

Do Sons or Daughters Give More Money to Parents in Urban China?

The patriarchal structure of the traditional Chinese family suggests that sons, more than daughters, provide financial support to elderly parents. The norm of receiving support in old age primarily from sons, however, may have been undermined by dramatic demographic, economic, and cultural changes occurring over the last several decades in China, especially in urban areas. We examine gender differences in adult children's financial support to parents using a recent data set ("Study of Family Life in Urban China") collected in 1999 (N = 1,801). The results show that married daughters, especially those living with parents, provide more financial support to parents than married sons do. This significant gender difference can be primarily explained by daughters' resources, such as education and income.

The traditional Chinese family has long been characterized as patriarchal, patrimonial, patrilineal, and patrilocal (Thornton & Lin, 1994). Indeed, in a classic paper on the influence of this family structure on gender inequality, Greenhalgh (1985, p. 265) stated that "Traditional Confucian China and its cultural offshoots, Japan and Korea, evolved some of the most patriarchal family systems that ever existed." The core value of the Chinese family system is filial piety, the idea that grown children should respect and care for

their elderly parents, especially along the male line (Whyte, 2004; Whyte & Xu, 2003). In other words, in the traditional system, elderly persons depend on their adult children for support in old age. This kind of support, however, is expected primarily from sons rather than from daughters (Sun, 2002), especially after daughters marry.

At the risk of oversimplification, let us provide a broad sketch of the Chinese family system and its implications for gender differences as the background (Greenhalgh, 1985; Knapp, 2005; Nylan, 2000). In this system, marriage means that a woman has joined her husband's extended family, where older and male family members have power over younger and female members. Sons are permanent members of their natal families and retain lifetime contractual relationships with their parents. Throughout their lives, they are expected to contribute to the economic well-being of their parents. In contrast, daughters are only transitory members of their natal families; after marriage, they begin to contribute to the family households of their parents-in-law. In this tradition, daughters generally cannot claim property from their parents and also have no formal obligation to support them (Whyte & Xu, 2003). Although daughters are expected to contribute to their natal families before marriage, married women are no longer expected to contribute financially to their parents' households. Instead, upon marriage, their obligations are supposed to be "redirected to the support of their husbands' parents" (Whyte & Xu, p. 167). In this traditional family system, financial support from adult children to their elderly parents is clearly gendered, with sons, but not daughters, expected to provide financial support.

Population Studies Center, Institute for Social Research,
426 Thompson Street, University of Michigan, Ann Arbor,
MI 48106 (e-mail: yuxie@umich.edu).

Key Words: China, gender, intergenerational support.

Earlier research has found some evidence in support of the fulfillment of this expectation in contemporary Chinese societies. For example, it has been reported in several studies that married sons provide larger amounts of financial support than married daughters to elderly parents in Taiwan (Hermalin, Ofstedal, & Shih, 2003; Lee, Parish, & Willis, 1994; Lin et al., 2003) and in rural China (Yang, 1996). There are also good reasons to suspect, however, that the norm of sons contributing more than daughters is no longer applicable in today's urban China.

To begin with, we observe that many traditional family practices have eroded in China. For example, age at first marriage has substantially increased from about 18.7 in 1950 to 23.1 in 1980 (Cheng, 1993). The crude birth rate has drastically declined from 36‰ in 1950 to 15.2‰ in 1999 (National Bureau of Statistics, 2000), partly due to the government's aggressive family planning measures (Zimmer & Kwong, 2003). The average size of Chinese families has dropped from 4.3 in 1953 to 3.36 in 2004 (National Bureau of Statistics, 2005), mainly in response to declines in both mortality and fertility (Lin, 2001). Love marriages have gradually replaced arranged marriages (Whyte & Parish, 1984; Xu & Whyte, 1990), and the divorce rate has increased from 0.9 per thousand in 1985 to 1.9 per thousand in 1998 (China Population and Development Research Center, 2007).

Partly as a result of the almost universal employment of women in urban China, gender inequality in socioeconomic status has declined since the founding of the People's Republic of China in 1949. In education, for example, gender inequality was substantially reduced in the pre-reform era (Hannum & Xie, 1994; Whyte & Parish, 1984) before it increased again after the economic reform (Hannum, 2005). Gender disparity in earnings was relatively low by international standards in urban China in 1988 (Xie & Hannum, 1996) but has risen in subsequent years (Hauser & Xie, 2005; Shu & Bian, 2003).

The traditional Chinese family system has been affected by another important structural feature of contemporary urban China: Unlike Chinese living in rural areas, almost all urban residents are covered under a pension system that provides support in old age to retirees (Lee & Xiao, 1998). This pension system substantially reduces, and indeed in most cases eliminates, the need for elderly persons to rely on their grown children for financial security. Some elderly with

modest pensions supplement them with employment income (Raymo & Xie, 2000). In fact, a large proportion of adults in urban China receive financial support *from* their elderly parents rather than providing support *to* them.

A combination of these factors—reduced gender inequality, weakening of the traditional family system accompanied by the rise of the nuclear family, a dramatic reduction in fertility and an increase in longevity, and nearly universal pension coverage for urban residents—has fundamentally changed the way in which the elderly continue to receive financial support from their adult children. In this paper, we explore one particular research question: Do sons give more money than daughters to parents in contemporary urban China?

A “no” answer to this research question would indicate that families in contemporary mainland China are engaged in *less* traditional familial practices than those in Taiwan and thereby challenge the classic modernization theory for family change (Goode, 1963; Levy, 1949). By standard measures of modernization, Taiwan is far ahead of China. According to Human Development Index, for example, Taiwan is rated 0.932, a number close to the rating of the United States at 0.951, and much higher than China's 0.777 (Wikipedia, 2008). We know that both Taiwan and China are Chinese societies that followed the same family tradition (Thornton & Lin, 1994; Whyte, Hermalin, & Ofstedal, 2003). If modernization alone is the main social mechanism for causing deviations from the traditional family model, we would expect Taiwanese families to be less traditional than Chinese families in mainland China. Empirical evidence contradicting this expectation thus would underscore the importance of noneconomic factors in causing erosion of the traditional Chinese family model, such as social structure, political ideology, and demography (Whyte, 2005; Whyte et al.).

There have been attempts to answer this research question in the previous literature. Sun's (2002) study based on a 1994 survey in Baoding, China, yielded ambiguous findings. Also based on the Baoding data, a study by Whyte and Xu (2003) found that married daughters provide the same level of financial support as married sons after the control of relevant covariates. It is unclear, however, whether the 1994 data from Baoding are generalizable to other cities or later periods in China. In addition, no previous study

to date has jointly considered coresidence status with parents and financial support to parents.

In this study, we pay very close attention to coresidence status with parents. We note that it is unclear whether coresidence with parents should be considered a form of adult children's support of parents or children's dependence on parents, as the answer depends on life course stages and the concrete situations of the two generations (Logan & Spitze, 1996; Ward, Logan, & Spitze, 1992). Lee et al. (1994, p. 1027) argue that high-status sons in Taiwan may "buy" themselves out of the obligation of living with elderly parents by providing more financial support. In this sense, coresidence and financial support are joint outcomes. In this study, we adopt a conservative strategy and treat coresidence as a moderator of financial support. The nature of intergenerational relationships is radically altered when a grown child lives separately from his or her parents, because direct support in terms of personal care, household chores, and sharing of household resources is much diminished when households are separated. In this case, cash transfer is the most visible and most tangible form of economic support.

Following earlier studies (Lee et al., 1994; Whyte & Xu, 2003), our research question is focused on married adults with at least one surviving parent. Although restricting the study to married people makes the study less generalizable, this restriction is necessitated by the research goal of questioning the continuation of a traditional practice—that the elderly still receive more financial support from sons than from daughters, as dictated by the traditional Chinese family system—in urban China. The literature on the Chinese family suggests that support to parents given by women declines substantially *only* after marriage (Whyte & Xu). Before marriage, women contribute to their natal families in more significant ways than brothers do and even help fund the education of brothers (Chu, Xie, & Yu, 2007; Greenhalgh, 1985; Li, Feldman, & Jin, 2004; Parish & Willis, 1993; Salaff, 1981).

In examining gender differences in the support of parents, we also include four groups of covariates in our multivariate analyses, following an earlier study by Lee et al. (1994) on intergenerational transfers in Taiwan. First, we include parents' resources, which may prompt adult children to provide support to parents as a form of "prospective exchange." Second, we control for respondents' own resources, because they

enable respondents to contribute support to their parents. Third, we include parents' help with household chores to capture mutual nonmonetary exchanges. Finally, we control for respondent's age, parents' ages, whether respondent has siblings, and geographic location, as the need and the capacity for support can vary by such demographic characteristics. Inclusion of these covariates highlights the overriding importance of practical matters for coresidence and intergenerational relationship in contemporary China (Logan & Bian, 1999).

Our study extends the previous study in three significant ways. First, we use a more recent data set that we collected ourselves for this study in 1999 ("Study of Family Life in Urban China") in three cities, Shanghai, Wuhan, and Xi'an ($N = 1,801$). Second, we jointly consider both coresidence with and financial support to elderly parents. Third, we examine social processes underlying the gender differences (or the lack thereof) in financial support to parents.

METHOD

Data

This paper is based on the analysis of a survey, "Study of Family Life in Urban China" in three large cities—Shanghai, Wuhan, and Xi'an—that we conducted in the summer of 1999. We also refer to the study as the "Three-City Survey." There are large intercity differences in levels of economic development, with Shanghai most developed, Xi'an least developed, and Wuhan in between. For example, the average 1999 annual wage was 16,641 RMB yuan in Shanghai, 8,812 RMB yuan in Wuhan, and 7,764 RMB yuan in Xi'an (1 yuan was worth roughly 1/8 U.S. dollar; China Data Online, 2007). In our regression analyses, we include dummy variables that allow for additive differences across the cities. We do not, however, find any interaction effects across the cities. At each research site of the Three-City Survey, the study initially targeted a probability sample of 1,300 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 was used to select an adult respondent (18 years or older) within each selected household.

If the person being interviewed was younger than 60, we used Questionnaire A, with which

we collected all relevant information, including that pertaining to the support of his or her parents. If the person initially selected was 60 years or older, we used a different questionnaire (Questionnaire B) and then randomly selected one of his or her eligible children for interview with Questionnaire B+, which is very similar in content to Questionnaire A for adult respondents. An eligible child is one who was an adult (age 18 or older) and lived in the same city. Questionnaire interviews were conducted in homes by interviewing staff. 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 shortcut of interviewing the coresidential adult child if the elderly person was in a coresidential household. Here, we define coresidential families as those in which an elderly person (60 years or older) lives with his or her adult child. Thus, there may be an upward bias in the incidence rate of coresidence in our data.

Although the survey design collected information from both an elderly person and his or her adult child (if available), for this paper we analyze data only from adult children. Our analytical sample includes respondents who were initially sampled and interviewed (i.e., respondents to Questionnaire A) and respondents who were selected and interviewed as children of elderly respondents (i.e., respondents to Questionnaire B+). As a result, persons of certain demographic characteristics (such as those with no sibling) may be overrepresented (or underrepresented) in the data. Restriction to married respondents with at least one surviving parent results in a sample of 869 male respondents and 932 female respondents.

Measures

For financial support to parents, respondents were asked about the financial transfers, including gifts worth more than 200 RMB yuan in value, both upward (from respondents to parents) and downward (from parents to respondents) in the year 1998. We followed the practice of Lee et al. (1994) and constructed a dependent variable based on the net flow between the respondent and the respondent's parents, (i.e., upward flow minus downward flow). We then truncated the measure from below at zero, so that all negative net flows are considered no upward transfer. This analytical decision was motivated by our interest in financial transfers from adult children to elderly parents. This depen-

dent measure can be further decomposed into two multiplicative parts: the likelihood of support (i.e., positive values of net support) and the amount of net support conditional on support.

We use the following groups of explanatory variables: Family Type is a dummy variable, with married child coresiding with parents coded 1 and not coresiding coded 0. Parents' Resources include father's socioeconomic status and parents' survival status. Father's socioeconomic status is measured by International Socioeconomic Index (SEI), which is recoded from detailed current occupation based on three-digit occupational codes used in the statistical system by the China State Statistical Bureau. We divided the conventional SEI by 10 so that it varies in the range of 0 to 10. Father's SEI is a proxy measure of the financial resources of parents. Parents' survival status is dichotomous, indicating whether both parents are alive. Parents' Help with Household Chores is measured by whether or not the respondent's parents assisted the respondent with such household chores as child care, cooking, and grocery shopping. Respondent's Resources are measured by the respondent's education, personal income in 1998, and current occupation. Education is measured in years of completed schooling. Personal income is a composite measure encompassing salary, bonus, subsidies, and all other forms of income. Occupation is again in the scale of International Socioeconomic Index (SEI), divided by 10. Demographic Characteristics include the average age of parents, the age of the adult child, whether the respondent has siblings, and city. We do not include in our analysis some other variables, such as health status, as they do not help predict the outcomes.

These data have limitations. Most notably, we do not have good measures of other dimensions of intergenerational relationships, composition of children's conjugal families, detailed financial information of all family members, and household labor. Without these measures, we are not in a position to thoroughly test various theories or models of intergenerational transfers. Rather, our research is focused on a narrower question of whether or not married daughters provide less financial support to their parents than married sons in urban China.

RESULTS

We present the means or percentages of our variables by gender in Table 1. The three dependent

Table 1. *Descriptive Statistics for Men (n = 869) and Women (n = 932)*

Variables	Men	Women	<i>p</i> Value ^a
Amount of transfer (yuan, unconditional) ^b	380	423	.382
Percent of positive transfer	37.9	40.9	.190
Amount of transfer (yuan, conditional on transfer) ^b	1,033	1,045	.908
Family type			
Type 1: Not coresiding (%)	61.9	84.8	.000
Type 2: Coresiding (%)	38.1	15.2	
Parents' resources			
Father's socioeconomic index (SEI, 0 – 10)	4.30	4.32	.862
Parents' survival status			
Both alive (%)	57.8	59.1	.561
Only father/mother alive (%)	42.2	40.9	
Parents' help			
Parents' help with household chores			
No (%)	72.7	84.4	.000
Yes (%)	27.3	15.6	
Respondent's resources			
Income in 1998 (yuan)	11,217	6,967	.000
Education	11.3	10.9	.015
SEI (0 – 10)	4.32	4.31	.966
Demographic characteristics			
Respondent's age	40.3	39.2	.001
Parents' average age	69.7	68.3	.000
Respondent has siblings			
Yes (%)	96.7	95.0	.074
No (%)	3.3	5.0	
City			
Shanghai (%)	33.4	30.5	.187
Wuhan (%)	33.5	37.3	.088
Xi'an (%)	33.1	32.2	.667

^a*p* value refers to the test for gender difference. ^b1 RMB yuan is worth about 1/8 U.S. dollar.

variables measuring financial support to parents are given in the first three rows, followed by family type, parents' resources, respondent's resources, and demographic characteristics. The *p* values for testing the null hypothesis of no gender differences for each variable are given in the last column.

The first row shows that, for our sample, there was no statistical difference by gender in the amount of financial support to parents. If anything, married daughters seemed to provide more support than married sons (423 yuan vs. 380

yuan). This is surprising, as the literature on the traditional Chinese family strongly suggests that daughters do not carry the financial responsibility of supporting parents after marriage. It is married sons who are supposed to be responsible for supporting parents in old age. The second row presents the proportion of children who gave positive net transfers to parents by gender. Again, married women seemed to do a higher proportion of giving than married men (40.9% vs. 37.9%), although the difference was not statistically significant. The third row displays the average amount transferred to parents among respondents with positive transfers. There was no gender difference in this measure.

The crude comparisons given above may be masked by the fact that children may provide additional, noncash support to parents through coresidential arrangements. We know that married sons are still far more likely to live with parents than married daughters. In our data, the contrast was 38.1% for men versus 15.2% for women. It thus is possible that the high level of financial support provided by women is related to their lower rate of coresidence with parents—a conjecture we explore later in the paper.

Among covariates that measure parents' resources, the main gender difference was that married sons were more likely to receive parents' help with household chores than were married daughters (27.3% vs. 15.6%). Of course, the main reason for this was that parents' ability to perform household chores was highly constrained by living arrangements. As married sons were far more likely to live with parents than were married daughters, the former (along with their wives) were also more likely to receive help with household chores than the latter.

Among the three measures of the respondent's resources, the most significant gender difference lay in personal income. Whereas married men had an average of 11,217 RMB yuan in personal income in 1998, the corresponding number for married women was only 6,967, only slightly more than half. Of course, a major reason for the gender difference in earned income was labor supply. Married men also had more years of education, but the educational disparity was not large (11.3 years vs. 10.9 years).

Results on Coresidence Status

We argued earlier that coresidence is both a form of support and a moderator of financial support.

We now explicate these two meanings of coresidence by implementing the following statistical strategies. First, we use coresidence as a dependent variable and model the determinants of coresidence by gender. Second, in modeling the determinants of financial support, we interact gender and coresidence so as to examine gender differences within a given type of living arrangement.

The results from the first statistical strategy are presented in Table 2. The main entries (in Columns 1 and 4) are logit coefficients on the probability of coresiding with parents, with standard errors (*SE*) reported on the right side. We also present the coefficients in the odds-ratio form (i.e., in exponentiated coefficients) in Columns 3 and 6. The model is estimated separately for men and for women. The estimated effects of some covariates are similar between the genders. For example, having lost a parent and having no other surviving siblings increased significantly the likelihood of coresidence. The

age and SEI of parents had positive effects, whereas the age of the respondent had a negative effect. The factors representing the socioeconomic status of children had very different effects on men and women, however. High social status of men (regardless of whether measured by income, education, or occupation) was associated with a *lower* likelihood of living with parents. In contrast, we find a strong *positive* effect of education among married women: a 1-year increase in their education increased the odds of coresidence by 10%. The estimated coefficient of father's SEI was also significant for women. Thus, it appears that causal mechanisms for entering coresidence differ sharply by gender: Whereas an unsuccessful son may stay at home with his parents after marriage because of his inability to live independently, a successful daughter may be able to bring her husband to live with *her* parents and thereby choose not to follow the traditional practice.

Table 2. Logistic Regression Results Predicting Coresidence for Men (n = 869) and Women (n = 932)

	Men			Women		
	<i>B</i>	<i>SE B</i>	<i>e^B</i>	<i>B</i>	<i>SE B</i>	<i>e^B</i>
Parents' resources						
Father's socioeconomic index (SEI)	.08 [†]	.05	1.08	.15**	.06	1.16
Parents' survival status						
Both alive (omitted)						
Only father/mother alive	.32 [†]	.17	1.37	.50*	.21	1.64
Respondent's resources						
Income in 1998 (logged)	-.03**	.01	0.97	-.00	.02	1.00
Education	-.04	.04	0.96	.10*	.05	1.11
SEI	-.14*	.06	0.87	.02	.08	1.02
Demographic characteristics						
Parents' average age	.31**	.08	1.37	.18 [†]	.10	1.20
Respondent's age	-.68**	.08	0.51	-.23*	.10	0.80
Respondent having siblings						
Yes (omitted)						
No	1.10*	.44	3.00	1.25**	.33	3.48
City specific intercepts						
Shanghai	1.40**	.44		-3.53**	.55	
Wuhan	.86 [†]	.46		-3.83**	.57	
Xi'an	.93*	.45		-4.09**	.60	
χ^2		124.28			49.52	
<i>df</i>		13			13	
% Coresiding with parents		38.1			15.2	

Note: Also included in the models are dummy variables representing missing for father's SEI, respondent's SEI, and parents' age.

[†]*p* < .1, **p* < .05, ***p* < .01.

Explaining the Gender Differences

We begin with the exercise of breaking down the mean of our three dependent variables further by both gender and family type. The results are unexpected. Among married persons who did not live with parents, there were no statistical differences by gender for any of the three outcomes, although the point estimates were higher for sons than for daughters. For respondents coresiding with parents, we observe that married women gave significantly higher levels of support to parents than married men both for the whole sample (635 yuan vs. 336 yuan) and among those who gave positive net amounts to parents (1,866 yuan vs. 1,219 yuan). There were no gender differences in the proportion of positive net transfer. These results, later summarized in Panel A of Table 5, are also given in the logit model form in Model 1 of Tables 3 and 4.

We present the results of two logit models predicting the occurrence of a positive transfer in Table 3. Model 1 shows the differences by gender and family type without controls. The only significant coefficient is the negative effect of coresidence, meaning that coresidential children were only 55% as likely to support parents as noncoresidential children. There was no gender difference either in the likelihood of support or in the coresidence effect on support. In Model 2, after we include parents' resources, respondents' resources, and demographic characteristics, we observe that the gender coefficient has turned positive and statistically significant (odds ratio of 1.40). This suggests that women are more likely to provide support to parents than are men if there are no gender differences in the distribution of the relevant factors presented in Table 1. Note that father's SEI had a significantly negative effect, indicating a reduced need with a higher status father. Having lost a parent had a significantly positive effect. Respondents' income, education, and SEI had significant and positive effects on the likelihood of transfer.

We further model the amount of transfer among the respondents for whom there is a positive transfer to parents. We use the natural logarithm of the net amount (in 1998 RMB yuan) as the dependent variable and estimated two linear regression models with ordinary least squares (OLS). The results are given in Table 4. Because the dependent variable is in logarithm transformation, the coefficients are scale free and can be roughly interpreted as the effects in percent-

ages. Model 1 in Table 4 presents the differences by gender and family type without controls. As we discussed earlier, we observe a significant interaction between gender and coresidential status, indeed the only positive coefficient in the model. The magnitude of the coefficient (.47), in combination with other statistically nonsignificant coefficients means that married women living with parents gave about 60% more to parents than the other three groups: men regardless of coresidential status and women not living with parents. The question that arises is why such an interaction exists.

We provide a partial answer to this question in Model 2 of Table 4. In this model, we include the same covariates that we included in Model 2 of Table 3 for the analysis of the likelihood of transfer. After we included the relevant covariates, two changes were particularly worth noting. First, the gender coefficient (which compares women vs. men among noncoresiding respondents) became significantly positive (.11). This change means that, after the appropriate control of relevant factors, women not living with parents actually provided higher amounts than men (by about 11%). Second, the gender \times coresidence interaction was reduced almost by half and was only marginally significant from zero at the 0.1 p value. This large decline in interaction supports our earlier proposition: The primary reason why married women living with parents provided more support to parents was that they had greater personal resources. The explanation for this interpretation can be found in Panel B of Table 5, where we present the means of the key explanatory variables by gender and coresidence status. Parents' help with household chores differed only by coresidence but not by gender. There was significant interaction of gender and coresidence for respondent's resources, however: Whereas noncoresiding sons were significantly better off than coresiding sons, noncoresiding daughters were worse off than coresiding daughters (except for income). We know that only explanatory variables that varied by gender and coresidence could possibly explain the interaction effect of the two variables in such a regression analysis as given in Table 4.

DISCUSSION

Do sons give more money to parents than daughters do in contemporary urban China?

Table 3. Logistic Regression Results Predicting Giving to Parents (N = 1,801)

	Model 1			Model 2		
	<i>B</i>	<i>SE</i>	<i>e^B</i>	<i>B</i>	<i>SE</i>	<i>e^B</i>
Gender						
Male (omitted)						
Female	−.05	.12	.96	.34**	.13	1.40
Family type						
Type 1: Not coresiding (omitted)						
Type 2: Coresiding	−.60**	.15	.55	−.50**	.17	0.61
Gender × Type	.29	.24	1.33	−.02	.26	0.98
Parents' resources						
Father's socioeconomic index (SEI)				−.11**	.03	0.90
Parents' survival status						
Both alive (omitted)						
Only father/mother alive				.66**	.12	1.93
Parents' help						
Parents' help with household chores						
No (omitted)						
Yes				.20	.16	1.22
Respondent's resources						
Income in 1998 (logged)				.06**	.01	1.06
Education				.05*	.02	1.06
SEI				.12**	.04	1.13
Demographic characteristics						
Parents' average age				.03	.06	1.03
Respondent's age				.11†	.06	1.11
Respondent having siblings						
Yes (omitted)						
No				−.21	.27	0.81
City specific intercepts						
Shanghai				−2.34**	.32	
Wuhan				−2.50**	.32	
Xi'an				−1.83**	.32	
χ^2		21.49			212.52	
<i>df</i>		3			17	
% Giving to parents		39.45			39.45	

Note: Also included in the models are dummy variables representing missing for father's SEI, respondent's SEI, and parents' age.

† $p < .1$, * $p < .05$, ** $p < .01$.

Based on our statistical analyses that compared married men to married women in the 1999 Three-City Survey, the answer is no. This finding suggests that the traditional family model is no longer applicable to contemporary China, particularly in urban areas. The only evidence that is consistent with received wisdom derived from the traditional Chinese family model is the fact that parents were still much more likely to live with married sons than with married daughters.

On the central question that concerns this study—gender differences in intergenerational support—our results are full of surprises. Instead of providing lower levels of support to parents than married men, married women, we found, gave either the same or higher levels of support. Married women were as likely as married men to provide support without any controls and were much more likely to do so when relevant factors are controlled for. They also provided higher amounts of support before controls among those

Table 4. Ordinary Least Squares Regression Models Predicting Amount Given to Parents, among Those Giving to Parents, With *ln*(yuan) as the Amount Given to Parents ($n = 689$)

	Model 1			Model 2		
	<i>B</i>	<i>SE</i>	e^B	<i>B</i>	<i>SE</i>	e^B
Gender						
Male (omitted)						
Female	-.02	.08	.98	.11**	.078	1.12
Family type						
Type 1: Not coresiding (omitted)						
Type 2: Coresiding	.10	.12	1.11	.00	.119	1.00
Gender \times Type	.47*	.17	1.60	.29†	.17	1.34
Parents' resources						
Father's socioeconomic index (SEI)				.03	.02	1.03
Parents' survival status						
Both alive (omitted)						
Only father/mother alive				-.01	.07	0.99
Parents' help						
Parents' help with household chores						
No (omitted)						
Yes				.36**	.11	1.43
Respondent's resources						
Income in 1998 (logged)				.02**	.00	1.02
Education				.04**	.01	1.04
SEI				.09**	.03	1.09
Demographic characteristics						
Parents' average age				.01	.04	1.01
Respondent's age				.01	.04	1.01
Respondent having siblings						
Yes (omitted)						
No				-.11	.19	0.90
City specific intercepts						
Shanghai				5.14**	.20	
Wuhan				5.09**	.21	
Xi'an				5.13**	.21	
R^2		.02			.17	

Note: Also included in the models are dummy variables representing missing for father's SEI, respondent's SEI, and parents' age.

† $p < .1$, * $p < .05$, ** $p < .01$.

coresiding with parents. After relevant factors are controlled for, all married women gave higher amounts than married men. Most of the higher level of support provided by women living with parents was explained by observed differences in personal resources. Although the existing literature suggests that married women should provide lower levels of support than married men provided, it was surprising that among those living with parents, married women actually surpassed married men in providing financial support to parents.

This important finding challenges the conventional wisdom that modernization is a main social mechanism for changing the traditional Chinese family model. Despite there being a lower level of economic development in China than in Taiwan, families in urban China differ from those in Taiwan in no longer subscribing to the traditional model of sons being the main contributors to the elderly's financial well-being. This conclusion is consistent with earlier research that found elderly residents in urban China much less likely to rely on support

Table 5. Means of Selected Variables by Gender and Coresidence Status

	Men		Women		<i>p</i> Value ^c
	Not Coresiding	Coresiding	Not Coresiding	Coresiding	
Panel A					
Amount of transfer(yuan, unconditional)	408	336	384	635	0.006
Positive transfer	0.43	0.29	0.42	0.35	0.239
Amount of transfer(yuan, conditional on transfer)	959	1,219	924	1,866	0.014
Panel B					
Parents' help with household chores	0.09	0.57	0.08	0.56	0.938
Respondent's resources					
Income in 1998 (logged)	8.84	8.54	7.77	7.74	0.003
Education	11.4	11.03	10.81	11.66	0.000
Socioeconomic Index (SEI)	44.62	40.82	42.83	44.91	0.000

^c *p* value refers to the test for the interaction effect between gender and coresidence status.

provided by children (Hermalin et al., 2003) and less traditional in intergenerational relationships than their Taiwanese counterparts (Whyte et al., 2003).

How do we account for the unexpected finding that married women in China provide more support to parents than married men? We suggested a possible answer to this puzzle earlier when we discussed the results. The social processes for coresidence are different for married men than for married women. The traditional practice is for a married son to stay with his parents, as living with parents is seen as part of one's filial obligation. Rich sons may be able to buy their way out of this obligation by providing cash, whereas poor sons provide this kind of support to parents and also save money by living together. In contrast, daughters are not supposed to live with their own parents after marriage. It takes an additional incentive (often economic or emotional) for a newly married couple to live with the wife's family. For example, the wife's family could provide living space for the couple if it is not available in the husband's family or the wife is strongly attached to her natal family and can defy traditional practices by affirming the primacy of ties to her own family, rather than to her husband's. For these and other potential mechanisms to work, she will need to be resourceful and able to rely on personal resources or those of her natal family. This is part of the reason why father's SEI has a much larger effect on the likelihood of married women living with parents than that of married men (first row, Table 2).

To properly interpret the findings within the context of social change in contemporary China, we conjecture that the Chinese family in contemporary urban areas has undergone some major changes that make it different from the traditional family. This social change in family relations is not just caused by "modernization" or economic development. Rather, multifaceted changes have taken place in gender ideology, economic development, fertility, mortality, and, most importantly, the pension system. Together, they have led to a transformation of intergenerational support to parents in contemporary urban China, where financial support to parents has become optional rather than obligatory, as expected in the traditional Chinese family model. As a result, the real significance of monetary support to elderly parents in urban China is symbolic rather than financial, as elderly parents no longer count on their adult children to help meet their basic living needs. We call our conjecture the "symbolic transfer" hypothesis. The symbolic transfer hypothesis has been alluded to in the previous literature (e.g., Logan & Bian, 2003, p. 98). In our own data, we note that the total amount of support is relatively small compared to wages earned by active workers, about 1/10th of the average annual wage in these cities.

Symbolic values are not necessarily unimportant ones. To be sure, financial transfer from adult children to parents remains an important practice in contemporary China, urban or rural. In urban areas, however, the nature of the practice has changed. Besides serving as an economic buffer or as informal insurance against unanticipated

needs, intergenerational transfers also serve the important function of providing familial networking and support. Elderly parents may take pride in knowing, and also in announcing publicly, that their grown children express their filial piety by sending them money, although the extra money may not be needed. These parents sometimes save the money and eventually transfer it back to the children who gave it to them, or they may give to other, less prosperous children or to grandchildren. We further note that the presence of other siblings reduces the likelihood of coresidence but does not affect the likelihood or the amount of support to parents. These results are consistent with our symbolic interpretation.

If we are correct in interpreting financial transfers as being primarily of symbolic and social importance, it is then not difficult to understand why women are more likely to give money to parents than are men. It is well known that women have larger social kinship networks than men (Lin, 2000; Moore, 1990) and that daughters provide more caregiving to parents than sons (Silverstein, Gans, & Yang, 2006). It is thus no surprise that women are more likely to interact with their parents and thus provide more support to them. Alternatively, daughters who coreside with parents are selective in certain unobserved characteristics (say affinity with parents) that make them prone to supporting parents.

In conclusion, the key finding of the study is that the Chinese elderly in urban China no longer count on sons, rather than daughters, for financial support. Although this finding represents a radical departure from the traditional Chinese family model, it does not mean that the traditional Chinese family model is totally irrelevant in today's China. Two caveats are worth noting. First, we still observed the prevalence of patrilocal extended family living arrangements in our data, although the extent of patrilocality is less extreme in urban China than the extreme form that is found in Taiwan (Knodel & Ofstedal, 2002; Weinstein, Sun, Chang, & Freedman, 1994). Second, it is quite plausible that different expectations of sons versus daughters for old-age support may still be widely held in rural China, where peasants have no pension and continue to count on sons for old-age support (Yang, 1996). It is possible that only when financial support to the elderly becomes optional, as in urban China, does the traditional gendered norm then break down. We argue that the social change underlying the key finding of the study was not brought

about by a generic "modernization" process but by a combination of particular social and institutional changes that have accompanied economic development in contemporary China.

NOTE

An earlier version of this paper was presented at the 2006 Population Association of America Annual Meeting (March, Los Angeles). The research is supported by a research grant from the National Science Foundation, a research grant to Yu Xie from the National Institute on Aging (R03 AG 1838), a Guggenheim Fellowship from the John Simon Guggenheim Memorial Foundation, and a Fogarty grant for international research from the National Institute of Child Health and Development (D43 TW00657). We thank Miranda Brown, Cindy Glovinsky, Zhongdang Pan, and Marty Whyte for comments and suggestions on the work presented in the paper.

REFERENCES

- Cheng, C. (1993). The fertility decline in China: The contribution of changes in marital status and marital fertility. *Asia-Pacific Population Journal*, 8, 55–72.
- China Data Online. (2007). *China data online*. Retrieved November 21, 2007, <http://chinadataonline.org>
- China Population and Development Research Center. (2007). *China population today*. Retrieved November 21, 2007, www.cpirc.org.cn
- Chu, C. Y. C., Xie, Y., & Yu, R. R. (2007). Effects of sibship structure revisited: Evidence from intra-family resource transfer in Taiwan. *Sociology of Education*, 80, 91–113.
- Goode, W. (1963). *World Revolution and Family Patterns*. New York: Free Press.
- Greenhalgh, S. (1985). Sexual stratification: The other side of "growth with equity" in East Asia. *Population and Development Review*, 11, 265–314.
- Hannum, E. (2005). Market transition: Educational disparities, and family strategies in rural China: New evidence on gender stratification and development. *Demography*, 42, 275–299.
- Hannum, E., & Xie, Y. (1994). Trends in educational gender inequality in China: 1949–1985. *Research in Social Stratification and Mobility*, 13, 73–98.
- Hauser, S., & Xie, Y. (2005). Temporal and regional variation in earnings inequality: Urban China in transition between 1988 and 1995. *Social Science Research*, 34, 44–79.
- Hermalin, A., Ofstedal, M. B., & Shih, S. (2003). Support received by the elderly in Baoding: The view from two generations. In M. Whyte (Ed.), *China's revolutions and intergenerational relations* (pp. 121–142). Ann Arbor: Center for Chinese Studies, University of Michigan.

- Knapp, K. (2005). *Selfless offspring: Filial children and social order in medieval China*. Honolulu: University of Hawaii Press.
- Knodel, J., & Ofstedal, M. B. (2002). Patterns and determinants of living arrangements. In A. Hermalin (Ed.), *The well-being of the elderly in Asia: A four-country comparative study* (pp. 143 – 184). Ann Arbor: University of Michigan Press.
- Lee, Y., Parish, W., & Willis, R. (1994). Sons, daughters, and intergenerational support in Taiwan. *American Journal of Sociology*, 99, 1010 – 1041.
- Lee, Y., & Xiao, Z. (1998). Children's support for elderly parents in urban and rural China: Results from a national survey. *Journal of Cross-Cultural Gerontology*, 13, 39 – 62.
- Levy, M. (1949). *The family revolution in modern China*. Cambridge, MA: Harvard University Press.
- Li, S., Feldman, M., & Jin, X. (2004). Children, marriage form, and family support for the elderly in contemporary rural China. *Research on Aging*, 26, 352 – 384.
- Lin, G. (2001). *Reading changes in family support through regional development in China*. Research Paper No. 2001-16. University of West Virginia, presented at the 97th Annual Meeting of the Association of American Geographers, Morgantown, WV.
- Lin, I., Goldman, N., Weinstein, M., Lin, Y., Gorrindo, T., & Seeman, T. (2003). Gender differences in adult children's support of their parents in Taiwan. *Journal of Marriage and Family*, 65, 184 – 200.
- Lin, N. (2000). Inequality in social capital. *Contemporary Sociology*, 29, 785 – 795.
- Logan, J., & Bian, F. (1999). Family values and co-residence with married children in urban China. *Social Forces*, 77, 1253 – 1282.
- Logan, J., & Bian, F. (2003). Parents' needs, family structure, and regular intergenerational financial exchange in Chinese cities. *Sociological Forum*, 18, 86 – 101.
- Logan, J., & Spitze, G. (1996). *Family ties: Enduring relations between parents and their grown children*. Philadelphia, PA: Temple University Press.
- Moore, G. (1990). Structural determinants of men's and women's personal networks. *American Sociological Review*, 55, 726 – 735.
- National Bureau of Statistics. (2000). *China statistical yearbook 2000*. Beijing: National Bureau of Statistics Press (in Chinese).
- National Bureau of Statistics. (2005). *China statistical yearbook 2005*. Beijing: National Bureau of Statistics Press (in Chinese).
- Nylan, M. (2000). Golden spindles and axes: Elite women in the Achaemenid and Han empires. In C. Li (Ed.), *The sage and the second sex: Confucianism, ethics, and gender* (pp. 199 – 222). Albany: State University of New York Press.
- Parish, W., & Willis, R. (1993). Daughters, education, and family budgets Taiwan experiences. *The Journal of Human Resources*, 28, 863 – 898.
- Raymo, J., & Xie, Y. (2000). Income of the urban elderly in post-reform China: Political capital, human capital, and the state. *Social Science Research*, 29, 1 – 24.
- Salaff, J. (1981). *Working daughters of Hong Kong*. Cambridge, UK: Cambridge University Press.
- Shu, X., & Bian, Y. (2003). Market transition and gender gap in earnings in urban China. *Social Forces*, 81, 1107 – 1145.
- Silverstein, M., Gans, D., & Yang, F. (2006). Intergenerational support to aging parents: The role of norms and needs. *Journal of Family Issues*, 27, 1068 – 1084.
- Sun, R. (2002). Old age support in contemporary urban China from both parents' and children's perspectives. *Research on Aging*, 24, 337 – 359.
- Thornton, A., & Lin, H. (1994). *Social change and the family in Taiwan*. Chicago: University of Chicago Press.
- Ward, R., Logan, J., & Spitze, G. (1992). The influence of parent and child needs on co-residence in middle and later life. *Journal of Marriage and the Family*, 54, 209 – 221.
- Weinstein, M., Sun, T. H., Chang, M. C., & Freedman, R. (1994). Co-residence and other ties linking couples and their parents. In A. Thornton & H. Lin. (Eds.), *Social change and the family in Taiwan* (pp. 305 – 334). Chicago: University of Chicago Press.
- Whyte, M. (2004). Filial obligations in Chinese families: Paradoxes of modernization. In C. Ikels (Ed.), *Filial piety: Practice and discourse in contemporary East Asia* (pp. 106 – 127). Stanford, CA: Stanford University Press.
- Whyte, M. (2005). Continuity and change in Chinese family life. *The China Journal*, 53, 9 – 33.
- Whyte, M., Hermalin, A., & Ofstedal, M. B. (2003). Intergenerational relations in two Chinese societies. In M. Whyte (Ed.), *China's revolutions and intergenerational relations* (pp. 225 – 254). Ann Arbor: Center for Chinese Studies, University of Michigan.
- Whyte, M., & Parish, W. (1984). *Urban life in contemporary China*. Chicago: University of Chicago Press.
- Whyte, M., & Xu, Q. (2003). Support for aging parents from daughters versus sons. In M. Whyte (Ed.), *China's revolutions and intergenerational relations* (pp. 167 – 196). Ann Arbor: Center for Chinese Studies, University of Michigan.

- Wikipedia (n.d.). *List of countries by Human Development Index*. Retrieved June 18, 2008, from http://en.wikipedia.org/wiki/List_of_countries_by_Human_Development_Index
- Xie, Y., & Hannum, E. (1996). Regional variation in earnings inequality in reform-era urban China. *American Journal of Sociology*, *101*, 950–992.
- Xu, X., & Whyte, M. (1990). Love matches and arranged marriages: A Chinese replication. *Journal of Marriage and the Family*, *52*, 709–722.
- Yang, H. (1996). The distributive norm of monetary support to older parents: A look at a township in China. *Journal of Marriage and the Family*, *58*, 404–415.
- Zimmer, Z., & Kwong, J. (2003). Family size and support of older adults in urban and rural China: Current effects and future implications. *Demography*, *40*, 23–44.