



A Vignette Study on Gendered Filial Expectations of Elders in Rural China

Author(s): Zhen Cong and Merrill Silverstein

Source: *Journal of Marriage and Family*, Vol. 74, No. 3 (June 2012), pp. 510-525

Published by: National Council on Family Relations

Stable URL: <https://www.jstor.org/stable/41507288>

Accessed: 20-10-2018 00:52 UTC

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



JSTOR

National Council on Family Relations is collaborating with JSTOR to digitize, preserve and extend access to *Journal of Marriage and Family*

A Vignette Study on Gendered Filial Expectations of Elders in Rural China

This investigation integrated vignette and survey design to study how sons' reduced availability and daughters' increased contributions to parents influenced Chinese rural elders' gendered filial expectations, measured with their beliefs about obligations of a vignette daughter and a vignette son to their postsurgery parent. The sample included 802 elders from 2001, 2003, and 2006 waves of a longitudinal study on rural elders in Anhui Province, China. Multinomial logistic regressions showed that the vignette sons' migration and actual daughters' previous contributions increased elder women's, but not men's, endorsement of the vignette daughter's obligations. The vignette son's child-care responsibilities affected neither women's nor men's beliefs, but the vignette daughters' migration and child-care responsibilities reduced respondents' expectations of the vignette daughter. This study directs attention to the discrepancy between social changes and individuals' attitudes because of structural lags

as well as to the importance of examining factors that will reduce the discrepancy.

In rural China, elders usually rely exclusively on adult children to provide care when needs arise because of strong filial expectations stipulated by Confucian norms as well as practical reasons, such as the lack of access to formal services (Joseph & Phillips, 1999; Y. Lee & Xiao, 1998; Shi, 1993; Sung, 1995; Zimmer, 2005). As in other places where Confucian norms are deeply embedded in the culture, the traditional filial expectations in rural China are gender-biased that sons and their families should be the major providers for parents at their old age (Cong & Silverstein, 2008; K. S. Lee, 2010; W. Zhang, 2009). Although deeply rooted in the culture, these gendered filial expectations have developed with social conditions, such as patrilocal residence and a strong patrilineal tradition, because culture is hard to be disentangled from practical reasons (Logan & Bian, 1999; Swidler, 1986). Social conditions that nurtured gendered filial expectations have, however, been substantially modified or altered. The large-scale labor force migration from rural to urban areas in China as a result of modernization and urbanization has drifted adult sons away from their parents in rural areas and reduced the availability of sons (Giles & Mu, 2007). As another consequence of modernization, daughters have started assuming more active roles in their elder parents' support networks along with the society's gradual

Department of Human Development and Family Studies,
Texas Tech University, P.O. Box 41230, Lubbock, TX
79409-1230 (zhen.cong@ttu.edu).

*Andrus Gerontology Center, Davis School of
Gerontology, University of Southern California, Room
208C, 3715 McClintock Avenue, Los Angeles, CA
90089-0191.

This article was edited by Deborah S. Carr.

Key Words: Asian/Pacific Islander families, caregiving,
culture, family roles, intergenerational relations, social
support.

acceptance of gender equality ideology as well as women's increased self-esteem and economic autonomy (Xie & Zhu, 2009; H. Zhang, 2007). How will these social changes contest the gendered filial expectations? Which changes are more important? Few empirical studies have addressed these questions in rural China, in part because the strong son preference allows little variation in gendered filial expectations (China Research Center on Aging, 2003).

Drawing on the structural lag model and theories on intergenerational relationships, in this investigation we integrated a vignette and a survey design to examine how the availability of sons and contributions of daughters affect gendered filial expectations of elder fathers and mothers; specifically, we investigated how elders allocated responsibilities between a vignette daughter and son when their widowed parent needed 2 months of care after a surgery by manipulating the vignette son and daughter's migration status and their child-care responsibilities. We also related the way that elders allocated responsibilities to the share of support provided by their actual daughters and the migration experience of their sons. We expected that this would help us understand how much elders resist or adjust to social changes and which changes are most influential in changing gendered filial expectations.

BACKGROUND

Structural Lag and Social Changes

Rossi and Rossi (1990) defined norms concerning family obligations as "culturally defined rights and duties that specify the ways in which any pair of kin-related persons is expected to behave toward each other" (pp. 155–156). Elders' attachment to traditional norms usually lags behind social changes, particularly in fast-changing societies (Alwin, 1990; Inglehart & Baker, 2000). The rigidity of elders' beliefs could be attributed to the development of those beliefs in their formative years when they were young and susceptible to social values at that time (Alwin, 1996; Alwin & McCammon, 2003). In societies experiencing fast changes, this asynchrony is more obvious (Aboderin, 2004).

Even fundamental beliefs are not immune to social changes, though, and people's beliefs finally adjust to social changes either through

cohort replacement or actual changes to individuals' values and norms (Alwin, 1996; Brewster & Padavic, 2000). Riley, Kahn, and Foner (1994) brought forth the idea of *structural lag*, suggesting that values and social institutions usually lag behind actual social changes. For example, when aging had initially brought many changes to a society, there was a lack of awareness to acknowledge these challenges and insufficient facilities to meet those demands. Nevertheless, the lag could not last long, because values and social institutions would eventually adjust to the demographic shift and social changes (Riley et al.).

In this investigation, we focused on elders' generalized expectations that sons should be responsible for parents' old age support, which is independent of specific situations experienced or actual support expected, even though these beliefs are likely to be compromised between the ideal and reality and modified by practical concerns and personal situations (Finley, Roberts, & Banahan, 1988; Gans & Silverstein, 2006).

Filial Expectations and Their Gender Bias in Rural China

Confucian filial norms emphasize the obligation of children to provide for their parents; these norms are further reinforced by policies and laws in China that expect adult children to provide for their elders (Sung, 1998; Yan, 2003). Children typically are the most reliable providers for elder parents in rural China, where the majority of elders are economically vulnerable, which further limits their choices of receiving care. The financial strains mainly result from the unavailability of pensions, lifelong poverty, and the depletion of resources in the form of "serial division of the family"; that is, the practice by which parents transfer assets to sons one by one when they get married (China Research Center on Aging, 2003; Y. Lee & Xiao, 1998; Yan). In case of sickness, urban elders find it hard to cover medical expenses; rural elders, with fewer resources than their urban counterparts, struggle even more, let alone hire caregivers (Sun, 2004; Zimmer & Kwong, 2003).

Notably, the filial expectations are highly gender biased in rural China. According to the patrilineal tradition, sons and their spouses are responsible for taking care of elder parents, but daughters are regarded as belonging to

other families after getting married and thus having no obligations toward their own parents (Feldman, Tuljapurkar, Li, Jin, & Li, 2007; Graham, Larsen, & Xu, 1998; Whyte & Xu, 2003; Xie & Zhu, 2009; W. Zhang, 2009). In addition, rural elders do not differentiate sons from daughters-in-law when they express strong expectations of sons, leading to underlying expectations of daughters-in-law to provide care (Cong & Silverstein, 2008). In contrast, daughters' families have many fewer obligations even when daughters may be on the verge of being regarded as family members.

Recipients of support use normative expectations as benchmarks to appraise the support they have received either as adequate or not (G. R. Lee, Netzer, & Coward, 1994), although filial expectations may or may not be associated with the support elders actually receive from their children (Gans & Silverstein, 2006; Peek, Coward, Peek, & Lee, 1998). In particular, gendered filial expectations stipulate sons and their families as primary providers for parents during their old age. The discrepancy between elders' expectations and what they actually receive in a fast-changing society will substantially influence their morale, which is closely associated with their physical and mental health (Chen & Silverstein, 2000; Cong & Silverstein, 2008).

These gendered filial expectations have persisted in part as a result of social conditions and their associated practical reasons that have limited daughters' capabilities of providing for their parents. Daughters usually marry into places other than their natal villages as a result of patrilocality; thus, their newcomer and subordinate status in the family deter them from providing support and care for their own parents (Li, Feldman, & Jin, 2003). Furthermore, daughters' economic dependence because of the lack of opportunities and their disadvantages in entitlement to land have traditionally disfavored them to provide care for their own parents (Bélanger & Li, 2009).

Structural Lag in Filial Expectations and Social Changes in China

The strong gendered filial expectations may lag behind social changes that have reduced the availability of sons and increased daughters' contributions to their parents. The large-scale rural to urban labor force migration in China

has attracted wide concerns about whether adult children, in particular adult sons in patrilineal families, could continue providing reliable support for their elder parents (Cong & Silverstein, 2010; Giles & Mu, 2007; Liu & Reilly, 2004). These concerns are more about the migration of sons than that of daughters, because sons are expected to be the major providers of old age and because men are more likely to migrate for job-related reasons than women (Cong & Silverstein, 2010; Gaetano & Jacka, 2004). Szinovacz and Davey (2008) found that children in the United States who lived farther away geographically from their parents were less likely to provide them care, which suggests the possibility that Chinese rural elders may change their beliefs in the obligations of sons and open their mind to settle down with daughters as a result of the reduced availability of sons associated with their migration (H. Zhang, 2005), although we recognize the possibility that the reduced availability of sons as a result of migration may not matter because of a structural lag in elders' beliefs. Thus, we proposed the following two competing hypothesis. If the first, the social change hypothesis, is rejected, then support for the second, the structural lag hypothesis, will be inferred.

Hypothesis 1A (social change hypothesis): Sons' migration will reduce the gender bias in elders' filial expectations.

Hypothesis 1B (structural lag hypothesis): Sons' migration will not affect the gender bias in elders' filial expectations.

The gendered filial expectations may also lag behind daughters' increasing contributions to parents. In fact, nowadays daughters are providing financial, instrumental (hands-on), and emotional support on a scale very close to that provided by sons and their families. This is because daughters have increased contact with their parents, facilitated by improved transportation as well as elevated social status and better control of family resources attributed to their economic independence gained through migration and working off the farm (Cong & Silverstein, 2008; Li, Feldman, & Jin, 2004; H. Zhang, 2007; W. Zhang, 2009). Daughters' contributions are increasingly important, and daughters are becoming more cherished family members for younger generation rural residents. Parents are more likely to invest in daughters'

education and emotional attachment with the expectation of receiving at least a share of support from daughters that is equal to that received from sons (H. Zhang, 2007; W. Zhang, 2009). In contrast, rural elders still tend to regard sons and their families as much more obligated than daughters (China Research Center on Aging, 2003; W. Zhang, 2009), although elders' beliefs may adapt to social changes eventually. We proposed the following two competing hypotheses:

Hypothesis 2A (social change hypothesis): Daughters' financial, instrumental, and emotional contributions will reduce the gender bias in elders' filial expectations.

Hypothesis 2B (structural lag hypothesis): Daughters' financial, instrumental, and emotional contributions will not affect the gender bias in elders' filial expectations.

Child-Care Responsibilities of Sons and Daughters

Studies in the United States have shown that expectations of adult children to provide care decrease when adult children themselves have child-care responsibilities, because it is widely believed that elder parents should be taken care of only when adult children's own children are well taken care of (Ganong & Coleman, 1999; Wolf, Freedman, & Soldo, 1997). The degree to which this is applicable to rural China, and how this mechanism is conditional on the gender of adult children in the patrilineal family system, is unclear. Although we expected that daughters' child-care responsibilities would reduce elders' expectations of daughters, we suspected that sons' child-care responsibilities may not have the same effect because of the structural lag in elders' attitudes. Sons' obligations are stipulated by strong gendered filial expectations in a culture where childlessness is rare and stigmatized (Chou & Chi, 2004). In this situation, sons' child-care responsibilities are the norm; hence, they may not be excused from providing care for parents even when they have to take care of their own children. On the other hand, modernization and reduced fertility have increased the value of children and a sense of equality between generations (Alwin, 1990; Sung, 1998); thus, elderly parents may be willing to yield to the child-care obligations of sons and accept

daughters as substitutes in providing care. We therefore proposed the following competing hypotheses:

Hypothesis 3A (social change hypothesis): Sons' child-care responsibilities will reduce the gender bias in elders' filial expectations.

Hypothesis 3B (structural lag hypothesis): Sons' child-care responsibilities will not affect the gender bias in elders' filial expectations.

Gendered Filial Expectations: Differences Between Men and Women

Few studies in China have examined the difference in filial expectations between fathers and mothers, but literature on gender roles and effects of gender in parent–child relationships in the United States have indicated implications for differences between fathers and mothers in rural China. As beneficiaries in patrilineal families with advantageous status, men may have vested interests in maintaining the patrilineal system and thus more strongly endorse traditional values. This is suggested by the observation that men's beliefs relevant to gender equality usually lag behind those of women (Davis & Greenstein, 2009). In addition, mother–daughter relationships are usually blessed with more attachment, contact, and support exchanges and are regarded as the most intimate among all parent–child dyads (Rossi & Rossi, 1990; Suito & Pillemer, 2006). Besides shared values and gender-specific similarities between mothers and daughters, as well as their consequent higher level of attachment, the gender-appropriate nature of caregiving also suggests that mothers will have higher expectations of daughters when there is a need (Calasanti, 2004; Coward & Dwyer, 1990; Lawrence, Goodnow, Woods, & Karantzias, 2002; Pillemer & Suito, 2006; Szinovacz & Davey, 2008). Despite the strong patrilineal tradition in rural China, daughters provide considerable help, especially personal care, to their mothers, which may help soften the gender bias in mothers' filial expectations (Cong & Silverstein, 2008). Thus, we expected that daughters' contributions would be more likely to promote mothers' favorable attitudes toward daughters' obligations relative to those of fathers. We proposed the following hypothesis:

Hypothesis 4: Mothers' gendered filial expectations will more likely be influenced by daughters' contributions than fathers' are.

Other Factors Explaining Filial Expectations

Other factors that influence filial expectations typically include respondents' socioeconomic status and their needs (G. R. Lee, Peek, & Coward, 1998). Thus, we controlled for parents' age in chronological years, gender, education, health, marital status, and income. We also controlled for their number of sons and daughters. In addition, we controlled for sons' financial, instrumental, and emotional support.

METHOD

Sample

The sample for this investigation was recruited from Anhui Province, in the east-central part of China with a more than 80% rural population (State Council of the People's Republic of China, 2000). Data were collected from a stratified random sample of adults age 60 and over living in rural townships within Chaohu, a primarily agricultural municipal district of 4.5 million people located on the north bank of the Yangtze River in the central part of Anhui Province. This rural area of the province was chosen because of its relatively low per capita amount of arable land, which was a contributing reason why 12% of its rural labor force lived outside the region in 2000, with most of them having migrated to the cities of Hefei, Nanjing, and Shanghai (Chaohu Statistical Bureau, 2001).

The sampling frame consisted of the population age 60 and older living in 72 villages within six rural townships in the Chaohu region. Eligible participants were randomly selected using a stratified multistage method that also oversampled people 75 years and older. The survey was originally fielded in April 2001 as a joint project between Xi'an Jiaotong University and the University of Southern California. Of 1,800 eligible participants selected at baseline, 1,715 completed the survey, yielding a response rate of 95.3%. In November 2003, a follow-up survey was conducted with 1,368 respondents, or 79.8% of the original participants. The third wave was conducted with 1,067 respondents in December 2006, when the vignette was incorporated for the first time. Mortality was the major reason for attrition. One thousand sixteen elders gave valid

responses concerning the vignette. Among these elders, 987 had at least one living child, and 810 had at least one living son and one living daughter, at baseline. Although the generalized expectations are relevant to all elders with or without actual needs and living children, we constrained our sample to those who had at least one living son and one living daughter at baseline. This strategy avoided the complexity of distinguishing elders who did not have sons or daughter from those who did not receive any support from sons or daughters. In addition, this strategy increased the relevance to respondents of the scenario described in the vignette, because we investigated how elders allocated care responsibilities between a vignette daughter and a vignette son. Thus, respondents would be more likely to give adequate responses to the vignette (Ganong & Coleman, 2005). After deleting missing values, we had 802 respondents in our working sample, with less than 1% missing values, that is, 8 out of the possible 810 respondents.

The survey included assessments of family relations, intergenerational transfers, physical health status, and psychological well-being. A bilingual English/Mandarin speaker translated the English questionnaire into Chinese, and another bilingual speaker back-translated it into English. The wording of the final questionnaire was determined after the original English questionnaire and the back-translated questionnaire were deemed sufficiently consistent. Interviews were conducted by local social workers in respondents' homes. Interviews typically lasted around 40 minutes to 1.5 hours, depending on how many children each respondent had. Researchers and graduate students served as supervisors on site and checked each questionnaire for its consistency on the same day when it was conducted. In addition, supervisors also randomly or deliberately chose elders to revisit 1 or 2 days later for the purpose of validating information collected. After the data were entered into the computer, further examination of consistency among answers of each respondent was conducted with a program written by the research team.

Vignette

We used the following vignette to examine factors that would possibly influence elders' beliefs in the allocation of responsibilities between a vignette son and daughter, when their widowed parent is in need of care:

There is an elder, who is widowed. S/He (the words *he* and *she* are pronounced exactly the same in Chinese) has just had an operation, and needs to be taken care of for 2 months. S/He has a son and a daughter. The son a) is living in the village/ b) went out for job. The daughter a) is living in a village nearby/ b) went out for job. The son has a) no child / b) two children who need taking care of. The daughter has a) no child / b) two children who need taking care of.

After presenting the vignette, we asked respondents the following question: "Who should take care of the elder?" The respondents were given five choices: (a) the son should take all the responsibilities; (b) the daughter should take all the responsibilities; (c) the son should take the majority of the responsibilities; (d) the daughter should take the majority of the responsibilities; (e) the son and daughter should take shifts in caring for the elders, depending on who has time.

There were four dimensions of the vignette, resulting in $2 \times 2 \times 2 \times 2 = 16$ combinations. Each respondent was randomly assigned a unique combination. By presenting respondents random combinations of the dimensions, we could establish internal validity and argue for the causality of each dimension's influences on the outcome of interest; when combined with a survey with a carefully designed sampling strategy, the vignette design also exhibits external validity of generalizability (Rossi & Rossi, 1990). Furthermore, the vignette design is appropriate for situations that are rare or hard to measure in reality, such as people's beliefs and norms in traditional societies, which tend to be unanimous, without variations (Ganong & Coleman, 2005; Inglehart & Baker, 2000). Likewise, elders' beliefs in gendered filial expectations are so strong in rural China that it is hard to detect any variation (China Research Center on Aging, 2003).

Nevertheless, if elders could actually visualize the contexts in which the obligations of sons and daughters would be evaluated, their beliefs may in fact vary. This necessitated the use of the vignette.

Dependent Variable

We measured the gender bias in filial expectations with elders' responses to the vignette. We reorganized the responses into three categories, coded as 0 = *the vignette son should take all*

or a majority of responsibilities (reference); 1 = *the vignette son and daughter should take shifts in caring for the elders, depending on who has time*; and 2 = *The vignette daughter should take all or a majority of the responsibilities*.

Independent Variables

There were four dimensions in the vignette. The first and the second dimensions were the vignette son's and daughter's migration status, both coded as 0 = *is living in the village* and 1 = *went out for job*. The third and fourth dimensions were the child-care responsibilities of the vignette son and the daughter, both coded as 0 = *no child* and 1 = *two children need taking care of*. We were particularly interested in the vignette son's migration and child-care responsibilities.

Except for these manipulated independent variables, other key independent variables were measured with a time lag for the purpose of establishing causality. Daughters' financial contributions were measured as the proportion of daughters' financial support among all children in 2001 and 2003. Financial transfers from children in each wave were based on the total amount of money that parents had received from each child during the previous 12 months. Parents were asked to provide the exact amount of money first; if they could not give an exact number, they were asked to choose among the following categories based on Chinese Renmimbi (RMB) currency (100 RMB = 14 USD): 0 = *none*; 1 = *less than 50*; 2 = *50–99*; 3 = *100–199*; 4 = *200–499*; 5 = *500–999*; 6 = *1,000–2,999*; 7 = *3,000–4,999*; 8 = *5,000–9,999*; and 9 = *more than 10,000*. We took the actual amount if it was available or used the median amount of the category if the exact amount was not supplied. We summed the amount reported in 2001 and 2003 across daughters. Similarly, we summed the amount for all sons and for all children. We then calculated the proportion of daughters' financial support among all children. If neither sons nor daughters provided any support, the proportion of daughters' help was coded as 0.

Concerning instrumental support, we asked whether during the past 12 months respondents had received support because of their poor health with (a) household chores, such as cleaning the house and washing clothes, and (b) personal care tasks, such as bathing and dressing. If they had

received help, we further asked them to name the person or persons who had provided each kind of help and how often it had been provided. For each person cited, we coded support intensity for each kind of help as follows: 0 (*none*), 1 (*seldom*), 2 (*several times a month*), 3 (*at least once per week*), and 4 (*every day*). We summed the amount reported in 2001 and in 2003 across daughters, including support from themselves and their spouses. We also calculated the total instrumental support from sons and from all children in the same way. Finally, we calculated daughters' hands-on contribution as the proportion of daughters' instrumental support among all children. If neither sons nor daughters provided any support, the proportion of daughters' help was coded as 0.

We measured intergenerational emotional support by using three questions that assessed the quality of each parent-child relationship. We adapted these questions from the Affective Solidarity Inventory (Mangen, Bengtson, & Landry, 1988), which assesses emotional cohesion between generations. The three questions were (a) "Taking everything into consideration, how close do you feel to [this child]?" (b) "How much do you feel that [this child] would be willing to listen when you need to talk about your worries and problems?" and (c) "Overall, how well do you and [this child] get along together?" We coded the items as follows: 0 (*not at all close/not at all/not at all well*), 1 (*somewhat close/somewhat/somewhat well*), or 2 (*very close/very much/very well*). We computed an additive scale, ranging from 0 through 6, for each child ($\alpha = .82$). For each parent, we took the highest total score across 2001 and 2003 among all daughters to indicate the parent's maximum emotional closeness with daughters. Similarly, we took the highest total score among all sons and all children. The reason that we took the maximum instead of the sum of emotional support was that emotional support was not tangible and addible, as in the case for financial support and instrumental support. Maximum emotional support and the deviation from it have been shown to be consequential, for example, affecting elders' psychological well-being (Gans & Silverstein, 2006). Thus, we used the degree to which daughters' maximum emotional support deviated from the maximum emotional support among all children to indicate daughters' contributions; specifically, we subtracted parents' maximum emotional closeness with all children

from parents' maximum emotional closeness with daughters, with 0 indicating that daughters were (one of) the closest children and negative values indicating gaps between daughters and the closest children. In other words, for this variable, the higher the value, the more emotional contributions daughters made to their parents.

We also measured sons' migration with elders' actual sons' migration status, represented by a dummy variable, with 1 = *the respondent had at least one son who were not in the village during 2001 or 2003 interviews* and 0 = *no migrant sons*. We controlled for sons' total financial and instrumental support to parents as well as sons' maximum emotional closeness with parents across 2001 and 2003.

We also controlled for parents' baseline age in chronological years, gender (0 = *male*, 1 = *female*), education (0 = *no formal education*, 1 = *some formal education*), health (functional limitations), and decline in health between 2001 and 2006, as well as marital status (0 = *not married*, 1 = *married*) and income in 2006. For these control variables, we included information from 2006 to make the best use of all information. Parents' health status was measured as the extent of functional impairment, calculated as the sum of 15 items reflecting difficulties in performing personal activities of daily living and instrumental activities of daily living. Respondents indicated the level of difficulty performing each task: 0 (*no difficulty*), 1 (*some difficulty*), and 2 (*cannot do it without help*). We calculated a summed scale that ranged from 0 (*no difficulties*) to 30 (*unable to perform all tasks*; $\alpha = .93$). We used the difference score in this scale between 2001 and 2006 to represent the decline in health status. Income was measured as the logged (+1) RMB value of the total annual income of respondent and spouse from work or pension. We also controlled for the number of sons and daughters.

Analysis

We used multinomial logistic regression to examine elders' gender bias in filial expectations. The reference group represented the traditional gender-biased filial expectations and included those who believed that the vignette son should take the majority of or all the responsibilities. The other two groups had different degrees of deviation from the traditional expectations and included those who believed that the

vignette son and daughter should take shifts and those who believed that the vignette daughter should take the majority of or all the responsibilities. We conducted the data analysis with Stata.

RESULTS

As shown in Table 1, 62% of elders believed that the vignette son should take all or a majority of responsibilities regardless of the situation, 22% indicated that sons and daughters should take shifts in providing care, and only 16% regarded

daughters as being the exclusive or major responsible child. Roughly half of the respondents were assigned to each condition of all vignette dimensions, which reflected the nature of random assignment. The sociodemographic characteristics of the respondents, presented in Table 1, revealed that the average age of the sample at baseline was 69 years ($SD = 6.52$), slightly more than half (52%) were female, 54% were married, and 24% had some formal education. The average functional impairment score was 4.15 ($SD = 5.72$) out of a possible 30. Between

Table 1. Descriptions of Analytic Variables ($N = 802$)

Variables	Men ($n = 386$)		Women ($n = 416$)		Total ($N = 802$)		Range
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Vignette response							
The vignette son should take all responsibilities (reference)	0.60		0.64		0.62		0 (no)–1 (yes)
The vignette son and daughter should take shifts in caring for the elders	0.23		0.20		0.22		0 (no)–1 (yes)
The vignette daughter should take a majority or all responsibilities	0.17		0.16		0.16		0 (no)–1 (yes)
Vignette manipulated dimensions							
Vignette son's migration status	0.49		0.50		0.49		0 (nonmigrant)–1 (migrant)
Vignette daughter's migration status	0.51		0.48		0.49		0 (nonmigrant)–1 (migrant)
Vignette son's child-care responsibilities	0.53		0.46		0.50		0 (no child care responsibility)–1 (two children to take care of)
Vignette daughter's child-care responsibilities	0.55		0.53		0.54		0 (no child care responsibility)–1 (two children to take care of)
Respondents' characteristics							
Age	67.53	6.07	70.06	6.76	68.84	6.52	59–88
Female					0.52		0 (male)–1 (female)
Married	0.70		0.38		0.54		0 (unmarried)–1 (married)
Some education	0.43		0.06		0.24		0 (no formal education)–1 (some education)
Functional limitations	2.14	4.22	6.01	6.41	4.15	5.72	0 (no impairment)–30 (most impaired)
Decline in health	2.40	6.08	2.39	7.11	2.40	6.61	–28–30
Income (1,000 RMB) ^a	1.86	2.43	1.02	2.43	1.42	2.48	0–18
No. sons	2.22	1.20	2.25	1.02	2.24	1.04	1–7

Table 1. *Continued*

Variables	Men (<i>n</i> = 386)		Women (<i>n</i> = 416)		Total (<i>N</i> = 802)		Range
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
No. daughters	2.16	1.27	2.18	1.06	2.17	1.08	1–7
Had at least one migrant son	0.81		0.76		0.78		0 (no migrant son)–1 (at least one migrant son)
Sons' support							
Total financial support from sons (1,000 RMB) ^a	0.99	1.37	0.86	1.37	0.92	1.51	0–15.5
Total instrumental support from sons	3.25	7.87	4.45	5.76	3.87	6.14	0–57
Maximum emotional closeness with sons	5.15	1.72	5.26	1.12	5.21	1.17	0–6
Daughters' contributions							
Daughters financial support/all children's financial support	0.37	0.37	0.36	0.33	0.36	0.34	0–1
Daughters instrumental support/all children' instrumental support	0.22	0.40	0.28	0.38	0.25	0.38	0–1
Maximum emotional closeness with daughters – Maximum emotional closeness across all children	–0.22	1.76	–0.25	0.70	–0.23	0.69	–6–0

^aAt the time this study was conducted, 100 Chinese Renmimbi (RMB) \approx 14 USD.

2001 and 2006, people's health deteriorated, on average, 2.40 ($SD = 6.61$) points. The average income was 1,420 RMB (199 USD; $SD = 2,480$ [347 USD]). On average, elder parents had two sons and two daughters. Seventy eight percent of respondents had at least one son who was reported to be a migrant in 2001 or 2003. Total financial support from sons amounted to 920 RMB (129 USD; $SD = 1,510$ [211 USD]). On average, daughters and their spouses contributed 36% of all financial support that elders received from their children. The average total instrumental support received from sons was 3.87 ($SD = 6.14$); daughters and their spouses provided 25% of all children's instrumental support. Maximum emotional closeness with sons over time was 5.21 ($SD = 1.17$) out of a possible 6, with daughters' maximum emotional support on average 0.23 ($SD = 0.69$) points lower than the maximum emotional support among all children.

As shown in Table 2, the reference group for multinomial logistic regressions comprised elders who thought the vignette son should take all or a majority of the responsibilities. The results showed that none of the daughters' contributions affected fathers' beliefs, but sons' financial support increased fathers' approval of the vignette daughter taking the majority

of or all the responsibilities. When daughters contributed bigger shares of financial support, mothers were more likely to be in favor of the vignette son and daughter taking shifts, and when daughters contributed bigger shares of instrumental support, mothers had more favorable attitudes toward the vignette daughter taking the majority of or all the responsibilities. Daughters' emotional contribution did not make a difference for mothers. Characteristics of elder men did not predict their attitudes. The socioeconomic and health status of elder women predicted their likelihood of endorsing the vignette son and daughter taking shifts, but not that of endorsing the vignette daughter taking on a majority of or all the responsibilities. Elder women who were married, with lower income, fewer functional limitations, and fewer daughters were more likely to favor the vignette son and daughter taking shifts. Having at least one migrant son influenced neither fathers' nor mothers' beliefs.

The vignette daughter's migration reduced elder men' approval of the vignette son and daughter taking shifts, and the vignette daughter's child-care responsibilities reduced elder men' favor of the vignette daughter taking the majority of or all the responsibilities. The

Table 2. Relative Risk Ratios of Multinomial Logistic Regression Predicting Elder Respondents' Attitudes of the Vignette Son's and Daughter's Filial Obligations (N = 802)

Variables	Men (n = 386)		Women (n = 416)		All (N = 802)	
	1 ^a	2 ^b	1 ^a	2 ^b	1 ^a	2 ^b
Vignette						
Vignette son's migration status	0.895	1.574	1.088	2.674**	1.017	1.880**
Vignette daughter's migration status	0.543*	0.575 [†]	0.678	0.353**	0.593**	0.457***
Vignette son's child-care responsibilities	1.075	1.384	1.011	1.282	1.035	1.419 [†]
Vignette daughter's child-care responsibilities	0.625	0.453*	0.629 [†]	0.502*	0.607**	0.482***
Respondents' characteristics						
Age	1.010	0.966	1.012	1.046	1.005	1.008
Female					1.001	0.882
Married	0.915	0.892	2.229*	1.443	1.347	1.075
Some education	1.108	1.271	0.850	0.000	1.035	0.995
Functional limitations	0.991	1.047	0.937*	0.967	0.960 [†]	1.002
Decline in health	0.988	1.034	0.974	0.968	0.980	0.996
Income (1,000 RMB) ^c	1.025	1.111 [†]	0.844*	0.862	0.942	1.004
No. sons	1.046	1.015	1.261	1.114	1.134	1.069
No. daughters	1.034	1.051	0.640**	1.031	0.851 [†]	1.040
Had at least one migrant son	0.898	0.650	1.672	1.184	1.277	0.911
Sons' support						
Total financial support from sons (1,000 RMB) ^c	1.020	1.209*	1.062	0.941	1.023	1.103
Total instrumental support from sons	1.006	0.981	1.025	0.977	1.010	0.974
Maximum emotional closeness with sons	0.884	0.979	0.999	0.948	0.930	0.959
Daughters' contributions						
Daughters financial support/all children's financial support	2.007 [†]	0.716	4.618**	1.835	2.574**	1.153
Daughters instrumental support/all children's instrumental support	0.905	1.406	0.901	2.357*	0.937	1.791*
Maximum emotional closeness with daughters – Maximum emotional closeness across all children	0.798	0.761	1.356	1.183	1.016	0.987
Likelihood ratio χ^2		46.73 ^d		97.14 ^d		87.62 ^e

Note: Reference: the vignette son should take all or a majority of responsibilities.

^aThe vignette son and daughter should take shifts. ^bThe vignette daughter should take all or a majority of responsibilities.

^cAt the time this study was conducted, 100 Chinese Renminbi (RMB) \approx 14 USD. ^d $df = 38$. ^e $df = 40$.

[†] $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

vignette daughter's migration and child-care responsibilities did not affect whether elder women were more likely to favor the vignette son and daughter taking shifts, but it reduced the elder women's likelihood of favoring the

vignette daughter taking the majority of or all responsibilities. In addition, the vignette son's migration increased elder women's endorsement of the vignette daughter taking the majority of or all the responsibilities. The vignette son's

child-care obligations affected neither elder men's nor women's beliefs. When we combined the sample of women and men, we found that the vignette daughter's migration and child-care responsibilities reduced elders' endorsement of the vignette daughters' obligations, and the vignette son's migration increased endorsement of the vignette daughter taking most or all responsibilities. Similar to the findings regarding elder mothers, when daughters contributed bigger shares of financial support, parents were more likely to be in favor of the vignette son and daughter taking shifts, and when daughters contributed bigger shares of instrumental support parents had more favorable attitudes toward the vignette daughter taking the majority of or all the responsibilities. We tested whether the gender differences concerning the effects of daughters' contribution and the four vignette dimensions were statistically significant, and found no significant effect. The results are presented in Table 3.

DISCUSSION

In this study, we examined rural Chinese elders' filial expectations of sons and daughters by a vignette design with four dimensions, including migration status of a vignette son and a daughter and their child-care responsibilities. We also investigated how elders' beliefs were affected by their own daughters' share of contributions and sons' migration experience, as well as how men and women were different in their responses to these factors epitomizing social changes.

Sixty-two percent of respondents believed that the vignette son should take all or the majority of the responsibilities regardless of the situation, and only 16% of respondents believed that the vignette daughter should take all or a majority of the responsibilities. This presents a scenario one would expect in a fast-changing society. On the one hand, there are still strong gendered filial expectations of receiving care from sons instead of daughters; on the other hand, the rigidity of this belief has collapsed to some extent because a considerable proportion of respondents thought that the vignette daughter should be responsible.

The social change hypothesis for sons' migration (Hypothesis 1A) was not supported for fathers but was supported partially for mothers. The analysis of mothers' data revealed that

the vignette son's migration increased elder women's approval of the vignette daughter's taking all or the majority of the responsibilities, which presents some evidence that the migration of sons compromises mothers' gendered filial expectations. Nevertheless, the migration of mothers' actual sons did not affect mothers' beliefs. The difference in mothers' responses to their actual sons' migration and to the vignette son's migration suggests that even though mothers demonstrated flexibility concerning the vignette son's obligations when he was not available, these mothers were not flexible when they actually had a migrant son. Respondents may feel they are absolved from actual concerns when asked about their generalized expectations regarding situations that are not applicable to themselves. This is consistent with findings that, in a vignette design study, respondents think more altruistically and are less demanding than in an actual situation; for example, generalized filial obligations reported by children are typically higher than their own perceived obligations (Ganong & Coleman, 2005).

Other than the structural lag, refusing to yield to sons' migration may also be attributed to the characteristics of migration in China, which may weaken the influences of sons' proximity. A large proportion of migrants from rural China are temporary migrants and eventually return home because of the segregation of urban and rural societies by Hukou (China's household registration system), which limits migrants' employment opportunities in urban areas (Bai & Song, 2002; Zhao, 2005). In addition, adult children will return from migration to provide care for their elder parents when their parents' health has deteriorated (Giles & Mu, 2007). Furthermore, the places where sons actually are physically located may become less consequential, because the actual expected providers could be sons' wives instead of sons themselves (Cong & Silverstein, 2008).

Our analysis revealed that the social change hypothesis for daughters' contributions (Hypothesis 2A) was not supported for fathers but was supported, to some extent, for mothers. Daughters' financial and instrumental support encouraged elder mothers to deviate from traditional gender-biased filial expectations. Fathers' beliefs were not affected by daughters' contributions, which provides some support for the structural lag hypothesis that, even with daughters'

Table 3. Relative Risk Ratios of Multinomial Logistic Regression Predicting Elder Respondents' Attitudes of the Vignette Son's and Daughter's Filial Obligations (N = 802)

Variables	Interaction With Support		Interaction With Vignette	
	1 ^a	2 ^b	1 ^a	2 ^b
Interactions between gender and children's support				
Gender × total financial support from sons	1.099	0.764 [†]		
Gender × total instrumental support from sons	1.000	0.977		
Gender × maximum emotional closeness with sons	1.165	0.995		
Gender × daughters' financial support/all children's financial support	1.337	1.883		
Gender × daughters' instrumental support/all children's instrumental support	0.843	1.672		
Gender × (maximum emotional closeness with daughters – maximum emotional closeness across all children)	1.594	1.456		
Interaction between gender and vignette dimensions				
Gender × vignette son's migration status			1.301	1.771
Gender × vignette daughter's migration status			1.252	0.700
Gender × vignette son's child-care responsibilities			1.030	0.875
Gender × vignette daughter's child-care responsibilities			1.198	1.231
Likelihood ratio χ^2		102.69 ^c		91.7 ^d

Note: Reference: the vignette son should take all or a majority of responsibilities. Only the interactive items are shown; regressions included all predicting variables in Table 2.

^aThe vignette son and daughter should take shifts. ^bThe vignette daughter should take all or a majority of responsibilities. ^c $df = 52$. ^d $df = 48$.

[†] $p < .10$.

increased support, fathers will not compromise their traditional gendered filial expectations.

The social change hypothesis for sons' child-care obligations (Hypothesis 3A) was not supported, because neither fathers' nor mothers' beliefs were affected by whether the vignette son had child-care obligations. In contrast, if the vignette daughter had child-care responsibilities, elder parents were less likely to endorse the vignette daughter's obligations. These findings are consistent with the structural lag hypothesis (Hypothesis 3B) and provide evidence that elders' beliefs are less conditional on the situation of sons than on those of daughters, possibly because sons are regarded as the backbone of elders' safety net. Although family obligations and competing demands, particularly child-care responsibilities, are reported to be important factors influencing beliefs in filial obligations in the United States (Ganong & Coleman, 1999), apparently Chinese rural elders did not concede to sons' family obligations.

This may be related to the strong filial norms in rural China, which have clearly defined sons' obligations, but daughters' obligations may be more contextual because they voluntarily provide for parents out of love instead of explicit and well-defined obligations (Zhan & Montgomery, 2003). It is interesting that if the daughter in the vignette was identified as a migrant, both elder women and men were more likely to insist that the vignette son take all or a majority of the responsibilities. Although the gendered filial expectations are not contextual to sons' availability, they depend on daughters' availability, supporting the existence of a structural lag in gendered filial expectations.

We found some support for Hypothesis 4, which predicted that mothers would be more likely to be influenced by daughters' contributions than fathers would be. Daughters' financial and instrumental support increased elder mothers', but not fathers', endorsement of the deviation from traditional beliefs. This is consistent

with our hypothesis that elder women would be more flexible in taking daughters into consideration when needs arise. Men may be more enthusiastic believers of patrilineal family tradition than women are and thus resist regarding their daughters as equals to their sons when support is expected. In addition, daughters are more likely to provide instrumental support to mothers than to fathers, which may increase elder mothers' flexibility in their beliefs because of more contact (Cong & Silverstein, 2008). Fathers are less likely to receive hands-on support from daughters, which is in accordance with their resistance to daughters' obligations, as explained above. This provides support for the hypothesis that women are more flexible in their beliefs than men when receiving more support from daughters. We also found that the vignette son's migration affected women's gendered filial expectations, but not fathers'. Although not hypothesized, and not the focus of this study, this corroborates the argument that elderly women are more susceptible to social changes and practical factors that have potentially increased the importance of daughters in parents' support networks and reduced the availability of sons. Nevertheless, caution should be taken concerning the strength of gender differences, because the interaction effect of parents' gender \times vignette son's migration, as well as that of parents' gender \times actual daughters' financial, instrumental, and emotional contributions, was not significant.

Our findings show that sons' financial support increased elder fathers' likelihood of endorsing the vignette daughter taking all or the majority of the responsibilities. Although not included in our hypothesis, this seems to be in conflict with the general idea that daughters' support reduces parents' attachment to gendered filial expectations, which implies that sons' support reinforces traditional gendered filial expectations. What we hypothesized, however, was the effects of daughters' share of contributions, which mirrors sons' share of contributions as well. Sons' financial support that weakened fathers' gendered filial expectations indicated the absolute support level, and this influence may involve more complicated mechanisms. For example, receiving higher levels of sons' support may improve elders' living standards, facilitate their communication with the outside world (e.g., having access to TV), and consequently increase their endorsement of daughters' obligations.

We found that daughters' financial and instrumental contributions increased mothers' beliefs in stronger obligations of the vignette daughter. This presents evidence that elders' norms are adjustable and subject to change along with the actual support they have received. We used a lagged design by measuring daughters' financial, instrumental, and emotional contributions to their parents in 2001 and 2003 and measuring elders' beliefs in 2006, yet we could not completely exclude the possibility that mothers who had less rigid norms regarding sons' obligations would be more likely to develop stronger ties with daughters, which could be addressed only with life course data collected at early stages of the parent-child relationships. Admitting that, our findings are consistent with studies arguing that children's support affects elder parents' attitudes instead the other way around. For example, studies have shown that filial expectations may not necessarily affect actual support from children (Peek et al., 1998), but previously receiving support from children increased those children's likelihood of being named as the preferred caregivers by their parents (Pillemer & Suito, 2006).

Another limitation of this study is that we constrained our sample to parents who had at least one living son and daughter at baseline, which limited our ability to address the effects of having no daughter or no son. Because that was not the focus of this study, our decision is a trade-off for the purpose of concentrating on the research questions. Whether parents have daughters or sons likely will influence their gendered filial expectations, a topic that deserves further examination with potential future reduced fertility and the increased possibility of having no son or no daughter. Nevertheless, the chances of having both sons and daughters are still great. It is estimated that the future generation of rural elders will have 2.8 children, in contrast to the current 4.1 (Zimmer & Kwong, 2003). Although the so-called "one-child policy" in urban areas has reduced fertility dramatically for the future generation of elders, the decline in fertility in rural areas is not as dramatic, because a more lenient family planning policy has been in effect, which usually allows up to two children to boost the possibilities that a son will be born into the family (Short & Zhai, 1998).

In this study, we incorporated a vignette into survey design and investigated factors

that may contribute to changes in gendered filial expectations, which are typically hard to examine in a traditional society because of the lack of variation in norms. Guided by the theory of structural lag, we regarded elders' beliefs as potentially adjustable while susceptible to structural lag (Riley et al., 1994). Our findings are in favor of the structural lag concerning parents' gendered filial expectations. Elders stick to their traditional gendered filial expectations despite fast social changes, such as sons' migration and reduced availability. Our findings also show that social changes boosting daughters' contributions to their parents are important reasons in reducing mothers' gender bias in filial expectations. Elder women and men differed in their responses to their interactions with daughters, which highlights the necessity of further examining how women and men differ from each other in adapting to social changes.

Because of the observed structural lag, gendered filial expectations may still persist for a long time, even when historical conditions have changed sufficiently to outdate the social conditions upon which the gendered filial expectations were built. It is important to understand the discrepancy between social changes and individuals' behaviors and attitudes. Assumptions of changes in behaviors and attitudes could not be immediately made on the basis of social changes, either in research or policy making. Even in societies with higher levels of social development, gender equality in intergenerational relationships could not be assumed. For example, in Japan and Korea the patrilineal tradition is still strong, and sons and their wives shoulder most of the care burden (Takagi & Silverstein, 2006; Youn, Knight, Jeong, & Benton, 1999). In addition, the discrepancy between expectations and reality as a result of structural lags could threaten the well-being of elder parents (Cong & Silverstein, 2008). Therefore, it is necessary to develop intergenerational programs that are sensitive to parents as well as children's gender for the purpose of actively changing elders' beliefs. Understanding the structural lag and factors crucial for gaining the synchrony will make important contributions to improving people's lives and well-being in fast-changing societies.

NOTES

This research was supported partly by Grant R03TW01060 from the Fogarty International Center of the National

Institutes of Health and partly by internal grants from the University of Southern California and Xi'an Jiaotong University. We would like to thank Shuzhuo Li for his invaluable contributions to this project.

REFERENCES

- Aboderin, I. (2004). Decline in material family support for older people in urban Ghana, Africa: Understanding processes and causes of change. *Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, 59B, S128–S137. doi:10.1093/geronb/59.3.S128
- Alwin, D. F. (1990). Historical changes in parental orientations to children. In N. Mandell (Ed.), *Sociological studies of child development* (Vol. 3, pp. 65–86). Greenwich, CT: JAI Press.
- Alwin, D. F. (1996). Coresidence beliefs in American society, 1973 to 1991. *Journal of Marriage and the Family*, 58, 393–403. doi:10.2307/353504
- Alwin, D. F., & McCammon, R. J. (2003). Generations, cohorts, and social change. In J. T. Mortimer & M. J. Shanahan (Eds.), *Handbook of the life course* (pp. 23–49). New York: Kluwer Academic/Plenum Press
- Bai, N., & Song, H. (2002). *Return or stay: The return flow of out-migrants from rural China* [in Chinese]. Beijing: China Finance and Economy Press.
- Bélanger, D., & Li, X. (2009). Agricultural land, gender and kinship in rural China and Vietnam: A comparison of two villages. *Journal of Agrarian Change*, 9, 204–230. doi:10.1111/j.1471-0366.2009.00201.x
- Brewster, K. L., & Padavic, I. (2000). Change in gender ideology, 1977–1996: The contributions of intracohort change and population turnover. *Journal of Marriage and the Family*, 62, 477–487. doi:10.1111/j.1741-3737.2000.00477.x
- Calasanti, T. (2004). Feminist gerontology and old men. *Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, 59, S305–S314. doi:10.1093/geronb/59.6.S305
- Chaohu Statistical Bureau. (2001). *Chaohu statistical annals*. Chaohu, China: Chaohu Statistical Bureau.
- Chen, X., & Silverstein, M. (2000). Intergenerational social support and the psychological well-being of older parents in China. *Research on Aging*, 22, 43–65. doi:10.1177/0164027500221003
- China Research Center on Aging. (2003). *Data analysis of the sampling of survey of the aged population in China*. Beijing: China Biaozhun Publications.
- Chou, K. L., & Chi, I. (2004). Childlessness and psychological well-being in Chinese older adults. *International Journal of Geriatric Psychiatry*, 19, 449–457. doi:10.1002/gps.1111
- Cong, Z., & Silverstein, M. (2008). Intergenerational support and depression among elders in

- rural China: Do daughters-in-law matter? *Journal of Marriage and Family*, 70, 599–612. doi:10.1111/j.1741-3737.2008.00508.x
- Cong, Z., & Silverstein, M. (2010). Which sons live with their older parents in rural China? The role of migration and intergenerational exchanges. *Family Science*, 1, 67–71. doi:10.1080/19424620903452897
- Coward, R. T., & Dwyer, J. W. (1990). The association of gender, sibling network composition, and patterns of parent care by adult children. *Research on Aging*, 12, 158–181. doi:10.1177/0164027590122002
- Davis, S. N., & Greenstein, T. N. (2009). Gender ideology: Components, predictors, and consequences. *Annual Review of Sociology*, 35, 87–105. doi:10.1146/annurev-soc-070308-115920
- Feldman, M. W., Tuljapurkar, S., Li, S., Jin, X., & Li, N. (2007). Son preference, marriage and intergenerational transfer in rural China. In A. H. Gauthier, C. Y. C. Chu, & S. Tuljapurkar (Eds.), *International studies in population: Allocating public and private resources across generations* (Vol. 3, pp. 139–162). Dordrecht, The Netherlands: Springer Netherlands.
- Finley, N. J., Roberts, M. D., & Banahan, B. F., III. (1988). Motivations and inhibitors of attitudes of filial obligations towards aging parents. *The Gerontologist*, 28, 73–78. doi:10.1093/geront/28.1.73
- Gaetano, A. M., & Jacka, T. (Eds.). (2004). *On the move: Women and rural-to-urban migration in contemporary China*. New York: Columbia University Press.
- Ganong, L., & Coleman, M. (1999). *Changing families, changing responsibilities*. Hillsdale, NJ: Erlbaum.
- Ganong, L., & Coleman, M. (2005). Measuring intergenerational obligations. *Journal of Marriage and Family*, 67, 1003–1011. doi:10.1111/j.1741-3737.2005.00190.x
- Gans, D., & Silverstein, M. (2006). Norms of filial responsibility for aging parents across time and generations. *Journal of Marriage and Family*, 68, 961–976. doi:10.1111/j.1741-3737.2006.00307.x
- Giles, J., & Mu, R. (2007). Elderly parent health and the migration decisions of adult children: Evidence from rural China. *Demography*, 44, 265–288. doi:10.1353/dem.2007.0010
- Graham, M. J., Larsen, U., & Xu, X. (1998). Son preference in Anhui Province, China. *International Family Planning Perspectives*, 24, 72–77. doi:10.2307/2991929
- Inglehart, R., & Baker, W. E. (2000). Modernization, cultural change, and the persistence of traditional values. *American Sociological Review*, 65, 19–51. doi:10.2307/2657288
- Joseph, A. E., & Phillips, D. R. (1999). Ageing in rural China: Impacts of increasing diversity in family and community resources. *Journal of Cross-Cultural Gerontology*, 14, 153–168. doi:10.1023/A:1006658706496
- Lawrence, J. A., Goodnow, J. J., Woods, K., & Karantzas, G. (2002). Distributions of caregiving tasks among family members: The place of gender and availability. *Journal of Family Psychology*, 16, 493–509. doi:10.1037//0893-3200.16.4.493
- Lee, G. R., Netzer, J. K., & Coward, R. T. (1994). Filial responsibility expectations and patterns of intergenerational assistance. *Journal of Marriage and the Family*, 56, 559–565. doi:10.2307/352867
- Lee, G. R., Peek, C. W., & Coward, R. T. (1998). Race differences in filial responsibility expectations among older parents. *Journal of Marriage and the Family*, 60, 404–412. doi:10.2307/353857
- Lee, K. S. (2010). Gender, care work, and the complexity of family membership in Japan. *Gender & Society*, 24, 647–671. doi:10.1177/0891243210382903
- 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. doi:10.1023/A:1006591608724
- Li, S., Feldman, M. W., & Jin, X. (2003). Marriage form and family division in three villages in rural China. *Population Studies*, 57, 95–108. doi:10.1080/0032472032000061758
- Li, S., Feldman, M. W., & Jin, X. (2004). Children, marriage form, and family support for the elderly in contemporary rural China: The case of Songzi. *Research on Aging*, 26, 352–384. doi:10.1177/0164027503262477
- Liu, Q., & Reilly, B. (2004). Income transfers of Chinese rural migrants: Some empirical evidence from Jinan. *Applied Economics*, 36, 1295–1313. doi:10.1080/0003684042000191101
- Logan, J. R., & Bian, F. (1999). Family values and coresidence with married children in urban China. *Social Forces*, 77, 1253–1283. doi:10.1093/sf/77.4.1253
- Mangen, D., Bengtson, V. L., & Landry, P. H., Jr. (Eds.). (1988). *The measurement of intergenerational relations*. Beverly Hills, CA: Sage.
- Peek, M. K., Coward, R. T., Peek, C. W., & Lee, G. R. (1998). Are expectations for care related to the receipt of care? An analysis of parent care among disabled elders. *Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, 53B, S127–S136. doi:10.1093/geronb/53B.3.S127
- Pillemer, K., & Suitor, J. J. (2006). Making choices: A within-family study of caregiver selection. *The Gerontologist*, 46, 439–448. doi:10.1093/geront/46.4.439
- Riley, M. W., Kahn, R. L., & Foner, A. (Eds.). (1994). *Age and structural lag: Society's failure to provide meaningful opportunities in work, family, and leisure*. New York: Wiley.

- Rossi, A. S., & Rossi, P. H. (1990). *Of human bonding: Parent-child relations across the life course*. New York: Aldine de Gruyter.
- Shi, L. (1993). Family financial and household support exchange between generations: A survey of Chinese rural elderly. *The Gerontologist*, 33, 468–480. doi:10.1093/geront/33.4.468
- Short, S., & Zhai, F. Y. (1998). Looking locally at China's one-child policy. *Studies in Family Planning*, 29, 373–387. doi:10.2307/172250
- State Council of the People's Republic of China. (2000). *Statistics of rural and nonrural residents of each province*. Retrieved from <http://www.stats.gov.cn/tjsj/ndsj/renkoupuocha/2000puocha/html/t0105.htm>
- Suitor, J. J., & Pillemer, K. (2006). Choosing daughters: Exploring why mothers favor adult daughters over sons. *Sociological Perspectives*, 49, 139–161. doi:10.1525/sop.2006.49.2.139
- Sun, R. (2004). Worry about medical care, family support, and depression of the elders in urban China. *Research on Aging*, 26, 559–585. doi:10.1177/0164027504266467
- Sung, K. T. (1995). Measures and dimensions of filial piety in Korea. *The Gerontologist*, 35, 240–247. doi:10.1093/geront/35.2.240
- Sung, K. T. (1998). Exploration of actions of filial piety. *Journal of Aging Studies*, 12, 369–386. doi:10.1016/S0890-4065(98)90025-1
- Swidler, A. (1986). Culture in action: Symbols and strategies. *American Sociological Review*, 51, 273–286. doi:10.2307/2095521
- Szinovacz, M. E., & Davey, A. (2008). The division of parent care between spouses. *Ageing and Society*, 28, 571–597. doi:10.1017/S0144686X07006915
- Takagi, E., & Silverstein, M. (2006). Intergenerational coresidence of the Japanese elderly—Are cultural norms proactive or reactive? *Research on Aging*, 28, 473–492. doi:10.1177/0164027506287788
- 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.
- Wolf, D. A., Freedman, V., & Soldo, B. J. (1997). The division of family labor: Care for elderly parents. *Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, 52B, 102–109. doi:10.1093/geronb/52B.Special_Issue.102
- Xie, Y., & Zhu, H. (2009). Do sons or daughters give more money to parents in urban China? *Journal of Marriage and Family*, 71, 174–186. doi:10.1111/j.1741-3737.2008.00588.x
- Yan, Y. (2003). *Private life under socialism: Love, intimacy, and family change in a Chinese village, 1949–1999*. Stanford, CA: Stanford University Press.
- Youn, G., Knight, B. G., Jeong, H., & Benton, D. (1999). Differences in familism values and caregiving outcomes among Korean, Korean American, and White American dementia caregivers. *Psychology and Aging*, 14, 355–364. doi:10.1037/0882-7974.14.3.355
- Zhan, H. J., & Montgomery, R. J. V. (2003). Gender and elder care in China: The influence of filial piety and structural constraints. *Gender & Society*, 17, 209–229. doi:10.1177/0891243202250734
- Zhang, H. (2005). Bracing for an uncertain future: A case study of new coping strategies or rural parents under China's new birth control policy. *The China Journal*, 54, 53–76. doi:10.2307/20066066
- Zhang, H. (2007). China's new rural daughters coming of age: Downsizing the family and firing up cash-earning power in the new economy. *Journal of Women in Culture and Society*, 32, 671–698. doi:10.1086/510923
- Zhang, W. (2009). “A married out daughter is like spilt water?” Women's increasing contacts and enhanced ties with their natal families in post-reform rural north China. *Modern China*, 35, 256–283. doi:10.1177/0097700408329613
- Zhao, Z. (2005). Migration, labor market flexibility, and wage determination in China: A review. *The Developing Economies*, 43, 285–312. doi:10.1111/j.1746-1049.2005.tb00263.x
- Zimmer, Z. (2005). Health and living arrangement transitions among China's oldest-old. *Research on Aging*, 27, 526–555. doi:10.1177/0164027505277848
- 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. doi:10.1353/dem.2003.0010