

## New Plan and Traditional Practices: New Rural Pension Scheme and Elderly's Reliance on their Adult Children

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### Abstract

**In most modern societies, elderly citizens rely more on their state pensions than their adult children and family members for economic support. Since 1997, urban elderly citizens in China have benefited from a sustainable retirement pension system and the vast majority have relied less on their adult children and family for help. This suggests a significant institutional and cultural shift from previous generations. At the same time, rural elderly in China have had limited or no pensions, forcing them to work well into their 60s and 70s. Moreover, unlike urban seniors, rural elderly citizens have depended on their adult children for support. However, in 2009 the central government enacted a New Rural Pension Scheme (NRPS) that provides a full rural pension plan with state and individual contributions. Early studies find that the NRPS has significantly reduced rural elderly financial dependence on their adult children, but it is still unclear whether or not the institutional changes have influenced elderly perceptions of dependence. That is, has the NRPS reduced rural elderly perceived reliance on their adult children? Using the 2013 China Health and Retirement Longitudinal Study (CHARLS) we find that rural elderly have become less financially dependent on their adult children, but the vast majority still believe they will depend on their adult children in the future.**

### Keywords

**New Rural Pension Scheme, Elderly, China.**

### 1. Introduction

China's aging population is rapidly increasing due to higher life expectancies, while simultaneously fertility rates have decreased significantly (Herd, Hu and Koen, 2010; Munnell, 2004). Since the 1980s citizens in China have been living longer due to improved living conditions, diet and health care. As a result, life expectancy has increased from 68 years in 1990 to 75 years in 2010 (China's National Bureau of Statistics, 2012). As life expectancies have risen fertility rates have dramatically declined due to increased levels of education for women and the state family planning policy since late 1970s. In 1960, the average woman had 3 or more births compared to 2 or less in 2000 (Hu, 2006). In addition, the overall birth rate continued to decline from 14 per thousand in 2000 to 12 per thousand in 2006 (Gu, 2008). While slowing population growth and increasing life spans are positive demographic developments, these conditions also create new social challenges regarding elderly care and especially pensions in rural China.

Urban elderly retires at the age of 55 for women and 60 for men and they benefit from a well-developed urban pension system, but rural elderly do not "retire" and they have limited or no pension schemes. In fact, elderly villagers work until they "drop", meaning that they work until the day they die. (Pang, Brauw and Rozelle, 2004). Many rural residents continue arduous and physically demanding farm work well into their 60s and 70s. Rather than pensions, rural seniors have depended on their adult children for support, most notably their sons. However,

since the 1990s many rural residents, especially those under age 50, have migrated to urban areas and send remittances back to their parents. As a result, a larger proportion of elderly are left behind in the villages, but are still dependent on their adult children for financial support (Chen and Turner, 2014; Yi and Vaupel, 1989; Hu, 2006; Li, 1999).

In order to deal with the growing disparity in rural and urban pensions and to provide a more stable income for the rural elderly, the central government has proposed and enacted several rural pension schemes since the 1990s. One of the goals is to create a modern rural pension system (like the urban pension system) that provides stable financial support for the elderly and reduces the reliance on their adult children. Most of the previous pension plans were voluntary and mostly financed by individual contributions (i.e. rural elderly). Thus none of these plans have taken hold and have failed to replace elderly reliance on children (Hu, 2006). However, in 2009, the central government unveiled the New Rural Pension Scheme (NRPS) that provides elderly financial support through a combination of individual contributions and subsidies from central and local governments. Early studies on the effectiveness of the NRPS suggest that the program is now more accepted and successful than previous attempts (Cheng, Liu, Zhang and Zhao, 2015). Moreover, the rate of participation is much higher than previous rural pension plans with nationwide coverage (over 70 percent) by 2012.

Despite the wide spread participation, it remains unclear how the NRPS have influenced rural elderly dependence on their adult children (both psychologically and financially). Most of the early studies suggest that the NRPS has reduced elderly financial reliance on their children (Zhang and Chen, 2014; Cheng et al., 2015; Chen and Zeng, 2013). However, these studies used the survey data conducted in 2010 and 2011 only a couple of years into the program. Moreover, few studies have closely examined elderly perceptions regarding the current and future reliance on their children. The development of a modern pension system requires a shift from traditional elderly dependence on family members to a more institutional dependence on a state pension plan (Leisering, Sen and Hussain, 2002; Choi, 1996; Ying, Philips and Lee, 2002). For example, the urban pension plan in China reduced urban elderly financial and perceived reliance on their adult children. A 2013 nationwide survey of elderly citizens shows that only 5 percent of urban elderly think they will rely on their adult children financially for support. Thus, has the NRPS reduced rural elderly perceived reliance on their adult children?

We evaluated the 2013 China Health and Retirement Longitudinal Study (CHARLS) and found that rural elderly have become less financially dependent on their adult children, but the vast majority still believe they will depend on their adult children for financial assistance in the future. The data suggests that cultural perceptions can remain in the face of very real institutional change. While institutions, such as the new pension plans, can generate fast and immediate change (in this case reduced financial dependence on their adult children), cultural norms such as perceived reliance on children for old age support change a much slower rate. Moreover, we find that the adult children, despite making fewer direct payments to their parents, also believe that they will continue to take financial care of the elderly parents. Thus while the NRPS has successfully reduced the rural elderly direct financial assistance on their adult children, the cultural (perceived) reliance will still take time to change.

This paper proceeds as follows; The first section reviews the literature on traditional and institutional elderly support. In China, filial piety and caring for elderly parents was the duty for all children in rural and urban areas, but after the introduction of modern pension plans in urban China in the 1950s and 1960s as well as pension reform in the 1990s, urban elderly have relied less on their children. The second section addresses the relationship between pension plans and intergenerational relationships including intergenerational transfer of income. The third section provides theories about institutional change and the slow and fast moving hypotheses. The fourth section presents the variables and measurements as well as descriptive and statistical data analysis. Finally, we conclude with an overview and implication of the study.

### 1.1. Traditional and Institutional Elderly Support

Traditionally, caring for the elderly has been the responsibility of adult children in China. Filial piety has been a tenet of Chinese society since the time of Confucius (Hu, 2006; Ebrey, 1996). Moreover, taking care of elderly people is seen as a moral and legal obligation in contemporary China (Zimmer and Kwong, 2003). Indeed, Article 49 of the Chinese Constitution states, "children who have come of age have the duty to support and assist their parents (National People's Congress of the People's Republic of China, 1982)." Through the education system and the media there is also a social expectation that the younger generations has a duty to take care of their elderly parents (Hu, 2006).

With the rise in industrialization, urbanization and rural-urban migration, most developing countries including China have experienced cultural and institutional change from elderly reliance on the family to greater access to state pension plans and social insurance (Li, 1999). Indeed, this process of modernization begins to erode the traditional practices and expectations, especially children's duty to take care of their parents and elderly reliance on their adult children. The mechanism for this institutional and cultural change is the state social security system (Ying et al., 2002; Leisering et al., 2002; Choi, 1996). Over the last several decades, China also has developed a modern pension system for the urban elderly.

Beginning in the early 1950s, China established public pension program for urban employees who worked in state owned enterprises, government offices and public institution (Nee, 1991; Walder, 1992; Lx, 2012). Under the work unit system, the state owned enterprises (SOEs) completely covered urban retirement and pensions, and most urban workers were public employees. However, after the introduction of market reforms in the early 1980s, the central government began to restructure urban pension plans (Lx, 2012). In 1986, the central government also reformed the Urban Employees' Pension Program (UEPP). Rather than full state coverage, urban workers are now required to contribute to their pension plans and they have to participate for at least 15 years until they are entitled to their pensions (Chen and Turner, 2014). By 2012, over 300 million urban workers are participating in the UEPP. However, this program does not cover those who were unemployed or did not have at least 15 years into the pension.

With the reform of SOEs after 1997, a significant proportion of urban workers, especially middle age workers, were laid off and remained unemployed. In 2011, China enacted the Urban Residents' Pension Program (URPP) in an attempt to provide pensions for the same elderly workers who had been laid off. The program applies to unemployed urban residents over the age of 60 who are eligible to receive basic benefits from the government without any contribution (Chen and Turner, 2014). By the end of 2011, over 5 million people had participated in the URPP (Dorfman, Wang, Keefe and Cheng, 2013).

Thus, over the last few decades China has developed a modern social security system for the urban elderly. For example, Herd et al. (2010) also found that 95 percent of urban residents in their sample were participating in the pension scheme, and pensioners reported that they did not rely on their adult children for financial support.

Although the urban elderly pension system has been developing over the last few decades, the rural pension system has lagged far behind. One reason is due to the government and rural resident's shared perception that the rural elderly can continue to rely on their adult children and land (Herd et al., 2010). Another factor was that previous attempts at establishing a rural pension plan relied on voluntary contributions with little or no state assistance (Lb, 2007). Many rural pension programs stagnated in the 1990s mainly due to inadequate subsidies from the government as well as widespread mismanagement of the funds (Lei, Zhang and Zhao, 2013; Shi, 2006). The portion of the rural population who participated in rural pension schemes during this period was less than 10 percent (Hu, 2006).

However, the central government launched the 2009 New Rural Pension Scheme (NRPS) in rural areas to improve the welfare of the rural elderly. Unlike previous rural pension schemes, the program requires both individual contributions and subsidies from central and local governments to finance the NRPS (Cheng et al., 2015). Within three years almost all rural elderly were participating in the NRPS. NRPS was first implemented in 10 percent of all rural counties, and reached to 23 percent within the first year (Mu, 2010). By the end of 2012, the scheme covered nearly all rural elderly in China (Cheng et al., 2015).

Although typically participants contribute for 15 years, elderly rural residents entering the NRPS at the age 60 or over can directly receive basic pension benefits. In order to immediately receive these benefits, their eligible adult children must enroll in the program at the same time (Cheng et al., 2015; Cai, Giles, Keefe and Wang, 2012). This requirement is called “family binding”. The ultimate aim of “family binding” is to encourage young rural residents to participate in the program early to ensure at least 15 years of participation before they reach 60 years of age (Chen and Turner, 2014). Ironically, this requirement directly influences rural elderly perceptions of the program and who is providing their financial support. Even though it is the Chinese government who provides the basic pension benefit for rural elderly over 60, one study shows that many rural elderly believe that the benefits they receive are due to their adult children because of the “family binding” requirement (Wang and Xue, 2012; Liu, Wu and He, 2011). This suggests that despite the institutional development of the modern pension system, rural elderly continue to hold traditional perceptions regarding elderly support.

## 1.2. Pension Plans and Intergenerational Relationship

Much has been written on the interaction of pension programs and intergenerational relationships, including living arrangement, informal support and intergenerational financial transfers. Yet, there is no consensus on how pension programs reduce elderly reliance on their adult children. Some studies find that pensioners have greater social independence. For instance, Barro (1974) and Becker (1974) find that pensioners are less reliant on their adult children for financial assistance. Liu and Manton (1985) and Soldo, Wolf and Agree (1990) also show that the elderly with pensions display a decreased reliance on informal support from their children. Finally, McGarry and Schoeni (2000), Costa (1999) and Engelhardt, Gruber and Perry (2005) find that older residents on pensions are less likely live with adult children. However, other studies suggest that pensions do not have a significant influence on intergenerational relationships with respect to living arrangements and informal support (Edmonds, Mammen and Miller, 2005; Kohli, 1999; Li, 1999; Hu, 2006). Kohli (1999) demonstrate that elderly with pensions tend to give their adult children more support with the intention that they will receive greater help from adult children in the future. Regarding elderly perceptions and reliance on adult children, Li (1999) and Hu (2006) suggest that even in urban China traditional attitudes remain despite the participation in long term pension programs.

There are few studies on the impact of NRPS in rural China, mainly because it started only a few years ago, and the data is limited. In general, most researchers find that the NRPS is reducing rural elderly financial reliance on children. Still, there is little research that explores the impact of NRPS on elderly perceptions.

Several studies find a positive effect of NRPS on the independence of elderly people such as reducing the financial reliance on their adult children. Zhang and Chen (2014) observe that the NRPS has significantly reduced the financial dependency in 2011. Using the Chinese Longitudinal Healthy Longevity Survey panel data from 2008 and 2011, Cheng, Zhang and Liu (2013) and Chen and Zeng (2013) suggest enrollees became less dependent on children in terms of financial resources. Regarding living arrangement and informal support, Cheng et al. (2015) find that participation in the NRPS positively decreases the probability of living with children, but adult children are still the main providers of long-term informal care.

While most studies suggest the NRPS has successfully reduced the rural elderly's financial reliance on their adult children, few studies have examined elderly perceptions and changing attitudes towards children's support (i.e. cultural change). In addition, these studies only examined the initial years and introduction of the program.

While financial contributions that adult children make to elderly, living arrangements and informal support are direct measures of intergenerational relationships, these measures do not reflect changing attitudes and perceptions regarding the traditional reliance on their children. Indeed, one of the key factors in institutional change is perceptions of future reliance on their children. Although studies suggest that due to the NRPS elderly are receiving less direct financial assistance from their children, it is unclear whether or not rural elderly believe they will continue to rely on their children in the future. Since NRPS just was launched in 2009, so far, few studies examined the impact of NRPS beyond the introduction of the program. In fact, existing studies use datasets within the first three years (2009-2011) before it was nationwide. This article analyzes the impact of NRPS in 2013 after the nationwide implementation of the NRPS.

### 1.3. Theory of Institutional Change

One of the key questions regarding the NRPS is whether or not the introduction of a new social security institution can influence elderly perceptions on traditional (and future) reliance from their adult children. This is essentially an interaction between culture and institutional change (North, 1990; Knight, 1992; Greif and Laitin, 2004). However, the challenge is defining and measuring change. Many scholars adopt North's (1990) definition of cultural practices and categorize culture as informal institutions. However, Roland (2004) suggests that there needs to be a more fine grained classification for informal institutions especially regarding the pace of institutional change and the persistence of cultural practices. He defines cultural norms and practices as "slow moving institutions". While fast moving political and economic institutions can change overnight, it takes more time to influence social norms and values. Moreover, Roland suggests that replacing or transplanting slow moving institutions with fast moving institutions can be problematic.

Urban China is an example cultural change, for example, urban elderly do not expect to rely on their children in the future and their attitudes reflect the more "modern" reliance on pension plans. In urban China, the cultural practice of relying on adult children in old age has changed with the introduction of the pension plan. In our 2013 sample, we find that 95 percent of urban elderly over the age of 60 who participate in Urban Employees' Pension Plan state that they do not anticipate relying on their children in the future (see Table 1). While only a small proportion of the urban elderly do not have pension plans or are receiving unemployed pension plans, they tend to report a much higher future reliance on their children. Thus when the urban elderly participate in a social security system such as the UEPP, they have less perceived future reliance on their adult children.

**Table 1** Percentage of urban elderly who report they will rely on their children in the future  
Percentage (frequency)

Urban elderly not participating in any social security program	61 (148)
Urban elderly participating in UEPP	5 (1119)
Urban elderly participating in URPP	31 (83)

Source: China Health and Retirement Longitudinal Study (CHARLS) 2013

Yet, in the countryside, the traditional practice of relying on children has persisted because the rural elderly have not had pensions and retirement benefits until 2009. In this case, the future reliance on adult children is a “slow moving” institution and the new rural pension system is a “fast moving” institution in rural China. According to Roland (2004), it will be very difficult to change the attitudes and practices of rural elderly’s perceived reliance on their children as well as children’s cultural commitment to their parents.

We examined two hypotheses. The first is the fast moving hypothesis. H1: Receiving pensions will reduce perceived future reliance on children. Knight (1997) suggests that institutions, even new ones, can change traditional preventions. Shen and Williamson (2010) as well as Ebenstein and Leung (2010) examined the first two years of the NRPS and they believe that expansion of NRPS should influence elderly and younger parents’ perceptions of their sons and the notion of “bringing up sons for your old age”.

The second is the slow moving hypothesis. H2: Receiving pensions will not reduce perceived reliance on children. The obligation for younger generations to support elderly is one of the oldest and continuing traditions in rural China. As a social norm, supporting the elderly tends to change at a much slower pace (Roland, 2004). In their sample, Cai and Wang (2006) found that 90 percent of the rural respondents plan to financially support their parents. In addition, the “family binding” requirement of NRPS may also enhance the perceived reliance on children.

## 2. Data Source

The data for this study is from the China Health and Retirement Longitudinal Study (CHARLS) administered by the National School of Development at Peking University. CHARLS is a national representative panel study of Chinese residents aged 45 and older. We use the two waves of CHARLS panel data from 2011 and 2013, and we focus on the rural sample of the elderly. Our sample excludes approximately 21 percent of respondents living in urban areas, and 56 percent of respondents who were younger than 60 in 2011. As a result, we have a sample of 5,355 in wave 2011. Of these, 600 respondents were lost in the 2013 follow-up survey. Therefore we have a total of 4,755 respondents from 28 provinces.

## 3. Empirical Analysis

**Table 2.** 2011 relationship between perceived future reliance on adult children and participating in NRPS

	2011 Participation in NRPS	
	Percentage (frequency)	
Future reliance on children	No	Yes
No	20 (795)	24 (199)
Yes	80 (3,125)	76 (636)

Source: China Health and Retirement Longitudinal Study (CHARLS) 2011

First we examine the relationship between perceived reliance on adult children and those participating in the NRPS in 2011. The reliance of NRPS pensioners on their adult children is same as non-participants with only a slightly larger percent of the elderly not receiving pensions and relying on their adult children (see Table 2). While elderly participants in the NRPS have a slightly lower percentage of perceived future reliance on their adult children, the difference is not significant. In addition, the actual number of the elderly receiving pensions is small in 2011, and only about 18 percent of the elderly are participating in the NRPS. If

receiving pensions can reduce the perceived future reliance on adult children, then we expect to observe a higher proportion of elderly relying less on their children as the participation in NRPS rate increases.

Second is the relationship between perceived future reliance on children and receiving pension in 2013. There is a dramatic increase in NRPS participation rate with about 63 percent of elderly people receiving pensions in 2013 (see Table 3). However, the percentage of elderly people receiving pensions and not relying on children does not significantly change. In fact, we observe only a slight decrease. In 2011, about 24 percent of elderly who received pensions did not rely on their children compared to 21 percent in 2013. This suggests that the elderly receiving pensions from NRPS did not significantly change their perceived future reliance on their adult children. Despite the success of the NRPS, it seems like four years (2009 to 2013) is still too short of a time period to change the traditional perceptions. Thus, the descriptive data supports the slow moving hypothesis.

In 2013, the majority of elderly in the sample were participating in the NRPS. The number of elderly not participating and relying solely on their adult children for future support decreased from 3,125 in 2011 to 1,116 in 2013. This is a significant difference in the actual number of respondents with an over 50 percent decrease. However, the number of the elderly not participating in the NRPS and not relying on adult children only decreased from 795 to 622 or about a 20 percent.

**Table 3.** 2013 relationship between perceived future reliance on adult children and participating in NRPS

Future reliance on children	2013 Participation in NRPS	
	Percentage (frequency)	
	No	Yes
No	36 (622)	21 (633)
Yes	64 (1,116)	79 (2,384)

Source: China Health and Retirement Longitudinal Study (CHARLS) 2013

Why did the number of the elderly not receiving the NRPS pension with no perceived future reliance on their adult children change little from 2011 to 2013? A close look at the panel data reveals that most of the 622 elderly in 2013 are participating in other social security insurance programs. These programs include commercial pensions, some of the previous old rural pension schemes, rural subsidies for those over 80 years old and land compensation for rural elderly. Most of these pension insurance programs existed in the 1990s long before the introduction of the NRPS. Thus we observe no significant change from 2011 to 2013 in the percentage of rural elderly who did not participate in the NRPS and have no perceived future reliance on their adult children. This result also supports our slow moving hypothesis because, like the urban pensions, it seems to have taken a couple of decades to change perceived future reliance on children.

Family binding is another aspect of the NRPS that may influence rural elderly perceived reliance on their adult children. Rural elderly over the age of 60 at the time they register for the NRPS can automatically receive basic pension benefits as long as their eligible adult children enroll in the program as well. Table 4 shows that in 2013 about 83 percent of NRPS pensioners directly received payments without contributing to NRPS because of "family binding". Interestingly enough, current research on the NRPS finds that young people in the countryside do not have a strong desire to participate in NRPS for themselves. They enroll in the NRPS due to the demands of their parents (Wang and Xue, 2012; Liu et al., 2011). Thus the NRPS combines

traditional filial piety with an institutional pension scheme. In fact, it seems like central government policy makers are relying on filial piety to establish the new institutional pension scheme. We believe that the overt participation of adult children in the NRPS may contribute to the rural elderly continued perception that they will rely on their children in the future despite receiving payments from the NRPS.

**Table 4.** Rural Contribute to NRPS in 2013

	Percent (Frequency)
Individual Elderly Contribution	17 (513)
Family Binding (i.e. children) Contribution	83 (2,430)

Source: China Health and Retirement Longitudinal Study (CHARLS) 2013

Direct financial support is also a factor that influences rural elderly perceived future reliance on their adult children. To verify the adult children support for their elderly parents, we examine whether or not children transferred some of their income to their parents. The CHARLS survey questionnaire directly asks if the elderly receive income from their children. We find that about half of the rural elderly receive income from their adult children (see Table 5). Moreover, older parents with deteriorating health received greater financial support from their children in 2013. Table 5 suggests that direct support from adult children is actually increasing with participation in the NRPS and children's perceived and real responsibility to their parents (i.e. filial piety) continues.

**Table 5.** Whether or not rural elderly receives direct financial support from their adult children

Receive direct financial support	2011	2013
	Percentage	
No	47	16
Yes	53	84

Source: China Health and Retirement Longitudinal Study (CHARLS) 2011 and 2013

While most rural elderly are receiving financial support from their adult children in 2013, a higher percentage are also participating in family binding. Table 6 shows that 74 percent of elderly people without financial support from their children are involved in family binding, but 81 percent of elderly people with financial support are also involved in family binding. The rural elderly with financial support from children have a greater possibility of participating in family binding. This implies a consistency in adult children's behaviors in terms of support for their elderly parents. Thus adult children are not completely relying on NRPS for their parents and they are contributing through family binding.

**Table 6.** Relationship between receiving financial support from children and Family Binding in 2013

Involved in Family Binding	Received Financial Support from Children	
	No	Yes
	Percentage	
No	26	19
Yes	74	81

Source: China Health and Retirement Longitudinal Study (CHARLS) 2013

The descriptive statistics suggest that the NRPS has not changed traditional perceptions regarding elderly reliance on their adult children. In addition, adult children continue to support their parents, such as providing transferred payments, even after their parents participate in NRPS and receive basic pensions.

**Table 7.** Relationship between elderly's reliance on children and receiving NRPS pensions

	Elderly perceive future reliance on their adult children,		
	(1)	(2)	(3)
Receiving pension 2011	-0.27*** (-2.93)		
Receiving pension 2013			0.67*** (9.63)
Children support 2013			0.81*** (9.45)
Age	0.01 (1.19)	0.00 (0.23)	-0.00 (-0.27)
Female	0.44*** (5.42)		0.40*** (5.29)
Formal education	-0.27*** (-3.15)	-0.20** (-2.53)	-0.22*** (-2.76)
Marital	-0.15 (-1.61)	-0.14* (-1.67)	-0.20** (-2.32)
Household Size	0.19*** (8.90)		0.18*** (9.14)
Cons	0.71 (1.56)	0.30 (0.72)	-0.10 (-0.24)
N	4734	4734	4734

Source: China Health and Retirement Longitudinal Study (CHARLS) 2011 and 2013

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Nevertheless, within existing literature there are several demographic variables that may influence perceptions and reliance on adult children such as age, gender, education, marital status and family size. We run a logit regression to control for these factors. Gender is coded as 1 for female and 0 for male. Education is coded as 1 if an individual completed at least 9 years of compulsory education and 0 if they have less than 9 years. Marital status is coded as 1 if the elderly lives with their spouse and 0 if they are married but not living with spouse, separated, divorced, widowed or never married. Household size is the number of residents who are living together. The number does not include the respondent or their spouse.

Overall the results of regression analysis are consistent with descriptive analysis. Table 7, Model (1) supports the earlier studies on the NRPS in 2011 (Zhang and Chen, 2014; Chen and Zeng, 2013). The statistically significant negative coefficient suggests that respondents participating in 2011 report that they are less likely to rely on their adult children in the future. However, in 2011 only 26 percent of rural elderly respondents participated in NRPS. The number of NRPS pensioners may have been too small to measure the impact of NRPS on perceptions. In addition, those participating in NRPS at the time were in pilot counties for the program, and it is unclear how these initial counties were selected. In 2013, the NRPS participation rate more than doubled to 66 percent in the sample. Model (2) shows a statistically significant positive relationship between participating in the NRPS and perceived future reliance on their adult children. This suggests that participation and receiving pension funds did not change the traditional perceptions of the rural elderly.

Another aspect of the NRPS is whether or not adult children also rely on the pension plan to financially support their elderly parents. In Model (3), we add the variable for children's continued financial contribution to their parents. The variable is positive and statistically significant. This reflects two aspects regarding traditional perceptions in rural China. First is rural elderly are continuing to receive financial support from their adult children as well as the NRPS payments, and this may be influencing the lack of change in perceptions despite the new social security system. Second is the NRPS has not changed the perceptions of adult children and filial piety regarding financial support and care for elderly parents in rural China. As long as adult children directly contribute to elderly income or indirectly through family binding, rural elderly continue to believe that they will rely on their children in the future. Moreover, the rural elderly have witnessed a number of previous rural pension programs that were not sustainable in the past, so it takes time for new institutions to influence perceptions.

Demographic variables such as age, education and household size also have an influence on elderly perceptions. We assumed that older rural residents especially over 70 year old depend on their children more, but in regression models age is not significant. This suggests that most elderly over the age of 60 hold similar perceptions regarding reliance on their children. However, elderly females have a greater perceived future reliance on their children than males. Cheung, Heinonen and Liu (2008) and Ji (2013) find that rural elderly women tend to be less educated than males and rely more heavily on their children. Indeed, education levels also have a significant influence. The negative coefficient suggests elderly with formal education (over 9 years) in 2011 and 2013 report that they are less likely to depend on their children in the future. Typically rural elderly with higher levels of education had off farm labor opportunities or they were township cadres and as result they have more savings and also access to better pension plans (Li and Tracy, 1999; Zhang and Goza, 2006). Thus the perceptions of the higher educated rural elderly with better income and off farm employment opportunities tend to look more like urban elderly with regards to future reliance on their children. This may be due to the earlier access to pension plans and greater time to adjust perceptions. Finally, the coefficient for household size is also positive and significant in 2011 and 2013. Thus rural elderly who live

with their children and extended family have a much higher perceived future reliance on their children. Previous studies also show that larger households tend to have greater levels of elderly support (Zimmer and Kwong, 2003).

#### 4. Conclusion

The descriptive and statistical analysis of the 2011 and 2013 CHARLS data support the slow moving hypothesis. While institutions can be set up within a short period of time and influence individual attitudes and behavior, the process is much slower when it comes to changing or replacing traditional perceptions. Previous studies on the first two years of the NRPS (2009-2010) suggest a significant reduction in elderly reliance on their adult children (Cheng et al. 2013; Chen and Zeng 2013; Zhang and Chen 2014). In fact, our analysis supports these finding in the 2011 survey, but our 2013 results show that early (first four years) participation in the NRSP did not reduce rural elderly perceived reliance on their adult children. Indeed, the 2013 data analysis supports some of the earlier research on intergenerational transfer and pensions in China (Hu, 2006; Li, 1999). This traditional social norm tends to change slowly for elderly parents and their children (McCarthy and Zheng, 1996). Just as with urban pensions and elderly perceptions, it takes decades rather than years to change traditional views and filial attitudes. Despite the wide spread participation and rural elderly getting pension funds, over 83 percent of the elderly respondents still receive financial support from children in 2013. The practice of supporting elderly parents is still pervasive in rural China. Moreover, young rural residents are not volunteering to participate in the NRPS, but rather view it as their duty to contribute through family binding to help their elderly parents. Regardless of the new rural pension system, even adult children seem to hold the same traditional view.

The final implication of the study is that rural elderly may continue to rely on adult children over the next decade due to migration and decreasing rural population. In fact, it seems like as adult children migrate to the cities, they may feel more obligated to provide for their parents still in the countryside. However, the cost of urban living and providing for elderly parents in the villages seems to be increasing over time. The NRPS may help supplement children's financial support. Indeed, future studies may examine whether or not rural elderly are relying more on the NRPS or their children and how this ratio may be changing over the years. Nevertheless, the data shows that both modern pension system and traditional filial piety contribute to rural elderly social security in China.

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