5-2002

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Original Citation

Sun, R. (2002). Old age support in contemporary urban China from both parents' and children's perspectives. *Research on Aging*, 24(3), 337-359.

Repository Citation

Sun, Rongjun, "Old Age Support in Contemporary Urban China from Both Parents' and Children's Perspectives" (2002). *Sociology & Criminology Faculty Publications*. 17.
https://engagedscholarship.csuohio.edu/clsoc_crim_facpub/17

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OLD AGE SUPPORT IN CONTEMPORARY URBAN CHINA FROM BOTH PARENTS' AND CHILDREN'S PERSPECTIVES

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This article explores the links between old age support and the characteristics of both parents and children drawing on survey data collected in Baoding, China, in 1994. Three specific forms of support are examined: monetary transfers, in-kind gifts, and help with daily activities. Hierarchical modeling is applied to the analysis from children's perspective to control for the unobserved family heterogeneity. Results indicate that intergenerational support within families is currently the major source of old age security in Chinese society. Analyses from both parents' and children's perspectives support the corporate group/mutual aid model, which largely sees the provision of help as dependent on elderly parents' needs and children's capacities. Although living away from children does not affect whether elderly parents receive economic help, it does constrain their receiving help on daily activities. Policy implications of the findings are discussed.

China has entered a period of dramatic demographic and social transition. Because of the decline in both fertility and mortality, China's population is aging at an unprecedented rate (Riley and Gardner 1997). At the same time, economic reform has brought about pervasive changes in many aspects of social life (Riskin 1987) that may have an impact on existing intergenerational relations. China is well known for its Confucian model of respect for the elderly. The family is the primary provider of social security and care for the elderly (Hong and Tracy 1999; Whyte and Parish 1984). As economic reform opens up new opportunities, individual aspirations arise, and desire for

AUTHOR'S NOTE: The author thanks Dr. Albert Hermalin and Dr. Martin Whyte for their permission to use the Baoding Survey data. The author owes great debt to the insightful comments and advice from Dr. Dennis Hogan, Dr. Susan Short, Dr. David Lindstrom, Dr. William Morgan, and Dr. Sarah Matthews.

consumption increases. The younger generations, who are usually better educated and equipped with more modern skills, enjoy economic advantage in this new social era (Parish and Tang 1997). As a result, the status of the elderly may be weakened in both society and individual families.

There has been wide concern over whether these social transformations will negatively affect the elderly's well-being and erode the role of the family in old age support. One possible scenario is that as the elderly's status declines because of their reduced economic power, the support they receive from their children may be compromised. A competing scenario, however, suggests that if, despite the dramatic social changes, the traditional values of filial piety still hold strong, support from children will be regulated mainly by the elderly's needs and the capacity of the family support network. The purpose of this study is to examine three forms of support (financial aid, in-kind gifts, and assistance in daily activities) in contemporary urban China from both parents' and children's perspectives and to identify the dominant mechanisms that govern these practices.

Hypotheses To Be Tested

In light of the existing theories, this article attempts to test two competing theoretical models regarding intergenerational relations.

The first is the power and bargaining model, which states that with declining economic status, parents lose their power to extract resources from children. By the same token, parents with more resources can exchange them for children's attention and support (Bernheim, Schleifer, and Summers 1985; Chen 1996; Lillard and Willis 1997). Previous studies on intergenerational relations in American families support such a bargaining model (Eggebeen and Hogan 1990; Hogan, Eggebeen, and Clogg 1993). Under this framework, as younger generations with higher education gain advantage in the more market-oriented economy in China, the possibility of needy elderly with relatively lower income obtaining support from their children is at risk. Furthermore, whether the older generation can elicit support from their children depends largely on whether they can provide other forms of resources in return. Two testable hypotheses are developed from older parents' and children's perspectives, respectively:

Hypothesis 1: The elderly with more economic resources are more likely to receive the support they need from their children, such as in-kind gifts and services.

Hypothesis 2: Children are more likely to provide gifts or services to the elderly with more economic resources, and those children with relatively higher incomes are less likely to provide support to their parents.

The alternative model is the corporate group/mutual aid model, which treats family as a closely related network that cares for the well-being of all family members and seeks optimal distribution of resources within the family network (Lee, Parish, and Willis 1994). Chinese families have long been portrayed as a corporate kin group consisting of members related by blood and marriage and bound by the common interests even though family members may live in separate households (Greenhalgh 1985; Tu, Freedman, and Wolf 1993). The support of the elderly is culturally defined by the Confucian principles that emphasize filial piety and children's obligation to their parents. These values have been instilled into children's belief system through character education and parents' early investment in their development process (Lin and Fu 1990; Yang 1996).

Such a model suggests that from the parents' perspective, whether they receive a certain type of help from their children depends on their specific needs, such as their economic or health status, and the available resources they can draw on from the family network, such as the number of children. Number of children has been found to be positively related to the support the elderly receive and their general well-being (Hermalin, Ofstedal, and Chang 1996; Pei and Pillai 1999). Supporting parents is regarded as a natural obligation, so when parents are in need of help, every child is expected to provide support. A larger number of children implies a bigger pool of potential resources.

From children's perspective, although every child is expected to help his or her needy parents, which type of help he or she offers and the amount of help correspond to his or her own capacity and circumstances. Since the Chinese family is organized as a mutual aid corporate group, the contribution to parents' support is not supposed to be uniformly distributed among siblings. For instance, children with relatively more disposable resources are more likely than other siblings to offer parents financial help. Those who received more early investment from parents are expected to contribute more in support.

Such a mutual aid arrangement is also reflected in the relationship between children's geographic proximity to their parents and the form of help they provide. While certain forms of support require close proximity, others can be performed at a distance. For example, while monetary transfer is less dependent on distance, help with personal care and daily activities requires close proximity. Thus, children's capacity to provide certain kinds of support, to some extent, is conditioned on their physical proximity to their parents. It is likely that while those children who live farther from parents tend to provide monetary support, those who live closer or in the same household tend to provide services to their parents. A previous study reported that money was given to parents more often by Taiwanese children who did not live with parents than by those who did (Freedman et al. 1978). Chi's (1996) study shows that in Hong Kong, coresidence is more important for the elderly to receive help with health care than with financial support.

The role of children's gender in providing support can fit into the mutual aid model as well. In Chinese culture, sons are the bearers of the family name and legal heirs of the family property. In contrast, daughters are portrayed as spilled water. Thus, there is supposed to be a closer tie between parents and sons, and sons are expected to take the main responsibility for supporting parents in old age. However, recent research finds that daughters are more likely than sons to provide care to parents. They are emotionally closer to parents and are more willing to provide help. A recent study of family relations in northeast China indicates the elderly tend to feel daughters are more considerate and caring, whereas sons are less sensitive to parents' needs. In addition, while sons are found more likely to provide monetary support, daughters are more commonly involved in help on routine activities (Wang 1999). Therefore, there is an expected division of support among siblings according to their gender, based on cultural expectations.

In light of the discussion above, six hypotheses are developed. From parents' perspective,

Hypothesis 3: The needy elderly (older, single, with lower income, or in lower health status) are more likely to receive financial support or care from their children.

Hypothesis 4: The elderly with more children are more likely to be helped than are those with fewer children.

From children's perspective,

Hypothesis 5: Children who (or whose family) are in a better economic condition within the family network are more likely than other siblings to provide economic transfers (money or gifts) to their parents.

Hypothesis 6: Children who receive more early investment from parents are more likely than are other siblings to provide help.

Hypothesis 7: While those children living farther are more likely to provide monetary help, those who live closer are more likely to provide services to their parents.

Hypothesis 8: While sons are expected to provide more financial support, daughters are more likely to provide in-kind gifts and services to their parents.

Data and Measurement

The data come from the Survey on Aging and Intergenerational Relations in Baoding City conducted jointly by Peking University and the University of Michigan in 1994. Baoding is a typical, medium-sized city in northern China with a population size of 600,000 in 1990. According the 1990 national census, 7.5 percent of Baoding's population was aged 60 and older, a little lower than the national average level of 8.6 percent (Wu, Kan, and Hao 1996). GNP per capita was 14,764 Yuan in Baoding in 1997, while the national average was 13,780 Yuan in the urban areas in the same period (National Statistics Bureau 1998). A total of 1,002 respondents aged 50 and older were interviewed. In the following analysis, the elderly parent sample will be restricted to the 999 respondents who had at least one child. There were a total of 3,019 children, who were older than 18 years old and were not attending school at the time of interview, associated with these elderly. A good feature of this survey is that while the elderly were asked detailed questions about themselves and their households, a fair amount of information was also elicited about each of their children, such as their age, marital status, and education. Thus, it is possible to construct a complete file for all the children associated with their common parents.

This study investigates the likelihood of receiving (from parents' perspective) and providing (from children's perspective) any of the following three forms of support in the past year: monetary transfer,

in-kind gifts, and assistance in daily activities (referred to as services in the following text). All three variables are coded as binary variables (1 = yes, 0 = no).

The elderly's needs are indicated by their age, marital status, and physical condition. Older and single (mostly widowed) parents are hypothesized to be more likely to receive help from children. Parents' age is collected into three categories (50-59, 60-69, 70 and older). For those married elderly, it is the older age of the couple that is used in the analysis. Since most of the single elderly are widowed, their marital status is categorized as either married or not currently married.

A physical status index was constructed by summing the scores of six activities of daily living or instrumental activities of daily living items (capability of walking, climbing stairs, lifting, opening a tightly closed jar, getting on a bus, and shopping), the impact of a recent illness, and self-rating of health status. All these questions referred to the present health status at the time of interview. Each item of activities of daily living or instrumental activities of daily living was measured at three levels of difficulty: *none*, *a little*, or *a lot*. The impact of a recent illness was also measured at three levels regarding the amount of inconvenience in their lives: whether the illness has caused *none*, *a little*, or *a lot*. The cases of no illness were combined with the *none* inconvenience category. Self-rating of health status was ordered in three categories: *good*, *fair*, and *poor*. The achieved reliability coefficient alpha was .86, indicating that the constructed index is quite reliable.

In addition, the elderly's economic status affects their ability to help themselves, which in turn affects the level of their need for help (Hermalin et al. 1996). Those elderly parents with more economic resources have fewer needs and are less likely than those with fewer resources to depend on their children for financial support. Elderly parents' combined income would be a direct measure of their economic status. However, for married elderly (88 percent of the sample), either the husband's or wife's income was recorded so that a couple's income could not be computed. However, a separate study (Sun 2000) has shown that the education of elderly persons is associated with both their likelihood of engaging in the labor market and their level of income. Therefore, the highest level of education of a married couple was chosen to represent the level of their economic resources and was coded in four categories: illiterate, primary school, junior high school,

and senior high school or above. The elderly's economic resources were also measured by their status of home ownership, which was differentiated among three categories: owner of a private house, tenant of public housing (usually assigned by the workplace), or living in another's house.

The number of children was measured with four dummy variables, from two to five or more, with the single-child elderly as the reference category.

The elderly's living arrangements were controlled in this study. Since children's marital status is a critical factor defining the life-course stages in China and it is associated with different expectations in supporting the elderly parents (Treas and Chen 2000), it is necessary to determine the marital status of the children with whom parents are living. Thus, living arrangements of the elderly parents were coded in four categories: living alone or with spouse only, living with unmarried children, living with married children, and living with others. When parents were living with both married and unmarried children, they were coded as living with married children.

Most of the measures of children's characteristics were straightforward, such as age, gender, education, and total number of siblings. Their geographic proximity to parents was measured at four levels: in the same household, within the same street committee, within the same city, and farther.

As was the case with their parents, there was some difficulty measuring children's income because only their personal income was reported in the survey and their spouse's (for those married) was missing. Using only the income of a wife or husband underestimates their family income for the 85 percent of the children who were married. The substantial underestimate would bias the effect of their economic status on their involvement in transfers. However, in the survey, the elderly were asked, "In general, would you say that in terms of income and standard of living this child (and his or her small family) is presently better off, about the same, or worse off than you and your family?" Since this is an overall evaluation, it overcomes the underestimate problem. But this piece of information was missing for 21 percent of the children. To avoid the risk of nonrandom selection, all children's records were kept, and those with missing values were treated as a separate category. Thus, children's economic status was coded as better off, about the same, worse off, and missing.

Finally, two dummy variables are utilized to represent elderly parents' early investment in children: parents' help with housing and finding a job.

Method

Both parents' and children's perspectives are used in this analysis. As Freedman et al. (1991) pointed out, estimates of intergenerational transfers are seldom identical from these two perspectives. It is mainly due to the different relative prevalence of people at risk in each generation. The proportion of the elderly receiving help is not the same as the proportion of adult children providing such help (Roan, Hermalin, and Ofstedal 1996). In addition, from the analytical point of view, these two approaches focus on a different unit of analysis, which leads to a fundamental difference in interpretation. In the study of transfers from children to elderly parents, while the parents' perspective is concerned with which elderly are more likely to receive help, the children's perspective asks which children are more likely to give such help. By addressing both questions, a more complete and accurate picture of intergenerational transfer dynamics is obtained.

First, a general description of the elderly's needs and the help they received is provided. Logistic regressions will be applied to model separately the likelihood of parents' receiving the three forms of help.

The likelihood of children's giving help cannot be modeled in the same way, because in most of the cases there are multiple children in each family. It is very likely that children who have grown up in the same family share some unobserved common characteristics, such as influence from their parents or interaction among siblings. Therefore, sibling behaviors may be correlated. In addition, as discussed earlier, each child's relative capacity is conditioned on a specific family setting. Relative income within the family may count more than the absolute amount. Thus, family heterogeneity must be controlled. Hierarchical modeling is an appropriate strategy to address these issues. By introducing a new random component to account for the block or clustering effect, the hierarchical model can control for family heterogeneity (Goldstein 1987).

Since the outcome variables in this study are binary, a Generalized Linear Mixed Model is employed. This study relies on logit as the link

function and fits a logit mixed model, which can be written as the following (Allison 1999):

$$\log\left(\frac{P_{ij}}{1 - P_{ij}}\right) = \alpha_i + \beta X_{ij},$$

where P_{ij} is the probability of providing a certain type of help from the i th family and j th child, and α_i serves as a family indicator, controlling for the effect of unobserved family heterogeneity. Unlike in a fixed effect model where it represents a series of dummy variables, α_i in this model is assumed to be random with a normal distribution and to be independent of X_{ij} , a vector of observed covariates. α_i s are also assumed to be independent of each other and have a constant variance of α^2 .

In all the hierarchical models employed in this study, in addition to the children's attributes, parents' characteristics are also controlled.

Results

HELP RECEIVING: FROM PARENTS' PERSPECTIVE

Table 1 provides a general picture of help received by the elderly. While one-fourth of the elderly received monetary assistance, about one-third of them received in-kind gifts and services. It is clear that children were the main providers of all forms of help, especially economic help. About 80 percent of money and in-kind transfers were from children. All these forms of help were thought to be sufficient by most elderly parents who received them: About 90 percent of the elderly were satisfied with the amount of help provided in each category. Among those who did not receive a specific kind of help, only a small fraction said they were in need of such help, less than 5 percent in each category.

Recent evidence shows that in urban areas, the elderly are more likely to live separate from their adult children as a result of massive housing construction and changes in preferences for living arrangements (Logan, Bian, and Bian 1998; Sun 2000). Such a pattern is observed in Baoding City as well. Table 2 shows that only one-third of

TABLE 1
Various Help Received by Elderly Parents (in percentages)

	<i>Money</i>	<i>Gifts</i>	<i>Services</i>
Being helped			
Yes	24.6	34.1	32.1
No	75.4	65.9	67.9
Sample size	999	999	999
Main provider ^a			
Spouse	0.4	0.3	35.8
Children	77.6	81.8	53.3
Other	22.0	17.9	10.9
Sample size	246	340	321
Help sufficient ^a			
Yes	88.6	95.3	92.5
No	11.4	4.7	7.5
Sample size	246	340	321
In need of help ^b			
Yes	4.8	4.4	3.8
No	95.2	95.6	96.2
Sample size	753	659	678

a. Among those who were being helped.

b. Among those who were not being helped.

the elderly parents were living with married children. About 30 percent of them were living alone, and another 30 percent were living with unmarried children.

Table 3 presents the results of three logistic models of the three forms of help received by the elderly from parents' perspective.

First, there is not a positive relationship between the elderly's economic resources and the likelihood of receiving help from children as suggested by Hypothesis 1, derived from the power and bargaining model. Home ownership does not have a significant impact on receiving any of the three forms of support. The elderly's educational attainment, which indicates their economic status, also does not affect their receiving gifts or services.

Second, parents' needs, in contrast, play a crucial role in determining whether they receive help. Hypothesis 3, which concerns the needs of the elderly, is supported by the data. As expected, the older elderly, 70 and older, were much more likely to receive assistance with daily activities than the two younger groups. The elderly's physical status is a strong predictor of receiving services. Married elderly were 39 percent (100 percent minus the antilog of -0.488) less likely than currently

TABLE 2
Characteristics of Elderly Parents

<i>Covariate</i>	<i>Percentage</i>
Age	
50-59	41.2
60-69	41.5
70 and older	17.3
Marital status	
Currently unmarried	11.8
Currently married	88.2
Education	
Illiterate	10.3
Primary school	24.2
Junior high school	26.7
Senior high or above	38.8
Total number of children	
One	6.1
Two	22.9
Three	34.9
Four	20.3
Five or more	15.8
Whether there is a son	
No	8.8
Yes	91.2
Living arrangements	
Alone or with spouse	29.6
With married children	34.9
With unmarried children	29.3
With others	6.2
Physical status index	21.7 ^a (3.35) ^b
Home ownership	
Self-owned	4.5
Self-rented	85.6
Other's house	9.9
Sample size	999

a. Mean.

b. Standard deviation.

unmarried elderly to receive in-kind transfers. The elderly's educational attainment, the proxy for economic status, is negatively associated with the likelihood of obtaining financial support. The elderly with senior high school education were 77 percent less likely than their illiterate counterparts to receive monetary help.

There is supporting evidence for Hypothesis 4, which suggests that the number of children or the potential size of supportive resources is

TABLE 3
Estimated Coefficients of Logistic Regressions
of Help Received by Parents

<i>Covariate</i>	<i>Money</i>	<i>Gifts</i>	<i>Services</i>
Age			
50-59 ^a			
60-69	.245	.367	-.153
70 and older	.340	.833***	.585*
Marital status			
Currently unmarried ^a			
Currently married	-.406	-.488*	-.246
Education			
Illiterate ^a			
Primary school	-.529*	.233	-.315
Junior high school	-1.102***	.274	-.174
Senior high or above	-1.483***	-.160	-.110
Total number of children			
One ^a			
Two	1.207*	1.258**	.126
Three	1.714***	1.664***	.666
Four	1.696**	1.803***	.415
Five or more	2.146***	2.250***	.768*
Whether there is a son			
No ^a			
Yes	-.342	-.420	-.118
Living arrangements			
Alone or with spouse ^a			
With married children	-.182	.094	.602***
With unmarried children	-.164	-.721***	-.128
With others	-.172	.306	-.266
Physical status index	-.028	.015	-.123***
Home ownership			
Other's house ^a			
Self-owned	-.172	.253	-.351
Self-rented	-.272	-.230	.117
Sample size	999	999	999
Model χ^2	126.193	141.441	108.620

a. Reference category.

* $p < .05$. ** $p < .01$. *** $p < .001$.

positively related to the likelihood of the elderly's receiving financial assistance and in-kind gifts. The coefficients for monetary transfer and gift endowment steadily increase from 1.207 and 1.258 for two children to 2.146 and 2.250 for five children or more, respectively.

Finally, the effects of living arrangements are mixed. While they have little impact on monetary transfers, living arrangements do

matter in the receipt of services. Those elderly living with at least one married child were almost twice as likely as those living alone to receive children's help on daily activities. The fact that the elderly living with unmarried children were significantly less likely to receive gifts may be attributed to the phenomenon that households with only unmarried children usually share a common family budget, and the goods bought by these children tend not to be counted as gifts but part of the family expenditure.

The results also show that the availability of sons does not make any difference in parents' receipt of any form of help. The role of gender can be more clearly seen in the following analysis from the children's perspective.

HELP GIVING: FROM CHILDREN'S PERSPECTIVE

Table 4 shows that while 17 percent of children were reported to help their parents financially, 23 percent provided in-kind gifts, and only 8 percent of them helped on daily activities. The proportion of children providing help is much lower than that of the elderly receiving it due to the larger number in the children generation. But the absolute number of children involved in upward transfers is still larger than the number of elderly receivers. Five hundred twenty-eight children contributed cash to only 157 parents, with a child-parent ratio of 3.4:1. Similarly, the child-parent ratios for in-kind gifts and services are 3.6:1 and 3.4:1, respectively. On average, there were about three children helping one (pair of) parent(s). Such a clustering phenomenon reveals that while in some families, multiple children were involved in help giving, in many other families, none of the children offered any help to their parents. It suggests that families' or parents' characteristics are an important factor determining whether children offer help. Such a fact on one hand indirectly supports the parents' needs hypothesis: It is because of parents' needs that multiple children in the same family respond. On the other hand, it calls for appropriate modeling to control for potential family heterogeneity, as children's supportive practices may be conditioned on unobserved family characteristics.

Furthermore, Table 4 shows that although only a quarter of adult children lived with their parents (which is subject to the effect of total number of siblings), most children were living in the same city as their parents (87 percent). Such close geographic proximity made it

TABLE 4
Help Giving and Characteristics of Adult Children

<i>Variable</i>	<i>Percentage</i>
Monetary support	
Yes	17.1
No	82.9
In-kind gifts	
Yes	23.0
No	77.0
Services	
Yes	8.2
No	91.8
Age	
18-29	33.1
30-34	24.7
35-39	21.6
40 and older	20.6
Gender	
Male	50.6
Female	49.4
Marital status	
Married	85.1
Unmarried	14.9
Education	
Junior high school or less	45.3
Senior high school	28.4
College or above	16.3
Income relative to parents'	
Higher	30.8
Similar	26.0
Lower	22.1
Missing	21.0
Geographic distance to parents	
Living in the same household	24.8
Living in the same street committee	12.6
Living in the same city	49.4
Living in the same province or farther	13.1
Received help from parents for work	
Yes	37.6
No	62.4
Received help from parents for housing	
Yes	26.6
No	73.4
Sample size	3,091

convenient for intergenerational support to occur even though family members did not share the same households.

Unlike the parents' perspective, which treats children in an aggregate fashion, the children's perspective permits a direct link between children's contribution and their personal characteristics. In connection with the early results, we know not only which parents are helped by their children but also by which children. Table 5 presents the results of the hierarchical models (Generalized Linear Mixed Model) of the three types of support provided by children with parents' characteristics being controlled.

The results strongly support Hypothesis 5, regarding children's economic capacity derived from the corporate group/mutual aid model but reject Hypothesis 2, associated with the power and bargaining model. Those children who were economically better off than their parents were 18 times and 2 times as likely as those who were economically worse off than their parents to participate in monetary and gift transfers, respectively.

The results seem ambiguous for Hypothesis 6, regarding the effects of parents' early investment. As expected, children who received parents' help with housing were more likely to provide support, including monetary transfers and services. Contradictory to the expectation, parents' help with finding a job decreased the likelihood of a child's providing money or gifts in return. However, further analysis revealed that such a result actually provides strong support to the corporate group/mutual aid model.

Two separate logistic regression models were fitted for providing money and gifts without controlling for family heterogeneity (not shown). The variable of parents' help with finding a job was not significant for either of the two models. It is clear that it is significant in the present hierarchical model because family heterogeneity has been taken into account. This implies that it is among siblings within each family that those who receive parents' help with finding work are less likely to help parents materially. Receiving help in finding work is associated with a child's lack of competitiveness and lower economic status. This argument is backed by the fact that of the 499 families with at least two children, and at least one of whom received parents' help with finding work, more than two-thirds of the lowest income earners among all siblings were those who received parents' help. These findings suggest that within each family, the less successful children are not only likely to be waived of their economic obligation toward their parents but are also likely to be helped by the elderly because they

TABLE 5
Estimated Coefficients of Generalized Linear
Mixed Model of Providing Help by Children

<i>Covariate</i>	<i>Money</i>	<i>Gifts</i>	<i>Services</i>
Children's characteristics			
Age			
18-29 ^a			
30-34	.456*	.257	.186
35-39	.914***	.596**	.043
40 and older	.994***	.926***	.150
Gender			
Female ^a			
Male	.406***	-.475***	-.742***
Marital status			
Unmarried ^a			
Married	.363	1.396***	1.356***
Education			
Junior high school or less ^a			
Senior high school	.103	-.383**	.197
College or above	-.431*	-.118	-.264
Income relative to parents'			
Lower ^a			
Similar	1.648***	.367*	-.275
Higher	2.899***	.785***	.249
Missing	1.380***	-.175	.748**
Geographic distance to parents			
Same household ^a			
Same street committee	.852**	.220	-1.543***
Same city	1.372***	-.066	-2.689***
Same province or farther	.740**	-1.171***	-5.890***
Whether received help on work			
No ^a			
Yes	-.890***	-.457***	.568***
Whether received help on housing			
No ^a			
Yes	.523**	.125	.813***
Parents' characteristics			
Age			
50-59 ^a			
60-69	-.356	.511	.116
70 and older	.089	.923*	1.702***
Marital status			
Currently unmarried ^a			
Currently married	-.507	-.554	-1.086**
Education			
Illiterate ^a			
Primary school	-.140	.720	-.245
Junior high school	-1.500*	-.075	-.223

TABLE 5 Continued

<i>Covariate</i>	<i>Money</i>	<i>Gifts</i>	<i>Services</i>
Senior high or above	-1.842**	.090	.102
Total number of children			
One ^a			
Two	1.130	1.237	.319
Three	1.347	1.236*	1.001
Four	.857	1.189	.398
Five or more	.292	.528	.857
Physical status index	-.037	.080*	-.171***
Home ownership			
Other's house ^a			
Self-owned	-.321	.538	.020
Self-rented	-.052	-.309	.423
Sample size	3,091	3,091	3,091

a. Reference category.

* $p < .05$. ** $p < .01$. *** $p < .001$.

themselves still need help. This is in accordance with the corporate group/mutual aid model. The fact that parents' help with finding work increased a child's likelihood to provide services to parents is consistent with the early investment hypothesis. In this case, providing services requires less financial capacity than providing the two other forms of support.

As suggested by Hypothesis 7, the effect of geographic proximity is conditioned on the form of support. It is evident that children living farther from parents were more likely to provide monetary support: Those living in the same city but not in the nearby neighborhood were 3 times more likely than those living in the same household to give parents money. This hypothesis is more apparent for the provision of services to parents. Consistent with the results found in the parents' model, children's physical distance from their parents was negatively related to the possibility of providing services on daily activities. Those children living together with their parents were about 5 times as likely as those living in the same street committee and 16 times as likely as those living in the same city to provide help with daily activities.

This analysis also shows a clear pattern of gender roles in old age support, supporting Hypothesis 8. While sons were one and a half times as likely as daughters to give financial support, daughters were more than one and a half times and about twice as likely as sons to provide in-kind gifts and services to parents, respectively.

In this study, children's age, marital status, and education are treated as control variables. As shown in Table 5, older children provided more money and gifts than younger children did. It may be due to the fact that older children tend to be more established and therefore have more resources to help parents. Or it may represent a birth order effect. In Chinese culture, older siblings are more likely to assume their obligation to parents and to set a good example for younger siblings. Married children were found to be more likely than unmarried children to provide services or in-kind gifts to their parents.

Parents' characteristics are also included in these models as control variables. Compared to the previous model, their effects basically remain the same, especially the indicators of parents' needs: While children with older, physically weaker, currently unmarried parents were more likely to provide help on daily activities, children with lower educated parents were more likely to provide monetary transfers. The effect of parents' home ownership is not statistically significant, suggesting children do not condition their support on parents' economic bargaining power.

Conclusion

Based on the 1994 Baoding survey, this article explores the links between old age support and the characteristics of both parents and children. Three specific forms of support are examined: monetary transfers, in-kind gifts, and help with daily activities. Data show that most of the elderly's needs are satisfied and their children are still the primary providers. Family support for the elderly is still strong and pervasive.

The results clearly reject the power and bargaining model. On one hand, parents with higher economic status, indicated by higher educational attainment and home ownership, are not more likely than other parents to receive help from their children; on the other hand, children do not provide help conditional on their parents' economic power.

In contrast, evidence from this analysis strongly supports the corporate group/mutual aid model, which largely sees intergenerational support as resting on the elderly's needs and children's capacity. Parents' age, marital status, physical condition, and educational attainment play a crucial role in eliciting intergenerational transfers.

However, the provision of help to parents is not uniformly distributed among siblings. Whether to provide a certain form of help is conditioned on a child's economic capacity, physical proximity, and gender. This article also demonstrates that children's relative economic status within each family deserves more attention, which calls for a control of family heterogeneity. Two children at the same income level but from different families may act differently in intergenerational transfers depending on their relative position in the family income spectrum among siblings.

What is worth special attention is the effect of geographic proximity between the elderly and their children and the effect of the number of children. These two measures reflect the availability of supportive resources within the family network. In his discussion of how the elderly are sustained by the flow of resources, Lee (1994) summarized three channels of resource flows: the family, the public sector, and financial markets. Through each channel, resource reallocation takes one of three forms: interage transfers, credit transactions, and capital formation. Since China is still a developing country, the state has not established a comprehensive social security system for its citizens. The pension system covers only a limited proportion of its senior citizens. Its financial market is only at the preliminary stage. Related laws and regulations are yet to be established. Investments and the stock market are still new to most Chinese citizens, many of whom lack necessary capital to engage in investment activities. Under such circumstances, the reliable resources that the elderly can draw on for old age security are from their family network.

The results suggest a positive relationship between the number of children and the likelihood of the elderly's receiving economic support. Geographic proximity plays a crucial role in some specific forms of support. From the parents' perspective, living away from children does not affect their receiving economic help but does constrain them in receiving help with daily activities. From the children's perspective, there is a certain pattern of arrangements among siblings dependent on their geographic distance from their parents: While those closer to parents tend to help with daily tasks, those living farther tend to provide financial transfers.

In light of these results, the family support system will face a great challenge in maintaining capacity to perform its supporting function in the near future given the continued demographic transition and

social transformation in China. Since the one-child policy is more strictly implemented in urban areas, when the single sons and daughters grow up to marriage, they will face two pairs of parents to support (Zeng 1986). The significant reduction in the number of children per family will undermine the elderly's support resources and/or add dramatic economic burdens to young couples in the future. Furthermore, existing literature has shown a gradual decline of coresidence in China's urban areas since the beginning of 1990s largely due to the rapid expansion of urban housing opportunities (Logan et al. 1998). For example, while virtually 60 percent of the elderly 60 and older lived with married children in Beijing and Shanghai in the 1980s (Pan and Lin 1987; Zheng 1988), the percentage has dropped to 35 percent in the Baoding sample and 37 percent in a national sample of 12 cities in the 1990s (Zhou and Wang 1996). Such changes in living arrangements coupled with the reduced number of children will make it more difficult for families to provide services to the elderly.

In light of the gradual improvement in the elderly's economic well-being in urban areas as more elderly of the younger cohorts are covered by the pension system (Sun 2000), the greater concern for old age support in the future would be the provision of daily services since it does require frequent contact and even constant presence of caregivers in the household. Therefore, social institutions must be developed to substitute for the supporting roles traditionally assumed by individual families. The public and private providers are increasingly expected to play a more important role in providing support to the elderly that was traditionally provided by families (Martin 1990). Corresponding measures should be taken to establish various services targeting the special needs of the elderly, such as building clinics, stores, and activity centers in the community. As more elderly are covered by the pension system and children are increasingly able to contribute more economic resources, there is a steady increase in the demand for formal services provided outside of the family. A recent study on family caregivers of impaired elderly in Shanghai, China, reveals that those children with more education and greater economic resources express greater need for formal service support (Cooney and Di 1999).

In addition, while it is important for the society to invest resources and establish social services, our perspectives should not be constrained to the resources outside the elderly generations. The elderly should not be portrayed as mere help receivers. The tremendous resources among the elderly people should be recognized. A separate study based on the Baoding survey shows that although there is a clear pattern of health decline with age, a substantial proportion of the elderly are still in good physical status: 75 percent of those between ages 60 and 69 and 62 percent of those older than 70 were in good health according to the Baoding survey (Sun 2000). Therefore, it is possible for those relatively healthier elderly to help other needy ones.

Schwab (1989) proposed that because the developing countries cannot solve the population aging problems with massive social security programs as practiced in the developed countries, other ways have to be sought. Their challenge is to find those underutilized resources inside the society and to use them accordingly. The huge number of Chinese elderly may be regarded as a great burden for the society, but it also represents a vast pool of human resources that can be developed to deal with the challenges of population aging in China.

It is foreseeable that the family's support capacity will be inevitably weakened in the near future as the demographic transition continues. Thus, it is necessary to expand our perspective from the present family network, which is already beyond each individual household, to a broader social network that is beyond each individual family. The members of such a social network are no longer limited to family members but can include various social institutions, friends, neighbors, and particularly, elderly peers. For example, the neighborhood committees in urban areas can play a more active role in mobilizing the elderly in the same neighborhood to provide help to each other. Although they have been the main providers of community services in the urban area, their functions have mainly focused on providing "guaranteed services" to the childless elderly (Zhu and Xu 1992). The urgent work to be done for the society is to establish effective social systems that provide opportunities and mechanisms for the able elderly to help others and to receive help from others when they themselves need help.

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