
IMPACTS OF INTERGENERATIONAL CARE FOR GRANDCHILDREN AND INTERGENERATIONAL SUPPORT ON THE PSYCHOLOGICAL WELL-BEING OF THE ELDERLY IN CHINA

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Abstract

Psychological well-being is important to the happiness of the elderly and their families. Based on China Longitudinal Aging Social Survey 2014, this paper explores the influence mechanism of intergenerational care for grandchildren on the mental health of the elderly. The intermediate variables of intergenerational support were selected for the analysis. The results show that the mental health of the elderly is positively affected by the intergenerational care for grandchildren, and the intergenerational financial and emotional supports; the two types of supports fully mediate the relationship between the intergenerational care for grandchildren and the mental health of the elderly, while housework support does not have a significant mediating effect. To protect their mental health, the elderly who provide care for grandchildren should receive more financial and emotional supports.

Key words: Psychological Well-Being, Caring for Grandchildren, Intergenerational Support, The Mediating Effect.

Received: 12-03-19 | Accepted: 05-08-19

INTRODUCTION

Duo to lower fertility and longer life expectancy, the proportion of the elderly people in China's total population is rising rapidly. By the end of 2015, China's population aged 60 or over has reached 222 million, accounting for 16.1% of the whole population, which is expected to reach 300 million in 2025 (National Bureau of Statistics of China, 2016). With the severe aging of population and rapid social transformation, psychological problems, such as anxiety and depression among the elderly have attracted great concern. According to CHARLS2015 (Chinese Health and Retirement Longitudinal Study), 33.1% of the elderly had high levels of depression. As one of the important indicators of healthy aging, psychological well-being is not

only related to the happiness and quality of elderly life, but also related to the overall development ability of families and social stability.

Foreign studies on the mental health of the elderly started earlier. An in-depth discussion was conducted, focusing on the connotation, measurement and influencing factors of psychological well-being (Shin & Johnson, 1978; Silverstein, Chen, & Heller, 2006). Previous studies have found that in addition to age, marital status, education, economic level, living arrangements, intergenerational support and physical health (Silverstein, Cong, & Li, 2006; Cong & Silverstein, 2008; Mao, Chi, & Wu, 2019), caring for grandchildren was also a vital factor (Lindsey & Silverstein). Most researches have indicated that intergenerational care has an adverse effect on the psychological well-being of the elderly, because children who always need help from their older parents will be considered a failure of parental education, which will bring

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psychological pressure on the elderly (Schwarz, Albert, Trommsdorff et al., 2010). Taking care of grandchildren requires more time and energy, which can lead to negative emotions, such as loneliness and anxiety, thus affecting mental health (Lumsdaine & Stephanie, 2015). In addition, some scholars have suggested that caring for grandchildren enriched later life of elders and contributed to develop their ability of teaching younger generation (Goodfellow & Lavery, 2003). Through interaction with grandchildren, older adults were encouraged to maintain active activities and improve their mental health (Balukonis, Melkus, & Chyun, 2008; Chen & Liu, 2012).

Currently, there has not been a consensus on the impact of caring for grandchildren on the mental health. In the trend of the strengthening familization of the floating population and the immature market-based childcare services, more and more elderly people in China will actively or passively participate in the work of caring for grandchildren in the future. The problem of psychological well-being and intergenerational relationship involved in caring for grandchildren will become increasingly prominent. On the basis of existing researches, this study comprehensively used multiple linear and binary Logistic methods to analyze the influence of caring for grandchildren on the mental health of the elderly and its mechanism, which provides reference for improving the mental health status of aged and family relationship.

METHODS

Data and sample

Data come from 2014 China Longitudinal Aging Social Survey (CLASS). The survey was a nationwide and continuous large-scale social project, which aimed to collect social and economic background data of the aged regularly and systematically, grasp various problems and challenges faced by the elderly, and evaluate the implementation effect of social policies for the elderly. It used a multi-stage stratified sampling method to select 60 or older in 476 residential/village committees in 28 provinces/municipalities/ autonomous regions across China. In order to better investigate caring for children and intergenerational support between old parents and adult children, missing values of key variables, such as those without surviving

children and grandchildren under 18 years old were first eliminated, only retained the elderly who care for one grandchild, a total of 3534 valid samples were obtained.

Variable measurement

Dependent variable

Psychological well-being (PWB). We used the CES-D (Center for Epidemiological Studies-Depression) to measure PWB (Radloff, 1977). This scale was developed into nine questions after revised by Cong and Silverstein. Respondents were asked about their negative and positive experience in the past week. Three items measured positive mood (feeling in a good mood, feeling interesting life and enjoying life). Six items were measured negative feelings (feeling lonely, feeling depressed, having no appetite, having poor sleep, feeling useless, having nothing to do). Each item is coded from 1(*rarely*) to 3(*often*), and the six positive items are recoded reversely. Final summed scores ranged from 9 to 27, with higher scores indicating higher level of mental health. Based on Cronbach's alpha, its reliability coefficient of 9 questions was 0.757, indicating that the question had a high degree of internal consistency.

Independent variable

Caring for Grandchildren (CFG). The key explanatory variable was measured by "How often did you spend time to looking after this grandchild in the past year"? with responses coded as 1= seldom or no, 2= about once a month, 3= several times a month, 4= at least once a week, 5= some time every day, 6= from morning to night every day, higher scores represented more frequency of care.

Intervening variables

Intergenerational support received (ISR). Respondents were asked about their ISR from adult children, including financial support, household chores help and emotional support. Financial support was measured by "Did this child give you money, food, or gifts in the past years, and how much were they worth"? (0=no, 1=1-199yuan, 3=200-499yuan, 4=500-499yuan, ..., 9=12,000yuan and above), higher scores denoted higher level of ISR. The housework helps with "How long did this child help you with household chores in the last years"? Measured (1=hardly any, 2= several times a year, 3= at least once a

month, 4= at least once a week, 5= almost every day), higher scores indicated more frequency of household chores help. Emotional support was measured by "considering from all aspects, did you feel emotionally close to this child"? With response coded as 1(not close), 2(close), and not close were used as the reference group.

Control variables

Previous studies have found that socio-demographic, living style and physical health could affect the mental health status of the elderly. Therefore, we controlled for these influencing factors, including gender, age, household registration, marital status, household registration, residence form, self-rated health, income and education level. The descriptive statistics of main variables are shown in Table 1.

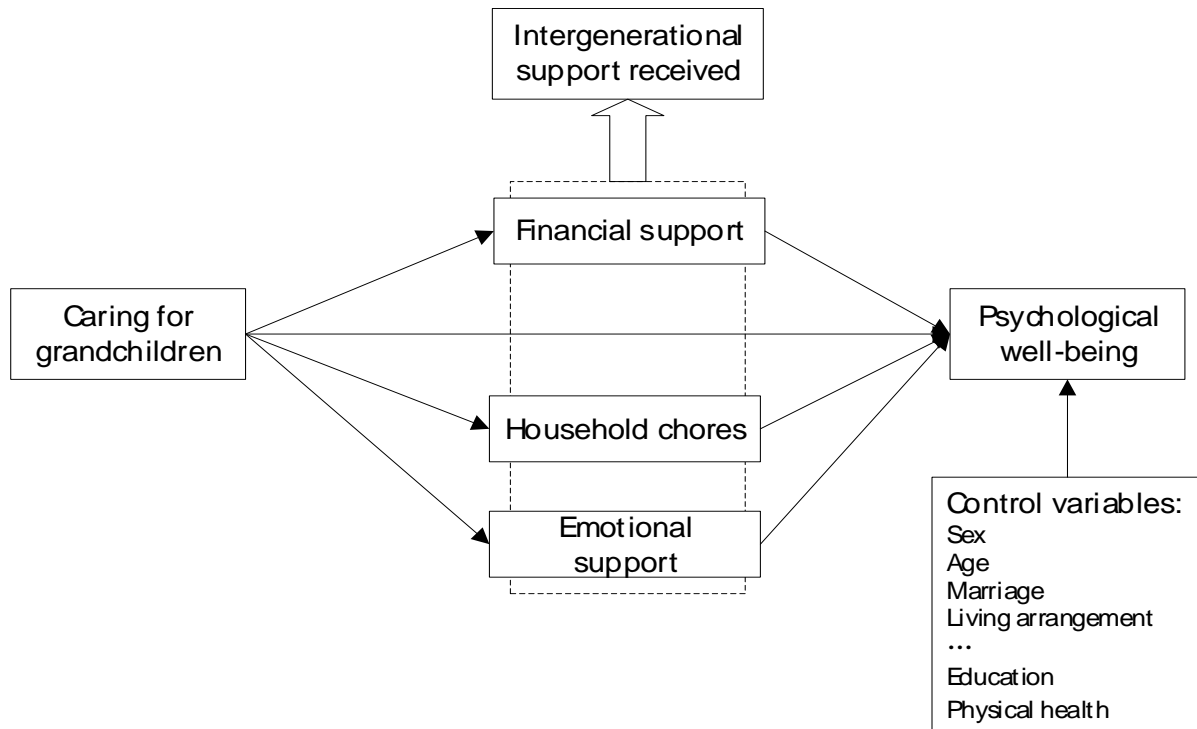
Analysis method

To clarify how intergenerational care influenced mental health through intergenerational support, this study followed the following design (Figure 1). Firstly, the causal link between caring for grandchildren and mental

health of the elderly was verified. Secondly, the mechanism of the influence of caring for grandchildren on mental health was tested by Bootstrap method, which used to test whether the three intergenerational support mediating paths were valid. Bootstrap Approach has obvious advantages compared with Baron and Kenny's (1986) Causal Steps approaches, since it can simultaneously examine such complex intermediary paths as multiple intermediaries and compare whether there is a significant difference in the role of multiple intermediary paths (Hayes, 2009).

The independent variable "psychological well-being", intervening variables "financial support" and "household chores help" were continuous variables. Therefore, multiple linear regression Model is used to analyze the effects of caring for grandchildren on mental health, economic support and housework help. As emotional support was a dichotomous variable, binary Logistic regression was used for analysis.

Figure 1. Analysis of influencing factors of mental



RESULTS

Sample characteristics

Table 1 showed that men account for 56.5% of the sample, and the average age was about 66 years old. 79.2% of the respondents are married, and the urban sample accounts for 52.0%. Only a few elderly people live alone. In terms of education level, 17.8% of the respondents have no education, 38.2% of the elderly have been to primary school, and over 40% of the elderly have received secondary school education or above. Respondents generally preferred self-rated physical health ($M=3.35$), and generally had higher levels of psychological well-being ($M=22.58$). The average frequency of providing caring for grandchildren was 2.73. The amount of financial support received was about 500-999yuan, and the amount of housework help received was relatively low ($M=2.41$), but the most majority of respondents (89%) have a close emotional relationship with their children.

Analysis on the influencing factors to PWB

In order to compare the effects of multiple independent variables on PWB, we established three basic models (Model1~model3) and a joint model (Model4). Model1 showed that the female, married older adults with spouse had a better mental health than the men and those who without spouse. The PWB level of urban old people was higher than that of rural ones. The higher income, education level and self-rated physical health, the higher mental health level of the elderly, however, the gender, age and living

arrangements had no significant influence on PWB.

Model 2 added the caring for grandchildren variable and passed the significance test at the statistical level of 5%, indicating that caring for grandchildren has a positive impact on the mental health of the elderly. The "feedback mode" of parent-child relationship and traditional ethics in China still attach importance to maintain the potential productivity of elders (Chen & Silverstein, 2000). Caring for grandchildren was also beneficial to help the elderly achieve a sense of efficacy and independence, which increased their life satisfaction and improved their mental health. This was consistent with previous research findings (Zhang & Chen, 2014).

Model 3 included three ISR variables, among which financial and emotional support proximity passed significance test, indicating that the more economic support the elderly received and the closer they were emotionally to their children, the better of their mental health status. During the caring for grandchildren families in China, grandparents received more remittances and economic help for taking care of the grandchildren left by the children of rural migrant workers or urban dual-income workers (Qi, 2018), and maintained intimate relationship with their children (Guo, Aranda, & Silverstein 2009; Liu 2014), which contributed to improve PWB of elders (Cong & Silverstein, 2008). However, household chores help has no significant impact on mental health, this was

Table 1. Variable definitions and descriptive statistics

Variables	Variable definition	Sample size	M(SD)/%
Psychological well-being	Ranges:9~27, High score - high mental health	3543	22.58(3.49)
Caring for grandchildren	Ranges :1~6, High score - high frequency care	3543	2.73(2.08)
Intergenerational support			
Financial support	Ranges :1~9, high score—more economic received;	3543	4.22 (2.18)
Household chores	Ranges :1~5, high score —more housework help;	3543	2.41 (1.53)
Emotional support	0=not intimacy (reference group),1=intimacy	3145	88.8
Sex	0=Female (Reference group),1=Male	2003	56.5
Age	Continuous variable	3543	66.09(6.0)
Marital status	0=Windowed (Reference group),1=Married	2806	79.2
Household	0=Rural (Reference group), 1=Urban	1843	52.0
Living arrangement	0=Living alone (Reference group),1=Not live alone	3539	99.9
Income(ln+1)	Continuous variable	3543	9.26 (1.84)
Educated	0=Not educated (Reference group);	632	17.8
Primary school	1=Primary school;	1335	38.2
Junior high school	2= Junior high school;	844	23.8
Senior high school*	3=Senior high school and above	712	20.1
Physical health	Ranges :1-5, high score —high physical well-being	3543	3.35 (1.07)

Table 2. Multiple linear regression for the influencing factors to PWB of Chinese elderly

Variables	Model 1		Model 2		Model 3		Model 4	
	B	SE	B	SE	B	SE	B	SE
Male	-0.263*	0.113	-0.211*	0.112	-0.211	0.112	-0.211	0.112
Age	0.007	0.009	0.009	0.010	0.015	0.009	0.016	0.010
Married	1.168***	0.139	0.896***	0.101	1.104***	0.137	1.099***	0.137
Urban	0.684***	0.128	0.646***	0.084	0.647***	0.127	0.640***	0.128
Not live alone	0.111	1.560	0.896	0.101	0.929	1.544	0.944	1.544
Income(ln+1)	0.074*	0.032	0.097*	0.023	0.069*	0.032	0.068*	0.032
Educated								
Primary school	0.632***	0.155	0.176*	0.084	0.571***	0.153	0.572***	0.153
Junior high school	1.045***	0.182	0.527***	0.095	0.908***	0.180	0.907***	0.180
Senior high school+	1.306***	0.199	0.740***	0.102	1.137***	0.197	1.136***	0.197
Physical health	1.113***	0.050	0.863***	0.038	1.071***	0.049	1.070***	0.049
Caring for grandchildren			0.040*	0.020			0.015	0.027
Intergenerational support								
Financial support					0.107***	0.025	0.109***	0.026
Household chores					0.040	0.035	0.035	0.036
Emotional support					1.296***	0.170	1.297***	0.170
F	91.961***		83.782***		79.807***		74.113***	
Adjusted R ²	0.197		0.205		0.216		0.224	
Sample Size	3543		3543		3543		3543	

Note: *p<0.05, **p<0.01, ***p<0.001

Table 3. Multiple linear regression/logistic for the ISR of Chinese elderly

Variables	Model 5		Model 6		Model 7	
	B	SE	B	SE	B	SE
Male	-0.230**	0.077	0.018	0.053	-0.242*	0.119
Age	-0.020**	0.007	0.007	0.005	-0.032***	0.009
Married	0.163	0.094	-0.253***	0.065	0.365**	0.132
Urban	0.259**	0.088	0.136*	0.061	-0.071	0.133
Not live alone	1.757	1.061	0.888	0.734	2.957*	1.162
Income(ln+1)	0.039	0.022	-0.001	0.015	0.003	0.033
Educated						
Primary school	0.312**	0.105	0.021	0.073	0.166	0.145
Junior high school	0.584***	0.124	0.075	0.085	0.537**	0.187
Senior high school+	0.916***	0.135	-0.030	0.093	0.522*	0.203
Physical health	0.108**	0.034	0.027	0.023	0.223***	0.051
Caring for grandchildren	0.065***	0.018	0.200***	0.012	0.063*	0.029
F/ Chi-square	19.941***		27.885***		96.273***	
Adjusted R ² /Nagelkerke R ²	0.056		0.077		0.053	
Sample Size	3543		3543		3543	

Note: *p<0.05, **p<0.01, ***p<0.001

mainly due to the increase of living space distance between the elderly and their children caused by the change of living arrangements, which reduced the possibility of adult children providing instrument support for their parents objectively (Song, Li, & Feldman, 2017).

Model 4 added variables of caring for grandchildren and intergenerational support at the same time. It was noted that caring for grandchildren no longer had a significant impact on mental health, while intergenerational economic support and emotional support still had a positive effect on mental health, and the

estimated parameters and goodness of fit of the Model have changed. This was mainly reflected in the improvement of economic and emotional support parameters and units that affect changes in mental health, which indicated that intergenerational support shared the effect of caring for grandchildren on mental health of the elderly, and played a full mediating effect in the process of intergenerational care's effect on mental health. What's more, the mediating effect of emotional support (Beta=0.117) was significantly greater than that of economic support (Beta=0.067).

Analysis on the influence mechanism of CFG on ISR

According to the empirical analysis of the influencing factor models on PWB, CFG influenced mental health through ISR. However, the effect of CFG on ISR in the elderly was not examined. Therefore, this paper then constructed a regression model of intergenerational support (as shown in table 3) to discuss how ISR behavior was affected by CFG.

Model 5 examined the effect of CFG on financial support and found that the more often older people help care for grandchildren, the higher level of financial assistance they could get from their children. For every additional unit of CFG, financial support for the elderly increased by 0.065 units. On the one hand, the olds need more financial support from their children because they have no extra source of income due to retirement or incapacity. On the other hand, in order to help children relieve the pressure of family and work, some elderly people left the familiar living environment and gave up original job opportunities, and choose to take the responsibility of CFG in the children's families. In order to make up for parents' sacrifice, children often increased their financial support to their parents, which also reflected the principle of intergenerational reciprocity (Cong & Silverstein, 2011).

Model 6 examined the effect of CFG on household chores help, and the results showed that there was also a significant positive effect between them. Older adults who provide more CFG receive more help with housework. Model 7 analyzed the influence of CFG on emotional support, though it only passed the significance test of 5% statistical level, it still had a positive influence on emotional support. Combining Model 5~Model 7, it could be found that CRG can promote the intergenerational feeding of adult children to the elderly parents, conforming that intergenerational support is a two-way intergenerational exchange behavior (Xu, 2017). Altruism is the motivation for most Chinese parents to provide child care for their children (Yin, 2010), but it also has potential binding force under the influence of traditional Confucian culture. The essence of "rational" grandparents to help take care of their grandchildren is to send the signal of pension contract to their children and urge them to assume pension responsibility.

CONCLUSION

With the increase of life expectancy and accelerated demographic aging, the elderly have more opportunities to be grandparents and taking care of their grandchildren, which undoubtedly poses a great challenge to the physical and mental health of the aged group. Based on the data of 2014CLASS, the influence of caring for grandchildren on psychological well-being was deeply discussed, we found evidence that: (1) The average mental health level of elderly in China was 22.6, which was a good overall condition; (2) Caring for grandchildren had a direct impact on psychological well-being, and the more CFG was provided frequently, the better mental health level of the elderly. (3) Intergenerational economic support and emotional support from children had a positive effect on mental health of older adults, and the more economic and emotional support the elderly received, the higher of their mental health level. (4) Intergenerational economic and emotional support, as mediating variables of CFG affected mental health, play a full mediating effect, and the mediating effect of emotional support was significantly greater than that of economic support, while the influence of housework help was not significant. CFG mainly affected the mental health of old parents through intergenerational economic support and emotional support.

Although this study found the influence mechanism of mental health from the perspective of inter-generational care, there are several limitations to be noted. In fact, the amount and intensity of caring for grandchildren have different influences on mental health of the elderly. However, the due to intensity of caring for grandchildren was difficult to be reflected due to the limitations of this data, and the mechanism of the influence of the amount of caring for grandchildren on mental health has not been tested. Regardless of these limitations, this study has significant implications for future research and policy on social policy of the elderly. The informal support from family has an important on the psychological well-being of elders, which mainly reflected in material help and spiritual care. Therefore, in the context of actively coping with aging population, we should attach importance to the vital value of family caregivers, improve family support and policies constantly, and alleviate the burden of family in elderly care. At the same time,

in order to successfully implement the healthy aging strategy, it is also necessary to strengthen formal social support for the elderly, and further clarify the main responsibility boundaries of the state, society and family and their cooperative relations.

Acknowledgements

This Study was Supported by Postgraduate Research & Practice Innovation Program of Jiangsu Province: Study on the social factors of longevity village and longevity (2017B737X14).

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