 if the respondent provided financial support to their parents during that time period, and 0 otherwise. To create a new comprehensive variable that measures the overall situations of financial support for both father and mother, the paper processes the original father/mother variable. If the values of both father and mother variables are 0, then the new variable takes on a value of 0. If the value of at least one of the two original variables is 1, then the new variable takes on a value of 1. Following this processing, a new comprehensive variable called Financial Support was created. The other binary variables in the original database, which present the situations of individuals' parents, were handled using the same approach as described in the paper.

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[1]Given that the dataset in 2016 and 2018 employed in this paper does not offer a more recent data source for community-level information, aside from Community Type, the paper is constrained to utilize the 2014 Community Database. Consequently, the community characteristics of individuals in 2014 were utilized as a means to control for its general effects on the dependent variables.

[2]In the original dataset, the values from 1 to 7 are assigned in descending order of frequency, with 1 representing the highest frequency of visiting the parent and 7 representing the lowest frequency.

[3]The variables used in this paper to describe the parents' conditions all pertain to the father and mother separately in the original dataset.

The Community ID variable and Family ID variable from the original dataset in CFPS were employed to distinguish the peer group which comprises people living in the same community but not connected by family relations with the individual (Zhang and Zhu, 2021). Based on this definition, this study calculated the Frequency of Visiting Parents and the Financial Support of each individual's peers at the average level and created new peer variables, Peers' Frequency of Visiting Parents and Peers' Financial Support, which serve as the primary explanatory variables in the study.

Drawing on previous literature, this study includes individual-, family-, and community-level characteristics of respondents as control variables to account for potential factors that may influence family eldercare beyond the key peer variables. At the individual level, the following variables are employed: Age, Gender (1 for male and 0 for female), Marital Status (1 for married and 0 for unmarried), Education (1 for illiterate/semi-illiterate, 2 for primary school, 3 for junior high school, 4 for senior high school/technical school/vocational high school, 5 for junior college, 6 for bachelor's degree, 7 for master's degree, and 8 for doctor's degree), Work Type (1 for nonagricultural work and 0 for agricultural work), Hukou Type (1 for nonagricultural household and 0 for agricultural household), and Trust in Parents[4] (1 for trust and 0 for distrust). The family-level variables used as control variables include Age of Parents[5], Education of Parents, Marital Status of Parents, Economic Relationship with Parents (1 for the same economic family and 0 for different economic families), Log Family Members Number, and Log Net Per Capita Family Income. The community-level variables employed as control variables include Community Type (1 for urban and 0 for rural), Log Community Members Number, and Log Net Per Capita Community Income.

In addition to the aforementioned variables, the paper also utilizes several code variables to identify individuals and control for the influence of unobserved factors. These variables include Personal ID, Family ID, Community ID, and Interview Year. The majority of the data used in this study is sourced from the Adult Database, Family Relationship Database, and Family Economic Database in 2016 and 2018. Meanwhile, community-level data (with the exception of Community Type) is derived from the Community Database in 2014.

Table 1 presents a summary of the data utilized in this paper. It should be noted

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[4]The original variable Trust in Parents takes an integral value ranging from 1 to 10, where a higher value indicates greater trust. For the purpose of this study, the variable was recoded such that values from 0 to 5 were assigned a value of 0, representing individuals who do not trust their parents, while values from 6 to 10 were assigned a value of 1, representing individuals who trust their parents.

[5]In the original data set, the age of the respondent's father/mother is not directly available. To address this, the paper uses information about the parents' vital status to measure their ages. Specifically, if the respondent's father/mother is still alive at the time of the interview (as indicated by their answers to the question "Is your father/mother alive?" and "How was your relationship with your father/mother in the past 6 months?"), the age of the parent is obtained by subtracting the birth year of the parent from the year of the interview. However, if the respondent's father/mother has passed away and the year of death is available, the age of the parent is calculated by subtracting the birth year of the parent from the death year of the parent. This allows for a more complete set of data on the parental characteristics of the respondents.

that the available sample size for all peer-related variables is smaller than that for the Family Support variables. This is primarily attributed to the fact that, in certain instances, the family of the individual is the sole family in the entire community, resulting in the absence of peers as defined in this study. Nevertheless, the disparity in sample sizes between individuals and their peer groups is not statistically significant. Furthermore, given the minute difference between the means of the Family Support variables and the peer variables, it can be argued that the individuals' support for their parents and the corresponding variables of their peers essentially represent the same meanings. This underscores the potential for severe endogeneity in the peer effects examined in this study and the need for appropriate measures to address this issue.

IV. Basic Result

A. Basic Result of Frequency of Visiting Parents

To estimate how peers influence an individual's decision on Family Support, this paper uses the following equation as the basic OLS model, which is consistent with the literature of peer effects (Duflo and Saez, 2002; Liu, Sun and Zhao, 2014).

$$(1) \qquad y_{ijt} = \alpha \frac{1}{n - n_0} \sum_{-i_{n_0}} y_{ijt} + \beta x_{ijt} + \gamma z_{jt} + \mu_k + \lambda_t + \varepsilon_{ijt}$$

Let i index an individual, j index a peer group (i.e., a community), and t index the interview year. The Family Support of individual i in the interview year t is denoted as y_{ijt}. The Peer variable is summarized in the term $\frac{1}{n-n_0} \sum_{-i_{n_0}} y_{ijt}$[6]. The coefficient α captures the direction and magnitude of the peer effects. The vector x_{ijt} contains control variables at the individual and family level, while the vector z_{jt} contains control variables at the community level. μ_k represents unobserved provincial characteristics, and λ_t represents unobserved time characteristics. The error term, ε_{ijt}, captures individual i's unobserved private information, and this paper assumes that it is i.i.d. across i, j, and t. Column (1) of Table 2 presents OLS estimation results that provide empirical evidence of significant peer effects on the Frequency of Visiting Parents, indicating a tendency for individuals to imitate their peers' visiting behavior. The coefficient of peer effects is 0.2542 which indicates on average, due to the peer effects, the impact on Peer's Frequency of Visiting Parents will transmit to individuals at a rate of approximately one-fourth.

Despite the application of controls, the possibility of biased estimation of peer effects using OLS due to missing variables and reverse causality cannot be ruled

[6]In the equation, n represents the observations of community j in the sample, while n_0 represents the observations of individual i's family in the sample.

TABLE 2—PEER EFFECTS ON FREQUENCY OF VISITING PARENTS/ FINANCIAL SUPPORT

Family Support	Frequency of Visiting Parents		Financial Support	
	OLS	2SLS	Probit	2SLS
	(1)	(2)	(3)	(4)
Peer Variable	Peer's Frequency of Visiting Parents		Peers' Financial Support	
	0.2542***	0.1938**	0.2906***	1.4117**
	(0.0398)	(0.0760)	(0.0645)	(0.7050)
Individual Characteristic				
Age	-0.0465***	-0.0461***	0.0131***	0.0338***
	(0.0089)	(0.0086)	(0.0012)	(0.0031)
Gender	0.8713***	0.8696***	0.0416*	0.1172**
	(0.1187)	(0.1165)	(0.0213)	(0.0591)
Marital Status	0.5315***	0.5289***	-0.0013	0.0072
	(0.1841)	(0.1794)	(0.0188)	(0.0503)
Education	0.0122	0.0117	-0.0030	-0.0122
	(0.0549)	(0.0548)	(0.0066)	(0.0178)
Work Type	-1.0808***	-1.0795***	0.0220	0.0518
	(0.1599)	(0.1597)	(0.0286)	(0.0685)
Hukou Type	0.3142**	0.3248**	0.0088	0.0237
	(0.1323)	(0.1356)	(0.0205)	(0.0529)
Trust in Parents	0.1376	0.1473	0.1005***	0.2614***
	(0.2454)	(0.2417)	(0.0300)	(0.0817)
Family Characteristic				
Age of Parents	0.0434***	0.0434***	-0.0039***	-0.0102***
	(0.0021)	(0.0021)	(0.0003)	(0.0009)
Education of Parents	0.0114	0.0118	-0.0113**	-0.0332**
	(0.0249)	(0.0248)	(0.0051)	(0.0138)
Marital Status of Parents	0.9748***	0.9775***	-0.2104***	-0.5389***
	(0.0799)	(0.0786)	(0.0143)	(0.0423)
Economic Relationship with Parents	0.9653***	0.9708***	0.0286***	0.0708**
	(0.1187)	(0.1172)	(0.0110)	(0.0297)
Log Family Members Number	0.7229***	0.7321***	0.0149	0.0401
	(0.1063)	(0.1053)	(0.0144)	(0.0402)
Log Net Per Capita Family Income	0.0055	0.0055	0.0583***	0.1471***
	(0.0601)	(0.0603)	(0.0126)	(0.0327)
Community Characteristic				
Community Type	0.4118***	0.4358***	-0.0200	-0.0328
	(0.1198)	(0.1312)	(0.0190)	(0.0457)
Log Community Members Number	0.1262	0.1360	-0.0114	-0.0202
	(0.0990)	(0.0962)	(0.0147)	(0.0285)
Log Net Per Capita Community Income	0.1905***	0.2030***	-0.0215*	-0.0487
	(0.0542)	(0.0554)	(0.0124)	(0.0353)
Province Fixed Effect	Yes	Yes	Yes	Yes
Year Fixed Effect	Yes	Yes	Yes	Yes
N	7247	7237	6387	6382

[1] Robust standard errors clustered at the province level in parentheses.
[2] $*p < 0.10, **p < 0.05, ***p < 0.01$

TABLE 3—FIRST STAGE RESULT OF IV (FREQUENCY OF VISITING PARENTS/ FINANCIAL SUPPORT)

Family Support	Peers' Frequency of Visiting Parents (1)	Peers' Financial Support (2)
Age of Peers' Parents	0.0526***	-0.0029***
	(0.0056)	(0.0006)
Individual Characteristic		
Age	0.0015	0.0007*
	(0.0028)	(0.0004)
Gender	0.0039	-0.0122**
	(0.0303)	(0.0059)
Marital Status	-0.0647	-0.0144***
	(0.0466)	(0.0047)
Education	-0.0234	0.0054**
	(0.0262)	(0.0023)
Work Type	0.0498	0.0138
	(0.0472)	(0.0085)
Hukou Type	0.2302**	-0.0052
	(0.0936)	(0.0129)
Trust in Parents	0.1303	0.0019
	(0.0883)	(0.0102)
Family Characteristic		
Age of Parents	-0.0006	0.0001
	(0.0010)	(0.0001)
Education of Parents	0.0178	0.0064***
	(0.0131)	(0.0021)
Marital Status of Parents	0.0218	-0.0155***
	(0.0380)	(0.0045)
Economic Relationship with Parents	0.0224	0.0044
	(0.0340)	(0.0033)
Log Family Members Number	0.1478***	-0.0043
	(0.0460)	(0.0079)
Log Net Per Capita Family Income	0.0121	0.0094
	(0.0281)	(0.0078)
Community Characteristic		
Community Type	0.3954***	-0.0279
	(0.1063)	(0.0237)
Log Community Members Number	0.1158	-0.0140
	(0.0782)	(0.0112)
Log Net Per Capita Community Income	0.1523	-0.0125
	(0.0719)	(0.0084)
Province Fixed Effect	Yes	Yes
Year Fixed Effect	Yes	Yes
N	7237	6382

[1] Robust standard errors clustered at the province level in parentheses.
[2] $*p < 0.10, **p < 0.05, ***p < 0.01$

out. To mitigate these concerns, the paper utilizes the Instrumental Variables Method, which utilizes the characteristics of individuals' peers that are believed to impact peers' Family Support decisions, the crucial explanatory variables in the study. The specification of IV method in first stage is

$$(2) \qquad \frac{1}{n - n_0} \sum_{-i_{n0}} y_{ijt} = \alpha_0 \frac{1}{n - n_0} \sum_{-i_{n0}} a_{ijt} + \beta x_{ijt} + \gamma z_{jt} + \mu_k + \lambda_t + \varepsilon_{ijt}$$

Where $\frac{1}{n-n_0} \sum_{-i_{n0}} a_{ijt}$ measures the parents' ages of individual i's peers at average level, and other symbols have the same meanings as shown in the equation 1 above. Research on children's support for their parents has identified the age of parents as a crucial factor affecting the level of support children offer, with older parents being more likely to receive substantial support (Grundy, 2005). Column (1) of Table 3 provides empirical evidence in support of the instrumental variable, demonstrating a significant and positive effect of the Age of Peers' Parents on the Peers' Frequency of Visiting Parents, which is the main explanatory variable, after accounting for individual, family, and community level factors. Moreover, controlling for other characteristics of the individual, it is improbable that the Age of Peers' Parents would exert any influence on an individual's visiting behavior. Therefore, the Age of Peers' Parents variable satisfies the hypotheses of exogeneity and exclusivity, making it an appropriate instrumental variable for this study. The peer effects presented in column (2) of Table 2, obtained through the aforementioned IV method, are still significantly positive, albeit smaller than the OLS estimate. The coefficient of 0.1938 in the IV estimation suggests that if factors other than peer effects lead to some members within the group visiting their parents more frequently, this influence will diffuse within the group at approximately one-fifth of the proportion.

In addition to the peer effects, the results in column (1) and (2) of Table 2 reveal several other noteworthy factors that influence the Frequency of Visiting Parents. Firstly, the impact of Age is significant and negative, suggesting that individuals visit their parents less frequently as they grow older. Secondly, Gender also plays a role, with males tending to visit their parents more often than females. Thirdly, the study shows that marriage status positively influence the emotional support to parents. Fourthly, individuals engaged in agricultural work tend to have more face-to-face contact with their parents, while those from agricultural households tend to visit their parents less often. Fifthly, the study confirms that children tend to provide more emotional support to their older parents which is consistent with the results showed in column (1) of Table 3, and married parents are more likely to receive emotional care from their children. Sixthly, a closer financial relationship between adult children and their parents results in more frequent visits. Seventhly, larger families with more members are more likely to provide emotional support to their parents. Finally, individuals living in urban areas and wealthier communities visit their parents more frequently. Notably, all of these

findings are statistically significant in both the OLS and IV estimations.

B.   Basic Result of Financial Support

In Table 2, the remaining columns present the outcomes of the peer effects on Financial Family Support. Specifically, Column (3) indicates that the behavior of peers providing financial assistance to their parents leads to the imitation of individuals, as evidenced by the Probit model. The Probit model calculates a marginal effect of 0.2906. This indicates that, on average, the presence of peers' financial support to parents increases the probability of an individual providing financial support to their parents by approximately 30%, holding other factors at their mean levels.

Nonetheless, as previously shown, the basic Probit model may be susceptible to endogeneity concerns. To mitigate the issue of endogeneity, the study employs the IV method and presents the findings in column (4) of Table 2. The results reveal significant positive peer effects on financial support, which are greater than the outcomes observed in the Probit model. The coefficient of 1.4117 in the IV estimation suggests that, at the average level, the change of peers' financial support behavior(from not providing financial support to parents to providing financial support) increases the probability of an individual providing financial support to their parents by approximately 140%. In other words, the presence of peers providing financial support to parents will certainly cause individuals to provide financial support to their own parents. The instrumental variable Ages of Peers' Parents continues to be employed for financial support, and Table 3 presents evidence of its validity as an instrumental variable in Column (2). Specifically, the results indicate that Ages of Peers' Parents has a significant negative impact on Peers' Financial Support. In general, the study findings suggest that peer effects are prevalent in family support from different perspectives for parents, indicating that individuals tend to emulate the behavior of their peers towards their parents.

Column (3) and (4) of Table 2 demonstrate that apart from the impact of peer effects, the various personal traits of individuals across different levels significantly influence their decision to provide financial support to their parents. Specifically, the analysis reveals that older children are more likely to provide financial support than their younger counterparts, which contrasts with the age pattern observed for emotional support. In addition, males are more likely than females to provide financial support to their parents. Trust is also a significant factor, with higher levels of trust between individuals and their parents associated with a greater likelihood of providing financial support. The outcome is unexpected as it reveals that older parents have a lower likelihood of receiving financial assistance from their offspring, which differs from the patterns noted for emotional support in previous section and the established literature. Additionally, Children are less likely to provide financial assistance to parents who have attained higher levels of education. Unlike emotional support, there is less of a tendency for children to offer financial aid to their married parents. Furthermore, a closer economic relationship between adult children and their parents is associated with a higher

likelihood of providing financial support. Finally, individuals from wealthier families are more likely to provide financial support to their parents.

V. Robustness

A. Alternative Measurement in Frequency of Visiting Parents

TABLE 4—ROBUSTNESS OF BASIC RESULT

Family Support	Monthly Frequency of Visiting Parents		Frequency of Visiting Parents (2016)	
	OLS	2SLS	OLS	2SLS
	(1)	(2)	(3)	(4)
Peer Variable	Peer's Monthly Frequency of Visiting Parents		Peer's Frequency of Visiting Parents (2016)	
	0.2943***	0.3071**	0.3005***	0.2720**
	(0.0422)	(0.1542)	(0.0589)	(0.1146)
Individual Characteristic				
Age	-0.0450	-0.0446	-0.0281**	-0.0279***
	(0.0543)	(0.0527)	(0.0105)	(0.0103)
Gender	7.3504***	7.3451***	-0.1669	-0.1623
	(0.6604)	(0.6630)	(0.1374)	(0.1323)
Marital Status	3.3407**	3.3770***	0.5173***	0.5146***
	(1.2339)	(1.1896)	(0.1289)	(0.1275)
Education	-0.5346	-0.5370	-0.0846	-0.0851
	(0.3397)	(0.3358)	(0.0794)	(0.0781)
Work Type	-7.1797***	-7.1712***	-1.4811***	-1.4809***
	(1.0347)	(1.0149)	(0.2685)	(0.2618)
Hukou Type	2.1799**	2.1107**	0.8698***	0.8715***
	(0.8751)	(0.8886)	(0.1849)	(0.1889)
Trust in Parents	-0.0425	-0.0388	-0.2068	-0.2016
	(1.2452)	(1.2486)	(0.3655)	(0.3574)
Family Characteristic				
Age of Parents	0.1313***	0.1319***	0.0321***	0.0320***
	(0.0116)	(0.0113)	(0.0036)	(0.0036)
Education of Parents	0.0361	0.0332	0.0788**	0.0796***
	(0.1632)	(0.1614)	(0.0305)	(0.0295)
Marital Status of Parents	2.4829***	2.4794***	1.3515***	1.3544***
	(0.5502)	(0.5423)	(0.1204)	(0.1191)
Economic Relationship with Parents	7.2155***	7.2330***	0.8095***	0.8137***
	(0.6677)	(0.6495)	(0.0799)	(0.0794)
Log Family Members Number	3.3140***	3.3174***	0.5145***	0.5188***
	(0.5804)	(0.6022)	(0.1784)	(0.1725)
Log Net Per Capita Family Income	-0.1803	-0.1832	-0.0286	-0.0295
	(0.3414)	(0.3328)	(0.0861)	(0.0858)
Community Characteristic				
Community Type	2.5853***	2.5482***	0.6881***	0.6994***
	(0.7353)	(0.7996)	(0.1500)	(0.1570)
Log Community Members Number /Situation of Public Facilities	1.0198	1.0319*	-0.1119*	-0.1107*
	(0.6425)	(0.6155)	(0.0585)	(0.0568)
Log Net Per Capita Community Income /Surrounding Environment	1.1828***	1.1733***	-0.0178	-0.0182
	(0.3247)	(0.3031)	(0.0680)	(0.0664)
Situation of Public Security			0.0333	0.0330
			(0.0561)	(0.0547)
Province Fixed Effect	Yes	Yes	Yes	Yes
Year Fixed Effect	Yes	Yes	Yes	Yes
N	7247	7237	5059	5054

[1] Robust standard errors clustered at the province level in parentheses.
[2] $*p < 0.10, **p < 0.05, ***p < 0.01$

Based on the source and method of obtaining the variable Frequency of Visiting Parents as described above, it can be concluded that the magnitude of the

estimated peer effects presented in column (1) and (2) of Table 2 cannot be accurately interpreted in economics in the meaning of frequency, regardless of whether OLS or IV estimation is used. A solution is proposed to address this issue, which involves standardizing the original variable describing frequency of visiting father or mother (which serves as the source for the comprehensive variable Frequency of Visiting Parents) into a monthly-based variable. This standardization will enable a more precise quantitative analysis. The new variable takes a monthly basis value of 0 if the individual never visited their parents, 0.5 if the individual visited once every few months, 1 if the individual visited once a month, 2.5 if the individual visited two or three times a month, 6 if the individual visited once or twice a week, 14 if the individual visited three or four times a week, and 30 if the individual visited almost every day. The processing method used to derive the composite variable Monthly Frequency of Visiting Parents follows the same approach as the variable Frequency of Visiting Parents described earlier in the paper.

The results of both OLS and IV estimations are presented in Table 4, with column (1) and (2) displaying the respective outcomes. The findings reveal a statistically significant positive effect of peers, which are larger than those obtained from the previous analysis using the Frequency of Visiting Parents variable. Interestingly, the IV estimation coefficient of peer effects is higher than that of OLS estimation, which contradicts the biased direction seen in Table 2 (column (1) and (2)). The findings indicate that individuals are more likely to visit their parents when their peers also visit their own parents, with an increase of 0.3071 visits per month for each additional average monthly visit by peers, providing robust and precise evidence for the influence of peer effects on emotional family support.

Additionally, the impacts of individual traits on the Monthly Frequency of Visiting Parents exhibit coherence with the outcomes obtained using the Frequency of Visiting Parents variable, except for Age, which does not demonstrate statistical significance. Notably, the magnitudes of all significant impacts (both positive and negative) reported in column (1) and (2) of Table 4 surpass those in column (1) and (2) of Table 2.

B.   *Alternative Data in 2016*

To explore the validity of peer effects from a different angle, the analysis was constrained to the 2016 survey data, which offers alternative community-level variables[7] compared to the previous analyses. The regression results presented in column (3) and (4) of Table 4 confirm the robustness of the basic findings, despite the use of a smaller sample size of approximately 5000 observations. Notably, the

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[7]The alternative community variables are from questions only in survey 2016: "What is the general situation of public facilities such as education, medical treatment and transportation around your community?", "What is the surrounding environment of your community (whether there is noise pollution, garbage stacking, etc.)?", and "What is the public security situation around your community?". To facilitate the analysis, these variables were recoded so that a higher value corresponded to a better attitude towards the question topic.

peer effects of Frequency of Visiting Parents remain statistically significant and positive in both OLS and IV estimations, albeit with an overestimation in the OLS estimation consistent with the basic results in Table 2. The coefficient of 0.2720 in the IV estimation suggests that on average, changes in peers' frequency of visiting parents directly lead to changes in individual's frequency of visiting parents, with the extent of individual behavioral changes being 27% of the average changes observed among peers. Compared to the IV estimation, the OLS estimation method overestimates the peer effects by 3%. The influences of the control variables in robustness check on Frequency of Visiting Parents are similar to the results obtained from the basic analysis. Regarding the alternative community-level variables, only the variable Situation of Public Facilities shows a significantly negative impact on emotional Family Support, both in OLS and IV estimations. Overall, these findings provide further evidence for the importance of peer effects in determining individuals' Frequency of Visiting Parents, even with the use of alternative data and a smaller sample size.

C. The Existence of Social Interaction Between Individuals and Peers

In the previous section, it was mentioned that the peer groups, as discussed in the paper regarding the peer effects, are geographically adjacent to the individuals. However, within this definition, it cannot be guaranteed that the members in the peer group will engage in social interactions with the individuals. Yet, social interaction between individuals and their peers is a necessary condition for the peer effects. Therefore, this section aims to provide further evidence that the geographically defined peer groups proposed in the paper do indeed involve social interaction with the individuals. The concept of social interaction is to be introduced by the variable Trust in Neighbors[8]. This variable is constructed based on the answers to the question "How much do you trust your neighbors?" in the survey. The original integral value ranges from 1 to 10, and a higher value indicates more trust. It was recoded by assigning a value of 0 to the original value from 0 to 5, indicating individuals with Low Trust in Neighbors, and a value of 1 to the original value from 6 to 10, indicating individuals with High Trust in Neighbors. This paper assumes that individuals with more trust in their neighbors tend to have more social interaction with their peers (people who live in the same community but different families).

The IV regression results for the two sub-groups, Low Trust in Neighbors and High Trust in Neighbors, are presented in Table 5. The results show that the peer effects in the Low Trust in Neighbors group are not statistically significant with the coefficient 0.0670, while in the High Trust in Neighbors group, peer effects are significantly positive with the coefficient 0.2702 which means on average, changes in visits to parents measured in terms of visiting frequency are influenced by peer

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[8]The mean of this variable is 0.6436, Standard deviation is 0.4789, the minimum value is 0, and the maximum value is 1.

TABLE 5—IV REGRESSION BY TRUST IN NEIGHBORS

Family Support	Frequency of Visiting Parents	
Trust in Neighbors	Low	High
	(1)	(2)
Peer's Frequency of Visiting Parents	0.0670	0.2702***
	0.1357	0.0756
Individual Characteristic		
Age	-0.0463***	-0.0449***
	(0.0127)	(0.0082)
Gender	1.0874***	0.7725***
	(0.1286)	(0.1471)
Marital Status	0.3692***	0.6208***
	(0.1350)	(0.2363)
Education	0.1023	-0.0173
	(0.0849)	(0.0530)
Work Type	-0.9663***	-1.1357***
	(0.1265)	(0.1874)
Hukou Type	0.3247	0.2850*
	(0.2179)	(0.1604)
Trust in Parents	0.1905	-0.1538
	(0.2425)	(0.7345)
Family Characteristic		
Age of Parents	0.0480***	0.0411***
	(0.0036)	(0.0020)
Education of Parents	0.0337	-0.0075
	(0.0418)	(0.0380)
Marital Status of Parents	0.9196***	1.0202***
	(0.1106)	(0.0860)
Economic Relationship with Parents	0.9220***	0.9961***
	(0.1671)	(0.1216)
Log Family Members Number	0.8296***	0.6820***
	(0.1405)	(0.1343)
Log Net Per Capita Family Income	-0.0029	0.0107
	(0.0804)	(0.0680)
Community Characteristic		
Community Type	0.5226***	0.3823**
	(0.1518)	(0.1491)
Log Community Members Number	0.2272*	0.0623
	(0.1346)	(0.1019)
Log Net Per Capita Community Income	0.2421***	0.1658**
	(0.0715)	(0.0665)
Province Fixed Effect	Yes	Yes
Year Fixed Effect	Yes	Yes
N	2424	4809

[1] Robust standard errors clustered at the province level in parentheses.
[2] $*p < 0.10, **p < 0.05, ***p < 0.01$

behavior at a rate of 27%. This indicates that identifying peer groups based on geographic proximity is a valid method for identifying true peer effects resulting from social interaction between individuals and their peers. The effects of the other control variables on Frequency of Visiting Parents are similar between the two groups and consistent with the results in the full sample presented in Table 2. These findings further support the reliability of the regression analysis performed before.

VI.   The Interpretation for the Existence of the Peer Effect

Empirical evidence has shown that peer effects exist in both emotional and financial family support, prompting the question of why such effects occur. This section aims to provide an explanation for the presence of peer effects, using the example of the Frequency of Visiting Parents. There are two primary reasons why peer behavior influences individual decision-making (Bursztyn et al., 2014). Firstly, when individuals observe that the behavior of other members in the group is recognized and rewarded, they are more inclined to adopt similar behavioral patterns. The mechanism behind this phenomenon is known as social learning. Secondly, the utility of engaging in a particular behavior for an individual depends on the prevalence of that behavior among other members in the group. This kind of behavioral mechanism is referred to as social utility. The paper suggests that the fundamental mechanism driving the peer effects in the decision of children to support their parents is the social learning mechanism. In China, the concept of family support has been deeply rooted in society due to the influence of filial piety, which has been a traditional cornerstone of Chinese culture. However, as the economy and society have developed, the importance of filial piety has diminished, leaving individuals to navigate eldercare within the family without a strong social norm. In the process of seeking a balance between the costs and benefits of decision-making, individuals may look to the behavior of their peers as a point of reference when deciding on their own level of support for their parents. When peers benefit from visiting their parents more frequently, individuals have the opportunity to observe the supporting behavior and corresponding benefits of their peers, which can be learnt to improve their own behavior accordingly. Therefore, it can be argued that while the role of filial piety culture as a social norm has weakened, as an underlying value of the social learning mechanism it continues to influence people's decision-making.

A further but fundamental question is what benefits come with visiting parents. In China, a country with a strong traditional culture of filial piety, supporting one's parents is in line with traditional ethical values and can enhance an individual's life satisfaction. When individuals observe that their peers' life satisfaction increases with greater frequency of visiting parents, they are encouraged to increase their own frequency of visits to improve their own satisfaction. Therefore, the underlying mechanism for peer effects in family support is social learning driven by the culture of filial piety. The following content employs empirical analysis to support this claim.

A.   The Effect of Frequency of Visiting Parents on Life Satisfaction

TABLE 6—SUMMARY STATISTICS OF LIFE SATISFACTION REGRESSION

Variable	N	Mean	Std. dev.	Min	Max
Dependent Variable					
Life Satisfaction	44,846	0.8984	0.3021	0	1
Explantory Variable					
Frequency of Visiting Parents	26,837	7.9786	4.1009	1	14
Control Variable					
Age	44,846	43.8111	13.5351	16	70
Gender	44,846	0.5239	0.4994	0	1
Marital Status	44,845	0.8451	0.3618	0	1
Education	43,761	2.8260	1.4307	1	8
Work Type	44,846	0.5731	0.4946	0	1
Hukou Type	44,787	0.2267	0.4187	0	1
Education of Parents	34,047	3.3301	1.8850	1	12
Log Net Per Capita Family Income	44,297	9.5783	0.9823	3.6889	15.5489
Community Type	44,846	0.4705	0.4991	0	1
Log Community Members Number	31,310	7.6102	0.8954	4.6052	11.0974
Religion	44,846	0.0266	0.1610	0	1
Work Satisfaction	44,846	3.5094	0.9127	1	5

The prerequisite for the social learning mechanism of peer effects to exist is the notion that individuals experience a boost in their inner contentment when they align their actions with the values promoted by filial piety. Empirical evidence supporting this assumption is presented in this section, with the variable of Life Satisfaction[9] being used as a measure of inner contentment. Furthermore, the impact of Frequency of Visiting Parents on Life Satisfaction is estimated while accounting for other factors[10] that are typically considered in the literature on this subject. Table 6 illustrates the fundamental characteristics of these variables.

The results presented in Column (1) of Table 7 show that emotional support for parents has a positive effect on an individual's happiness, after controlling for various observed factors and the fixed effect for county and year. The Probit model calculates a marginal effect of 0.0017. This indicates that, on average, there is a 0.17% increase in the likelihood of an individual being more satisfied with life

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[9]The variable Life Satisfaction is obtained from the question "How satisfied are you with your life?" in CFPS survey 2016 and 2018. The original integral value ranges from 1 to 5, and a higher value indicates more satisfaction. It was recoded by assigning a value of 0 to the original value 1 and 2, indicating individuals who are not satisfied with their lives, and a value of 1 to the original value from 3 to 5, indicating individuals who are satisfied with their lives.

[10]Besides the variables Religion, and Work Satisfaction, all factors in the Table 6 have the same meanings with the Table 1. The variable Religion takes on a value of 1 if the respondent is a member of a religious group, and 0 otherwise. The variable Work Satisfaction takes on a integral value from 1 to 5, and a higher value indicates more satisfaction.

Table 7—The Effect of Frequency of Visiting Parents on Life Satisfaction

Dependent Variable	Life Satisfaction	
	Probit	IV
	(1)	(2)
Frequency of Visiting Parents	0.0017**	0.2252**
	(0.0007)	(0.0960)
Individual Characteristic		
Age	-0.0005*	0.0202*
	(0.0003)	(0.0117)
Gender	-0.0067	-0.4204**
	(0.0042)	(0.1724)
Marital Status	0.0373***	0.0725
	(0.0052)	(0.1688)
Education	0.0095***	0.0101
	(0.0028)	(0.0559)
Work Type	-0.0110*	0.1474
	(0.0064)	(0.1379)
Hukou Type	-0.0089	-0.1097*
	(0.0080)	(0.0574)
Education of Parents	-0.0004	-0.0848**
	(0.0012)	(0.0380)
Log Net Per Capita Family Income	0.0186***	0.1702***
	(0.0027)	(0.0258)
Community Type	0.0043	-0.0188
	(0.0092)	(0.0755)
Log Community Members Number	-0.0039	-0.0420
	(0.0052)	(0.0277)
Religion	0.0008	0.0493
	(0.0119)	(0.0811)
Work Satisfaction	0.0480***	0.1910
	(0.0020)	(0.1787)
County Fixed Effect	Yes	Yes
Year Fixed Effect	Yes	Yes
N	16133	14351

[1] Robust standard errors clustered at the province level in parentheses.
[2] $*p < 0.10, **p < 0.05, ***p < 0.01$

when the frequency of visiting parents by their children increases by 1 unit, while keeping other factors constant. However, the endogeneity issue could potentially bias the results of estimation. To address this issue, the study employs the IV method and presents the results in Column (2) of Table 7, which provide robust evidence for a significantly positive effect of Frequency of Visiting Parents on Life Satisfaction. The magnitude of the effect obtained from the IV estimation is larger than that from the Probit estimation. After employing instrumental variable analysis, the estimated coefficient becomes 0.2252. This indicates that for every one unit increase in the frequency of children visiting their parents, there is a 22.52% increase in the likelihood of individuals becoming satisfied with their lives. These findings support the assumption that there is a relationship between an individual's supportive behavior towards their parents and their overall sense of well-being, which provides a foundation for demonstrating the social learning mechanism of the peer effects of family caregiving..

The Age of Parents variable has been chosen as the instrumental variable for the IV method. Previous studies have demonstrated that the age of parents plays a critical role in determining the level of support children provide, with older parents being more likely to receive significant support. This finding is further supported by the results presented in columns (1) and (2) of Table 2 in this paper, which indicate that individuals tend to visit their parents more frequently as their parents age. In addition, given the inclusion of control variables for individual characteristics, it is unlikely that the Age of Parents variable has any direct impact on an individual's life satisfaction. These factors suggest that the Age of Parents variable satisfies the necessary assumptions of exogeneity and exclusivity, making it a suitable instrumental variable for the analysis.

B. The Effect of Filial Piety Culture on Peer Effects

The reason why individuals' Life Satisfaction can be influenced by Family Support for parents is assumed due to the belief in filial piety, a deep social norm among Chinese people. Therefore, in areas with a stronger filial piety culture, the peer effects of Frequency of Visiting Parents should be greater. This study utilized data from CGSS[11] in 2017, which included seven statements[12] about filial piety. The responses to these statements were used to construct a comprehensive variable to measure the level of filial piety in different provinces[13] in China. The responses to

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[11] The Chinese General Social Survey (CGSS) was launched from 2003 as the first national representative continuous survey project conducted by academic institutions in mainland China. Its purpose is to systematically monitor the evolving relationship between social structure, quality of life, and well-being in urban and rural areas across China.

[12] These 7 statements are "In any case, the father's authority should be respected in the family.", "Children should do something to make their parents proud.", "In order to carry on the family line, at least one son must be born.", "Be grateful to your parents for raising you.", "No matter how bad your parents are to you, still be kind to them.", "Give up your personal ambitions and fulfill your parents' wishes.", and "Support your parents to make their life more comfortable.".

[13] Due to the lack of original data, Xinjiang Uygur Autonomous Region, Tibet Autonomous Region, and Hainan Province were not included in the sample set.

TABLE 8—THE EFFECT OF CULTURE OF FILIAL PIETY/ SOCIAL LEARNING ON PEER EFFECTS

Family Support	Frequency of Visiting Parents			
	Filial Piety Culture		Peers' Life Satisfaction	
	Low	High	Low	High
	(1)	(2)	(3)	(4)
Peer Variable	Peer's Frequency of Visiting Parents		Peer's Frequency of Visiting Parent	
Peer's Frequency of Visiting Parents	0.1044	0.2529**	0.1888	0.3245***
	(0.0868)	(0.0995)	(0.1591)	(0.1043)
Individual Characteristic				
Age	-0.0525***	-0.0434***	0.0127	-0.0029
	(0.0158)	(0.0093)	(0.0096)	(0.0056)
Gender	0.6904***	0.9901***	0.5021***	0.5092***
	(0.1242)	(0.1620)	(0.1524)	(0.1197)
Marital Status	0.6366***	0.4737*	0.1870	0.2378**
	(0.1654)	(0.2417)	(0.1466)	(0.1141)
Education	-0.0681	0.0306	0.0552	0.1128**
	(0.0421)	(0.0746)	(0.0416)	(0.0488)
Work Type	-0.9751***	-1.1000***	-0.2520**	-0.4780***
	(0.2084)	(0.1983)	(0.1231)	(0.1108)
Hukou Type	0.2479	0.3989**	0.0488	0.1458
	(0.2620)	(0.1651)	(0.1927)	(0.1703)
Trust in Parents	0.7213*	-0.1840	0.0755	0.3253
	(0.4029)	(0.1953)	(0.2520)	(0.2177)
Family Characteristic				
Age of Parents	0.0443***	0.0429***	0.0051*	0.0119***
	(0.0038)	(0.0024)	(0.0029)	(0.0020)
Education of Parents	0.0216	0.0038	0.0547*	0.0170
	(0.0406)	(0.0321)	(0.0295)	(0.0263)
Marital Status of Parents	0.9474***	0.9988***	-0.0222	-0.0491
	(0.0924)	(0.1027)	(0.1327)	(0.0638)
Economic Relationship with Parents	1.3421***	0.7786***	0.2669**	0.2552***
	(0.2220)	(0.1054)	(0.1188)	(0.0782)
Log Family Members Number	0.5667***	0.8282***	0.1581	0.4132***
	(0.2075)	(0.1035)	(0.0996)	(0.0664)
Log Net Per Capita Family Income	0.0528	-0.0274	-0.1856*	0.1090*
	(0.0983)	(0.0722)	(0.0969)	(0.0644)
Community Characteristic				
Community Type	0.5559**	0.3681***	0.1383	0.4128***
	(0.2780)	(0.1053)	(0.1017)	(0.1309)
Log Community Members Number	0.0104	0.1981*	0.1137	0.0537
	(0.1231)	(0.1153)	(0.0930)	(0.0851)
Log Net Per Capita Community Income	0.2957**	0.1522***	-0.0193	-0.0261
	(0.1347)	(0.0529)	(0.0477)	(0.1105)
Province Fixed Effect	Yes	Yes	Yes	Yes
Year Fixed Effect	Yes	Yes	Yes	Yes
N	2380	4857	1472	1857

[1] Robust standard errors clustered at the province level in parentheses.
[2] $*p < 0.10, **p < 0.05, ***p < 0.01$

these statements could be chosen from 7 subjective attitudes, with higher values indicating greater disagreement. The variables were recoded such that higher values indicated lower disagreement. The mean value of the new variable at the province-level was calculated to measure the degree of filial piety in provinces, which was then matched with the data in CFPS. The provinces were divided into two categories based on the median value. Provinces with values lower than the median were assigned the value 0 indicating provinces with lower degree of filial piety, while the others were assigned the value 1 indicating provinces with higher degree of filial piety. The IV regression using the variable Age of Peers' Parents was conducted separately for these two groups, and the results are presented in column (1) and (2) of Table 8.

The results of the regression analysis, as presented in column (1) and (2) of Table 8, indicate that peer effects are not statistically significant in the Low Filial Piety Culture group with the coefficient 0.1044, whereas they are significantly positive in the High Filial Piety Culture group with the coefficient 0.2529 which means the influence of peer-parent visitation frequency on individual corresponding behavior can reach a quarter of the magnitude of peer behavioral changes. This finding suggests that the observed peer effects may be attributed to the influence of Filial Piety Culture itself. Despite the rapidly changing economic and social environment, the norm of filial piety culture has persisted for centuries and continues to shape people's behavior through social interaction. Therefore, the regression results provide compelling evidence that filial piety culture still plays a significant role in shaping individuals' behaviors. The impacts of other control variables on Frequency of Visiting Parents are similar between the two groups and consistent with the results showed in Table 2.

C. Social Learning

The second step to explain the existence of peer effects is to examine whether individuals follow their peers' Family Support when they observe that their peers benefit from such behaviors. This analysis below focuses only on the group with higher Peer's Frequency of Visiting Parents[14]. In this subsample, the peer effects are supposed to be significantly positive in the group of peers with higher Life Satisfaction[15] and to be insignificant or negative in the group of peers with lower Life Satisfaction. This is because individuals in the former group are more likely to believe that visiting their parents more frequently will also increase their Life Satisfaction. As a result, the peer effects in this group are expected to be significantly more positive. In this regression, the instrumental variable estimation using the Age of Peers' Parents is employed solely without OLS estimation. The empirical evidence for this analysis is presented in column (3) and (4) of Table 8.

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[14]In the event that an individual's variable for Peer's Frequency of Visiting Parents exceeds his own variable for Frequency of Visiting Parents, he is categorized as belonging to the group characterized by higher Peer's Frequency of Visiting Parents.

[15]The peer group with higher Life Satisfaction than the median is defined the group of peers with higher Life Satisfaction, otherwise the group of peers with lower Life Satisfaction.

Based on the outcomes depicted in columns (3) and (4) of Table 8, it appears that the peer effects on Frequency of Visiting Parents is not statistically significant for individuals with low Peers' Life Satisfaction with the coefficient 0.1888. However, for individuals with high Peer Life Satisfaction, the effects are found to be significantly positive with the coefficient 0.3245 which means in the behavior of visitation frequency with parents, peers can have an influence on individuals that approximately amounts to one-third of their own behavioral changes. These results suggest that the social learning mechanism is likely to be the underlying factor behind the peer effects on Frequency of Visiting Parents, thereby validating the complete logic chain.

VII.   Conclusion

This paper investigates the peer effects on Family Support of children for their old parents in China. The study finds that people tend to increase their Family Support both in emotional and financial aspects for their parents when they observe their peers doing the same. To explain the peer effects, the paper proposes a two-step mechanism that centers on the role of filial piety culture in China. First, supporting old parents contributes to life satisfaction, which is bolstered by the cultural values of filial piety. The evidence from both the OLS and IV estimations shows that increased Frequency of Visiting Parents causes increased Life Satisfaction. Second, people are more likely to follow the behavior of their peers when they perceive that their peers are benefiting from their increased Frequency of Visiting Parents with their parents. The study also finds that the influence of peers is contingent on the strength of the filial piety culture in the local community. In areas with strong filial piety, the peer effects are more significant than in areas with weaker filial piety. Overall, the results suggest that filial piety culture plays a critical role in shaping the behavior of children towards their parents in China.

In modern society, the younger generation faces multiple pressures, such as work, family, and personal development. As a result, supporting their old parents is often perceived as a burden for children. However, in reality, filial piety and the value system of cultural traditions suggest that providing care for aging parents can bring moral satisfaction to children and enhance their overall life satisfaction. This perspective provides a foundation for validating the peer effects in the decision of children to support their parents as proposed in the paper. Furthermore, the peer effects also implies that family caregiving can create a self-reinforcing positive cycle within the group, reducing the social costs involved. When some children in the group actively support their parents, it serves as inspiration and encouragement for other group members, leading to the formation of a common behavioral pattern. It may also potentially alleviate the burden on the government and society in terms of elderly care. Therefore, reevaluating the importance of family caregiving can provide new insights for addressing the challenges of aging population and eldercare. By emphasizing the positive impact

of family caregiving on children's moral satisfaction and life fulfillment, and by encouraging societal adherence to the values of filial piety, more individuals can be motivated to actively participate in family caregiving. This would help reduce the social burden of eldercare, improve the quality of life for older adults, and foster social harmony and stability.

While this paper provides evidence of peer effects on Frequency of Visiting Parents of adult children in China, there are some limitations to consider. First, the paper mainly focuses on emotional and financial Family Support for parents and only briefly touches upon financial support in the analysis. The results show differences for Financial Support Peer Effects compared to Frequency of Visiting Parents Peer Effects, suggesting that different aspects of family support may have distinct peer effects on a deeper level of significance. However, this aspect is not explored in depth in the paper, leaving room for future research. Second, the Frequency of Visiting Parents is a mutual behavior that is motivated by both adult children and their parents. While the paper attempts to control for parents' characteristics, it is likely that parents' preferences also influence the Frequency of Visiting Parents, potentially leading to estimation bias of the peer effects on the children's side. Thirdly, the database used in this study may not contain a rich set of variables related to parents and communities, which could have some impact on the estimation results. Fourthly, the mechanism of the peer effects requires further exploration. For example, further research can focus on the heterogeneity of peer effects which may help to pay limited policy attention on specific subgroups to promote the benign development of Family Support for the elderly at a lower social cost. If family support can be initiated and reinforced within the society, it can create a virtuous circle of support behavior, which can have positive effects on both the elderly and the government's financial burden.

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