INTERGENERATIONAL SUPPORT IN CONTEMPORARY URBAN CHINA

Yu Xie

Haiyan Zhu

University of Michigan

^{*} Paper prepared for presentation at the 2006 Population Association of America Annual Meeting (April, Philadelphia). Direct all correspondence to Yu Xie (e-mail: <u>yuxie@umich.edu</u>) or Haiyan Zhu (e-mail: zhuh@umich.edu) at Population Studies Center, Institute for Social Research, 426 Thompson Street, University of Michigan, Ann Arbor, MI 48106. The research is supported from a research grant to Yu Xie from the National Institute on Aging.

INTERGENERATIONAL SUPPORT IN CONTEMPORARY URBAN CHINA

In this paper, we empirically test, in the Chinese context, hypotheses based on three standard explanations for intergenerational support: the power model, the exchange model, and the altruism model. From earlier works by Davis (1991), Davis and Harrell (1993), Lee, Parish, and Willis (1994), and Raymo and Xie (2000), we expect a significant proportion of the elderly population in China to receive support from their adult children. While the power model and the exchange model are testable, the altruism model is not directly testable in the sense that it does not yield specific predictions concerning person-level, family-level, and city-level variation in intergenerational support.

To explain variation in intergenerational support, we turn to beliefs deeply rooted in traditional Chinese culture. We develop a new model of cultural beliefs. Due to the infiltration of western ideology accompanying marketization in the course of economic reforms, there is substantial variation in the extent to which traditional beliefs are upheld about supporting the elderly. We show that cultural beliefs about supporting the elderly, measured both for the elderly generation and for their adult children, explain a significant proportion of variation in intergenerational support.

Background

Dramatic changes have been taking place in the People's Republic of China in the last two decades. Rapid reductions in fertility and a general increase in longevity are working together to make the elderly an increasingly larger segment of the Chinese population. It has been predicted that the elderly population will reach 168.8 million (or 12.42 percent of the total population) in the year 2010, and 341.7 million (or 23.85 percent of the total population) in the year 2030 (Poston and Duan 2000). The economic reforms instituted since 1978 are transforming China's economy from being command-driven to market-based. The penetration of Western influences and the erosion of the communist ideology, combined with greater affluence, are altering cultural norms. These demographic, economic, and cultural changes have important implications for the elderly population in contemporary China. Given the trends toward lower fertility and lower mortality, fewer adult children are available to support elderly parents, while the period during which the need for support is growing longer. Economic reform has also made the pension system a less reliable source of support, now that *danwei* (work units) are accountable for pension contributions and payments (Davis 1988, 1993). Levels of pension and pension-like benefits are increasingly subject to the profitability of *danwei*. The westernization of values also means that Chinese have become more individual-oriented and more protective of their own interests, thus undermining the long-standing cultural basis for support of the elderly by children. In sum, it can be argued that the elderly population in contemporary China is caught at the crossroads of unprecedented demographic, economic, and cultural changes.

This paper is part of a larger effort aimed at understanding the economic and social well-being of the elderly in contemporary China. We analyze a dataset ("Study of Family Life in Urban China") that we collected in summer 1999. The survey design was unique in that both an elderly person and his/her adult child, if available, were contacted separately. This design allows us to examine in detail the role of cultural beliefs, both for the elderly parent and for the adult child, in affecting intergenerational support.

We first test hypotheses derived from the three standard explanations for intergenerational support: the power model, the exchange model, and the altruism model. In some ways, we replicate the study by Lee, Parish, and Willis (1994) for Taiwan. The power model is based on the premise that the primary reason for children's support of elderly parents lies in the elderly parents' power and resources. Rapid economic development and social changes weaken parental power and thus reduce the support. The exchange model emphasizes mutual assistance among family members of different generations. For example, adult children may need their parents' help with household chores and childcare. Furthermore, "prospective exchange" may be important, meaning that parents may invest in children while the children were young in the expectation of more financial returns later (Lee, Parish, and Willis 1994). The altruism model of the family economy assumes that the head of the household is altruistic and cares about the welfare of other family members as well as his or her own. Becker (1974, 1991) argues that altruism dominates family behaviors perhaps to the same extent as selfishness dominates market transactions.

Lee, Parish, and Willis (1994) show that most married sons (79%) and daughters (70%) give financial support to their parents in Taiwan. To explain patterns of intergenerational transfers in Taiwan, they did not find empirical evidence for the power model. Instead, they found the altruism model to be best supported by their data.

While we expect the Chinese case to be similar to that of Taiwan, we also expect some differences and wish to capitalize on the differences to enhance our understanding of theoretical reasons for intergenerational support. The primary difference between China and Taiwan is that traditional values of familial piety and financial support of elderly parents have substantially eroded in China, especially in urban China. Based on Raymo and Xie's (2000) study, we expect the proportion of adult children who provide net financial support to parents to be substantially less than that in Taiwan.

Furthermore, while Taiwan is a relatively homogeneous society, China is very heterogeneous. The heterogeneity of Chinese society is reflected in two aspects. First, as a consequence of uneven economic growth and uneven pace of economic reforms, there is a large regional variation in economic structure (Xie and Hannum 1996). Second, the degree to which traditional Chinese values are held varies substantially by individuals. This second aspect results from the fact that traditional values have suffered direct and indirect assaults from the Chinese government and the formal education system. The socialization of traditional values has thus become more a matter of the private sphere rather than of the public sphere.

The erosion of traditional values that sustain intergenerational support of the elderly gives rise to an opportunity to test the importance of cultural beliefs. This can be at three levels: city-level, familylevel (i.e., child-parent pair), and person-level (i.e., child level). We will be able to show that what has been called the "altruism" model actually works through cultural beliefs. If our hypothesis is true, we give a different meaning to the "altruism" model. Instead of being interpreted as a universal phenomenon, perhaps as a byproduct of evolution, we will argue that altruism is actually sustained by cultural systems.

Data

We conducted the "Study of Family Life in Urban China" in Wuhan, Shanghai, and Xi'an in 1999. At each research site, the study initially targeted a probability sample of 1,000 households, with a two-stage probability sampling method. At the first stage, 50 neighborhood communities were randomly chosen in proportion to size. Within each selected neighborhood community, 20 households were randomly chosen. A Kish table is used to select an adult respondent (18 years or older) within each selected household.

If the person being interviewed was younger than 60, we first interviewed the person with Questionnaire A, with which we collected all relevant information, including that pertaining to the support of his/her parents. We then interviewed one of his/her parents with Questionnaire A+, which is specifically tailored to the elderly. If the person initially selected was 60 years or older, we interviewed the person with Questionnaire B, which is similar to Questionnaire A+ and specifically tailored to the elderly. We then randomly selected one of his/her children for interview with Questionnaire B+, which is very similar in content to Questionnaire A for adult respondents. The survey design called for matching between an adult respondent and one of his/her elderly parents only if both parties lived in the same city. Although the instruction stipulated a "random" selection when an elderly parent was first interviewed and multiple adult children were possible candidates, we suspect that some interviewers took the short cut of interviewing the co-residential adult child if the elderly person was in a co-residential household. Here, we define co-residential families as those in which an elderly person (60 years or older) lives with his/her adult children.

The basic design of the survey is to collect information from both an elderly person and one of his/her adult children, as a parent-child pair. However, due to limitations of funding, we did not interview parents (children) who were not living in the same city as the children (parents). Through this procedure, we were able to interview 623 elderly persons in Wuhan, 488 elderly persons in Shanghai, and 605 elderly persons in Xi'an. Our success in matching parent-child pairs also varied across cities. We were

able to match 484 pairs in Wuhan, 387 pairs in Shanghai, and 413 pairs in Xi'an. To recapture, the survey interviewed three groups of elderly persons:

- (1) Elderly persons who co-reside with their adult children who are interviewed in matched pairs.
- (2) Elderly persons who live in their own nuclear families.
- (3) Elderly persons who co-reside with adult children who are siblings of the focal adult children are interviewed in matched pairs.

Research Methods

Dependent Measures of Intergenerational Support

On the elderly parent's questionnaire (Questionnaire B and A+), we asked about the financial transfers, both upward (from children to parents) and downward (from parents to children), between him/her and all adult children in year 1998. On the child's questionnaire (Questionnaire A and B+), we also asked about the amounts of transfers (if above 200 yuan) to or from his/her parents. (200 yuan is equivalent to about 25 U.S. dollars.)

We assess the quality of the reported transfers by the elderly parent and the adult child. Since the amount of transfers is truncated to be at least 200 yuan for the child questionnaire, it is necessary to truncate the parent's report at 200 yuan. We first assess if there is a reporting bias. For example, it is possible that the elderly parent might underreport transfers from the child but overreport transfers to the child. Similarly, the child might overreport transfers to the parent but underreport transfers from the parent. Obviously, without access to actual transactions, our assessment of bias is only relative. That is, we cannot distinguish the child's overreporting and the parent's underreporting for transfers from the child to the parent, and analogously the parent's overreporting and the child's underreporting for transfers from the parent to the child. We further assess the reliability of the two reported measures of transfer. Under the assumption that the two reports are independent, the correlation between the two measures constitutes the reliability of the measurement.

We formulate two dependent variables for substantive analyses. The first dependent variable measures the direction of net transfers, with three distinct categories: downward transfer (from parents to

children), no transfer, and upward transfer (from children to parents). The second dependent variable is continuous, measuring the net amount of transfers between the elderly parent and the adult child.

Independent Variables

In our analysis, we first control for many standard demographic and background variables, such as age, sex, education, marital status, and city.

To test the power model, we use the parent's financial resources (i.e., income) and assets (primarily home ownership). If the power model is true, we would expect the parent's income and ownership of a housing unit to increase the support from his/her children.

To test the exchange model, we will measure the parent's assistance to the children in such forms as childcare, cooking, and grocery shopping. Our analyses also include co-residence status and the elderly parent's need for financial assistance. As in Lee, Parish, and Willis (1994), we use parents' assistance to the children to test the short-term exchange that children provide more financial support to parents who help them with household chores. We also use parents' need for financial assistance and parents' health status to test whether parents who need more assistance will receive more (the insurance hypothesis). In addition, we will measure the parent's investment in the particular child, operationalized as the difference between the child's education and the average education of all other children, to test the prospective exchange (loan) hypothesis.

Unlike the power and exchange models, the altruism model does not lend itself to direct testing. Instead, altruism is often inferred from the prevalence of intergenerational support or tested indirectly in combination with the long-term exchange model (Lee, Parish, and Willis 1994). In this paper, we explicitly measure cultural beliefs as mechanisms of altruism. Cultural beliefs will be measured using attitude items on the survey, as explained below.

Attitudes were measured in the survey using Likerd-scale responses to the following groups of statements:

Family Orientations

1. "If a couple are truly in love, it is alright for them to live together without being married." (-)

2. "If a married couple no longer love each other, they may choose divorce, regardless of children."

(-)

- 3. "If health condition allows, the elderly have a responsibility to care for grandchildren." (+)
- 4. "Young people should devote more energy to their career than to care for their parents." (-)
- 5. "If financial and health conditions permit, it is best for the elderly to live separately from their children." (-)

Gender Roles

- "For a family to do well, it is best for the husband to devote himself to his career, and the wife to take care of the family." (+)
- 2. "Mothers should take more responsibility than fathers in caring for children." (+)
- 3. "Ideally, a married couple should have a son." (+)

Westernization

- 1. "It is alright to learn science and technology from the West, but not their moral standards" (+)
- 2. "The lifestyle of western countries is where our own country is headed." (-)
- 3. "If our country wishes to develop, there is no other path but to follow the west." (-)
- 4. "It is appropriate and necessary for our party and government to control the level of influence of western culture." (+)

Items marked with a positive sign (+) are assumed to be positively related to the latent dimension favoring children's financial support of the elderly. Conversely, items marked with a negative sign (-) are assumed to be negatively related. Not all items will be necessarily used or given the same weight. Factor analyses are conducted to select items with high reliability and weigh them properly. The selected items contribute to a single composite variable measuring attitude favoring children's financial support of the elderly. Note that the attitudes were assessed for both the adult child (Questionnaires A and B+) and the elderly parent (Questionnaires B and A+). It is thus possible to evaluate the unique contributions of the parent's attitude, in addition to the child's attitude.

Support in China, Page 8

Statistical Models

Several types of statistical models will be employed for the analyses. They include: the multinomial logit model, the ordinary linear regression model, and various versions of the Tobit model. We use the multinomial logit model to predict the likelihood that the net transfer is downward (from parents to children), none/neutral, or upward (from children to parents). We use the ordinary linear regression model for the amount of intergenerational support. It is possible that for a large proportion of childparent pairs, there is no transfer. To account for this truncation, we use the Tobit model. The Tobit model decomposes the modeling process into two components, the observation of a positive response (upward transfer, in our case), and the amount of the positive response (amount of upward transfer, in our case).

We restrict our regression analyses to the subsample for which we successfully matched an elderly parent with an adult child. Even with this restriction, the subsample is still quite heterogeneous with respect to the residence location of the elderly parent: (1) He/she may live with the focal child that we matched; (2) he/she may live alone; and (3) he/she may live with another adult child. We believe that financial transfers between an adult child and an elderly parent are distinctly different across the three situations, for co-residence can be thought of as a special, non-cash form of transfer. Further, the first case of co-residence can be further decomposed into two types: (a) adult children may have stayed in their elderly parents' home, and (b) some elderly parents may have moved in to live with their adult children. In case (a), elderly parents provide implicit transfers to their adult children. In case (b), adult children provide implicit transfers to their parents. Thus, we conduct our statistical analyses after we disaggregate our subsample into the different types.

References

Becker, Gary S. 1974. "A Theory of Social Interactions." Journal of Political Economy 82: 1063-1094.

Davis, Deborah S. 1988. "Unequal Chances, Unequal Outcomes: Pension Reform and Urban Inequality." *The China Quarterly* 114:223-242.

_____. 1991. *Long lives: Chinese elderly and the Communist Revolution*. Stanford, CA: Stanford University Press.

_____. 1993. "Financial Security of Urban Retirees." *Journal of Cross-Cultural Gerontology* 8:179-196.

- Davis, Deborah S. and Stevan Harrell (Editors). 1993. *Chinese Families in the Post-Mao Era*. Berkeley, CA: University of California Press.
- Lee, Yean-Ju, Parish, William L., and Willis, Robert J. 1994. "Sons, Daughters, and Intergenerational Support in Taiwan." *American Journal of Sociology* 99:1010-1041.
- Poston, Dudley J. and Chengrong Duan. 2000. "The Current and Projected Distribution of the Elderly and Eldercare in the People's Republic of China." *Journal of Family Issues* 21: 714-732.
- Powers, Daniel A. and Yu Xie. 1999. *Statistical Methods for Categorical Data Analysis*. Academic Press.
- Raymo, James M. and Yu Xie. 2000. "Income of the Urban Elderly in Post-Reform China: Political Capital, Human Capital, and the State." *Social Science Research* 29:1-24.
- Xie, Yu and Emily Hannum. 1996. "Regional Variation in Earnings Inequality in Reform-Era Urban China." *American Journal of Sociology* 101:950-92.
- Yu, Xuejun. 1995. *Economic Research on Population Aging in China* (in Chinese). China Population Publishing House, Beijing.