



Intergenerational Relations and Mental Health among Chinese Older Adults

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Abstract. This study examined data from the 2015 China Health and Retirement Longitudinal Study (CHARLS) to investigate the influence of intergenerational relations on Chinese elders' depression. The results showed that the average level of depression for elderly women was higher than that of elderly men. The elderly received much more financial support from their adult children than financial support transferred from the elderly to their adult children. Elderly men also received much more financial support than their female counterparts did from their adult children. Regarding instrumental support, about half of the respondents had the experience of taking care of grandchildren. And elderly women reported longer hours of caring grandchildren than elderly men. In terms of emotional support, on average, elderly men and women did not show significant differences in seeing or having contact with their adult children. The regression results showed that financial exchanges or instrumental support to children did not show significant effects on elders' level of depression.

Keywords: older adults, CHARLS, mental health, intergenerational support

1 Introduction

Studies have repeatedly documented the relationship between intergenerational relations and the elderly's mental health^[1, 10-11]. Intergenerational relations are normally defined as relations between elderly parents and their adult children (or grandchildren), which normally include financial support, instrumental support and emotional relations. All three forms of intergenerational support could go both ways. This is because when elderly parents receive support from their adult children/grandchildren, they may also provide support to their adult children/grandchildren, such as taking care of grandchildren, doing housework et al. ^[5].

Findings on the linkage between intergenerational relations and older adults' mental health are not conclusive. Some researchers argued that emotional and instrumental

support promote the elderly's mental health outcome^[2, 12]. This is because characteristics of the intergenerational relationship, including quality, relationship strain, patterns of attachment, can affect parental well-being. A stronger attachment between parents and adult children usually relates to less care-giving burden of adult children and better well-being of elderly parents^[3, 8, 9]. Thus, intergenerational support from adult children often leads to better mental health among elderly parents. According to intergenerational solidarity theory, intergenerational solidarity and affection are associated with a more positive aging experience, which leads to better health among older adults^[6]. Others researchers, however, contended that intergenerational support from adult children for elderly parents' mental health could be negative, especially when it engenders feelings of dependence and loss of autonomy^[7]. Besides the explanation of losing dependence and autonomy, Merz and associates (2009)^[4] also argued that quality of the relations might be more important for elderly mental health than provision of actual support. If the relationship is in low quality, then providing support becomes more burdensome and therefore decreases the elderly parents' well-being. In short, previous studies have documented that in Western countries, intergenerational relations can affect the elderly's subjective well-being in different ways, depending upon the quality of the relationship and the strength of intergenerational attachment. Nonetheless, the story in the Chinese society is not clear. This study intends to fill this void by investigating sample from 2015 China Health and Retirement Longitudinal Study (CHARLS).

2 Data, Measures and Methods

2.1 Data

The study used data from the China Health and Retirement Longitudinal Study (CHARLS). The survey applied a multistage sampling strategy to collect high quality nationally representative sample data of Chinese residents aged 45 and older to serve the needs of scientific research on the elderly. The baseline national wave of CHARLS was conducted in 2011, which included about 10,000 households and 17,500 individuals in 150 counties/districts and 450 villages/resident committees. The individuals were followed up for every two years. Since this study aimed to examine older adults, only individuals aged 60 and over were included in the analyses. Meanwhile, the study excluded those who did not have adult children or grandchildren. As a result, it yielded 5,075 respondents with 2,832 males and 2,243 females.

2.2 Measures

Mental Health Measure. The study used the depression level as the measure of an older adult's mental health status, which applied a CESD – 10 measuring scale. CHARLS asked during the past week if the respondent: 1) bothered by little things; 2) felt difficult to concentrate on things; 3) felt sad; 4) felt difficult to do things; 5) felt hopeful towards future; 6) felt feared; 7) did not sleep well; 8) felt pleasant; 9) felt lonely; 10) felt difficult to continue life. Among those ten questions, eight of them

asked negative feelings and two of them asked positive feelings. Four scales were used for answers of those ten questions, i.e., 1=never or seldom (< 1 day), 2= rarely (1-2 days), 3= sometimes or half of the time (3-4 days), and 4= most of the time (5-7 days). The coding scales for questions asking positive feelings were the in the opposite direction. Cronbach's Alpha value was also generated to test the internal consistency of the variables, which yielded a value of 0.795. It suggested that the ten questions were internally consistent in terms of measuring the respondent's mental health condition. Thus, the study added the scores for the ten questions together to generate a continuous variable representing the level of depression of Chinese older adults. A greater value represented a higher level of depression.

Intergenerational Support Measures. Regarding financial support, the study used two measures, i.e., the amount of money an older adult received from his or her adult children/grandchildren during the past year and the amount of money the respondent gave his or her adult children/grandchildren during the past year. As far as emotional support, CHARLS asked the frequency adult children/grandchildren visited elderly parents and the frequency an older adult contacted their adult children/grandchildren. The study used 9 coding scales (8=almost everyday, 7=2-3 times per week, 6= once a week, 5=once for every two weeks, 4=once a month, 3=once per three months, 2=once per 6 months, 1=once a year, 0=very rare/never) . For those who had more than one adult child/ grandchild, the mean values for multiple children/grandchildren were applied. For the last measure, instrumental support, CHARLS only had questions asking instrumental support elderly parents provided to their adult children/grandchildren; no questions asked the opposite direction. The question asked "During the past year, did you or your spouse take care of grandchild(ren)?" and "If so, how many hours did you or your spouse take care of grandchild(ren) per week?"

Control Variables. A number of covariates were also controlled in the study, including the respondent's age, residence, occupation, educational attainment, family household per capita income, social networks, chronic diseases, if disabled, if felt painful, self-rated health (SRH), cognitive function and instrumental activity of daily living (IADL). Descriptive results for all variables (except for the leisure activity variables) are presented in Table 1.

2.3 Methods

Descriptive analysis was used to report means and percentage distributions of all variables. Since the depression level measure was coded as a continuous variable, ordinal least squared (OLS) regression was used to predict the impact of intergenerational support on older adults' mental health.

3 Results

3.1 Descriptive Statistics

Table 1 showed descriptive results for all variables. On average, females showed higher depression level than males (10.0 vs. 7.5). Regarding intergenerational support, the data showed that elderly parents received far more financial support from their adult children/grandchildren as compared to the amount of money they gave to their offspring. In addition, elderly fathers received more money from their offspring than elderly mothers (31086.4 vs.5605.3 RMB). As far as instrumental support, the results revealed that half of the studied elders or their spouses took care of their grandchildren in the past year. Females reported a greater number of hours taking care of grandchildren than males per week (69.6 vs.57.1). In terms of emotional support, there were higher percentages of females than males reporting their offspring visited them“almost everyday”or“2-3 times per week”(9.2% vs.8.0%;11.5% vs.9.7%). About half of the respondents saw their adult children/grandchildren once per two weeks. Less than 1.0% of the elders reported rarely or never visited by their children/grandchildren. When frequency contacting adult children/grandchildren is considered, slightly over 70.0% of elders contacted their adult children/grandchildren at least once a month. No significant gender differences were found in this regard. About 20.0% of the respondents claimed that contacted their offspring for every two weeks or once a week. About 11.7% of males and 9.4% of females claimed that they never or rarely contacted their adult children.

Table 1 also demonstrated the demographic and socioeconomic characteristics of the respondents. The mean age of the respondents was 68.5 with higher percentages of males being included in the survey (55.8% vs.44.2%). About 73.3% of the respondents came from rural areas and there were much higher percentages of females being widowed than males (42.9% vs.15.6%). The studied older adults had low educational attainments. Male respondents reported relatively higher family per capita income than females. The average number of adult children was 3.0. Over 50.0% of the respondents claimed they participated in social activities. As far as the health status of the elders. Males showed better health status measured by SRH, cognitive function, IADL, chronic diseases, body pain and disability status.

Table 1. Descriptive Results for all Variables: Chinese Aged 60 and above.

Variable	Total		Male		Female	
	Mean (or %)	S.D	Mean (or %)	S.D	Mean (or %)	S.D
<i>Dependent variable</i>						
Depression level (mean)	8.7	6.6	7.5	6.0	10.0	7.0
<i>Independent variables</i>						
1. Financial support						
a. received from adult children/grandchildren	19814.3	986312.1	31086.4	1320712.0	5605.3	18128.8
b. gave adult children/ grandchildren	2954.4	13377.0	3100.9	12131.9	2769.6	14800.4

2. Instrumental support							
a. If cared for grandchildren							
Yes	46.4		47.1		45.5		
No	53.6		52.9		54.5		
b. #of hours cared for grandchildren per week	64.1	204.5	57.1	163.8	69.6	231.5	
3. Emotional support							
a. Frequency visited by adult children/grandchildren							
Rarely or never	.9		.8		.9		
Once a year	8.4		9.0		7.7		
Once per 6 months	11.0		12.6		8.9		
Once per 3 months	13.4		13.4		13.5		
Once a month	15.9		15.1		17.0		
Once per two weeks	15.6		15.4		15.7		
Once a week	15.9		16.1		15.7		
2-3 times per week	10.5		9.7		11.5		
Almost everyday	8.6		8.0		9.2		
b. Frequency contacted adult children/grandchildren							
Rarely or never	10.4		9.4		11.7		
Once a year	1.4		1.3		1.6		
Once per 6 months	4.5		4.2		4.9		
Once per 3 months	7.6		6.9		8.5		
Once a month	15.9		16.5		15.2		
Once per two weeks	20.2		20.7		19.5		
Once a week	22.2		23.5		20.6		
2-3 times per week	12.2		12.3		12.0		
Almost everyday	5.6		5.3		6.0		
<u>Other variables</u>							
1. Age	68.4	6.6	68.3	6.4	68.5	6.8	
2. Sex							
Male	55.8						
Female	44.2						
3. Residence							
Rural	26.7		24.5		29.6		
Urban	73.3		75.5		70.4		
4. Marital status							
Widowed	27.7		15.6		42.9		
Married	72.3		84.4		57.1		
5. Educational attainment							
Illiterate	27.9		14.6		44.9		
Elementary school	47.3		53.6		39.3		
Middle school or above	24.8		31.8		15.8		
6. Occupation before retirement							
Agricultural	45.3		50.1		39.3		
Non-agricultural	54.7		49.9		60.7		
7. Per capita family income (mean)	8116.9	32859.7	9427.3	40792.9	6462.1	18368.5	

8. # of adult children (mean)	3.2	1.5	3.1	1.5	3.3	1.5
9. Income of adult children	4.5	2.3	4.7	2.2	4.2	2.3
10. If participated social activities						
Yes	52.8		52.3		53.4	
No	47.2		47.7		46.6	
11. Self-rated health (mean)	2.9	.9	3.0	.9	2.8	.9
12. Cognitive function (mean)	11.7	5.1	12.9	4.5	10.2	5.3
13. If had chronic diseases						
Yes	24.7		23.0		27.0	
No	75.3		77.0		73.0	
14. IADL (均值)	1.1	2.1	.7	1.8	1.4	
15.If disabled						
Yes	16.8		16.1		17.7	
No	83.2		83.9		82.3	
16.If felt painful						
Yes	32.0		25.4		40.3	
No	68.0		74.6		59.7	
N	5075		2832		2243	

Source: 2015 China Health and Retirement Longitudinal Study (CHARLS).

3.2 Regression Results

Table 2 showed OLS regression results on depression of older adults aged 60 and over. The study examined males and females separately and the results were showed in model 2 and 3, respectively. The results showed that financial support and instrumental support had significant effects on older adult's mental health. For emotional support, frequency of adult children/grandchildren visiting elderly parents showed significant effects on elder parents' depression level. For every one-unit increase in frequency of seeing adult children, male and female elders' depression level decreased by 21.0% and 25.0%, respectively. No significant gender differences were found in this regard. Frequency contacting adult children can significantly drop male elders' depression level but not females' depression level. Instrumental support and financial support did not show significant effects on either or female elders' depression levels.

Table 2. Regression Results on Depression of Older Adults Aged 60 and over.

	Total	Male	Female
	Model 1	Model 2	Model 3
<i>Independent variables</i>			
1. Financial support			
a. Natural logged amount of money received from children	-.04	-.02	-.12
b. Natural logged amount of money gave children	.03	.01	.07
2. Instrumental support			
a. If cared for grandchildren (ref.=No)	-.06	.15	-.55
b. # of hours cared for grandchildren per week	.00	.00	.00

3. Emotional support			
a. Frequency visited by children	-.23***	-.21**	-.25*
b. Frequency contacted children	-.10	-.16*	-.01
<i>Control variables</i>			
1. Age	-.08***	-.05	-.12***
2. Sex (ref.=female)	-1.49***		
3. Residence (ref.=rural)	-.07	.37	-.51
4. If widowed (ref.=married)	.86***	.55	1.12**
5. Education (ref.=illiterate)			
Elementary school	.42	.34	.56
Middle school or above	-.01	-.02	-.15
6. Occupation (ref.=non agricultural)	.88***	.78**	1.13***
7. natural logged family per capita income	.00	-.01	-.02
8. # of children	.05	.05	.01
9. Adult children's income	-.13*	-.05	-.25***
10.Participated in social activities (ref.=no)	-.32	-.35	-.31
11. Self-rated health	-1.29***	-1.21***	-1.39***
12. cognitive function	-.12***	-.09*	-.14
13. Chronic diseases (ref.=no)	.35	.28	.46
14. IADL	.54***	.48***	.59***
15. If disabled (ref.=no)	1.12***	1.26***	1.03*
16. Body pain (ref.=no)	3.75***	3.88***	3.58***
Constant	19.54***	15.13***	24.03***
R-squared	.33	.30	.32
N	2,571	1,547	1,024

Source: 2015 China Health and Retirement Longitudinal Study (CHARLS).

As to the effects of control variables, the results showed that most control variables were significantly associated with elders' depression level. Being widowed, disabled, having non-agricultural occupation, having difficulties in IADL, and having body pain for a long term significantly increased elders' depression level. Being males, having better SRH and cognitive function and adult children having higher income tended to decrease elders' depression level.

4 Conclusion and Discussion

Through analyzing sample aged 60 and above from data of the 2015 CHARLS, the research examined the relationship between intergenerational relations and Chinese older adults' mental health. The results showed that financial support and instrumental support did not show significant effects on male or female elders' depression level. Emotional support can reduce both male and female older adults' depression levels without significant gender differences. These findings worth our further discussion, for example, why did emotional support significant drop older adults' depression levels? Why didn't the other two dimensions show significant effects on older adults' mental health condition? These results may remind us that in current Chinese society, older adults desire more emotional support than other types of support from their offspring.

The study had limitations. Due to data limitation, measures of three types of inter-generational support were limited. In addition, the study relied on a cross-sectional

dataset to conduct the analysis. The changing patterns of intergenerational support and older adults' mental health have not been examined. Since one's mental health is in a changing status, one's depression level may change from low to high with time goes or the other way around. Thus, future research may consider using longitudinal dataset to further elucidate the association between intergenerational support and older adults' mental health.

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