

**Marriage Form and Age at First Marriage:  
A Comparative Study in Three Counties in Contemporary Rural China**

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**ABSTRACT**

Using data from two surveys in three counties where the prevalence of uxorilocal marriage differs greatly, this paper analyzes the effects of marriage form, individual, family and social factors on age at first marriage and spousal age difference. The results show that, under the Chinese patrilineal joint family system, compared with the dominant virilocal marriage form, uxorilocal marriage significantly lowers women's age at first marriage, increases men's age at first marriage, and consequently increases spousal age difference. Education, number of brothers, adoption status, marriage arrangement and marriage circle also significantly affect age at first marriage for both genders. Age at first marriage and spousal age difference differ greatly in the three counties. These findings address the process and consequences of change in rural family and marriage customs during the current demographic and social transition, and may help to promote late marriage and late childbearing under the present low fertility conditions in rural China.

## **BACKGROUND**

Family system refers generally to the customary normative manner in which family processes unfold, namely the usual pattern of family practices and household dynamics, including the main elements of marriage form and preferences, succession, property inheritance, residential arrangements, and power structure as a function of gender and age within the family (Skinner, 1997). Skinner (loc. cit.) distinguished three types of family system in traditional agricultural societies: conjugal, stem, and joint family systems, which affect demographic processes such as nuptiality, fertility, mortality and migration in distinctive ways. Acceptable ages at first marriage for men and for women, as well as preferred patterns of spousal age difference according to the cultural norms of various family systems are different. Couples in conjugal family systems usually marry later and the spousal age difference is not significant; couples in joint family systems usually marry earlier and the spousal age difference is significant, while age at first marriage and spousal age difference for couples in stem family systems are usually moderate and between those in conjugal and joint family systems (Davis, 1955; Hajnal, 1982; Laslett, 1983).

The different patterns of age at first marriage for premodern China and Western Europe illustrate the impact of family system on age at first marriage. In premodern China, marriage was almost universal for women, and their average age at first marriage fluctuated in the narrow range of 16 to 19 years old. In contrast, men married relatively later, with average age at first marriage about 21 years old, and some men never married (Telford, 1992; Campbell, 1998; Li and Wang, 2000). In premodern Western Europe, both men and women married at relatively later ages. While women usually married 5 to 10 years later than Chinese women, men usually married at close to 30 years of age (Campbell, 1998; Li and Wang, 2000). In addition to different

traditions and norms as well as marriage market balance (Jiang and Lavelly, 1995; Campbell, 1998; Wang, 1999), different family systems were the most important causes of the differences in patterns of age at first marriage between premodern China and Western Europe. In premodern Western Europe, the patrilineal stem family system was dominant. Under this system, only the son who had the right to inherit was permitted to marry by his natal family, and the marriage usually occurred after his parents passed away or were no longer in charge of domestic affairs. Other children had to remain single if they wanted to stay home; otherwise they had to leave their natal family to live on their own. Accordingly, such a family system required the majority of young men and women to make their own living first and then marry (Wang, 1999). In premodern China, the patrilineal joint family system was dominant; here family property was equally divided among all sons, usually after all sons were married and had the ability to live on their own (Li et al., 2003b). As family members, all offspring had the right to obtain financial support for their marriage from the combined property of the family, so that marriage was seldom constrained by individual economic status (Wang, 1999; Campbell and Lee, 2003; Yan, 2003). Thus, the contrast in family system and age at first marriage between premodern China and Western Europe implies that marriage form, as a symbol and an important component of the family system, was closely related to succession, property inheritance, residential arrangements, and power structure. In rural China today, the trend towards modernization is recent and therefore expect marriage form to have a significant impact on age at first marriage and spousal age difference.

Rural Chinese society has historically been dominated by a rigid male-centered patrilineal joint family system. Under this system, virilocal marriage, in which the wife leaves her natal family and coresides with her husband's parents, has been almost universal throughout the

history of China. In a virilocal marriage, parents call in daughters-in-law for each of their sons, only offspring of sons are entitled to use father's surname and to continue the family lineage, and sons have both the right to inherit family property and obligation to support parents in their old-age. By contrast, parents marry out all of their daughters to other families; daughters belong to their husbands' families after marriage, and they do not have substantive rights and obligations beyond their emotional bond with their natal parents (Skinner, 1997; Das Gupta and Li, 1999).

Uxorilocal marriage, in which a couple resides with the wife's parents after marriage, is a contingent variation of the patrilineal joint family system, and a deviation from the dominant virilocal marriage. Factors causing a uxorilocal marriage usually differ between the husband's natal family and the wife's natal family. For the wife's natal family, parents adopt a uxorilocal marriage usually because they have no sons or are unable to adopt a son for various reasons, and occasionally because they face economic constraints even when they have at least one son.

Under the first circumstance, to ensure continuity of the family lineage and security for their old-age, parents usually call in a son-in-law for one of their daughters and reach an agreement with this son-in-law on such issues as his surname and that of his future descendants, length of post-marital co-residence, inheritance of family property, and old-age support for the wife's parents. In this case, uxorilocal marriage is a contingent variation of the patrilineal family system and possesses a preservative function (Wolf, 1989). Under the second circumstance, the economic constraints include mainly a lack of male laborers, low cost of uxorilocal marriage, unwillingness of daughters in a wealthy family to leave the natal family after marriage, and relatively greater ability of uxorilocally married men from outside to accumulate wealth. Here, uxorilocal marriage becomes an institutional variation of the patrilineal family system and possesses a practical function (Wolf, 1989). For the husband's natal family, parents accept a

uxorilocal marriage usually because they face economic constraints, and occasionally because of some special political or social factors. Specifically, called-in sons-in-law are usually from poor families with many brothers, because parents are unable to accumulate enough bridewealth or provide adequate residential facilities for all their sons' marriages; or they are from poor regions that are not rich in natural resources and seek for a better life in richer regions with better natural conditions; or they become called-in sons-in-law in large families for security to avoid the forced military service during the wars of the first half of the 20th century; or they are from families with unfavorable political status during the Cultural Revolution period and wish to change their political fate by joining the wife's family which has good political status (Pasternak, 1985, Wolf, 1989; Li and Zhu, 1999; Li et al., 2000, 2001, 2003a; Jin and Li, 2003). Due to the low proportion of no-son families in populations with high fertility, and to the fact that a called-in son-in-law has lower status and less respect from the wife's family's clan and community under the patrilineal family system, uxorilocal marriage is rare in rural China and the proportion is reported only about 5 to 8 percent (Li and Wang, 2000). It is reported to be prevalent in only a few Han Chinese areas of rural China (Feng, 1936; Pasternak, 1985; Wolf, 1989; Han, 1992; Li et al., 1998; Yihuang County Government, 2000; Jin et al., 2001).

Since the causes and functions of uxorilocal marriage are obviously different from those of the dominant virilocal marriage under the patrilineal joint family system in rural China, marriage form is expected to be one of the key factors affecting age at first marriage and spousal age difference. Skinner (1997) argues that, in a specific family system, children who have greater value to their families are more likely to marry, marry earlier and marry well, and the reverse is true for those who have less value to their families. Applying this principle to the patrilineal joint family system in China, we may predict that, compared to couples in virilocal marriage,

husbands in uxori-local marriage marry later, their wives marry earlier, and the spousal age difference is greater. This prediction is partly corroborated by results from some surveys. In his research on uxori-local marriages in three regions of Taiwan in the 19th century, Pasternak (1985) finds that, compared with couples in viri-local marriage, the age at first marriage is lower for wives and higher for husbands in uxori-local marriages. Using data from surveys of five provinces in China, Chen et al. (2002) find that the proportion of women married under 19 years old is highest among women in uxori-local marriage, which indicates that uxori-local marriage may lower women's age at first marriage. However, Shi (2001) finds from a survey of three villages in Zhejiang province that, while the spousal age difference does not differ significantly between viri-local and uxori-local marriages, uxori-local marriage lowers age at first marriage for both genders. With the changing family structure and increasing proportion of uxori-local marriage in rural China, the number of studies on family relationship involving uxori-local marriage in contemporary China is increasing (Li et al., 2003b; in press). However, there are still few systematic and quantitative studies on determinants of age at first marriage in uxori-local marriage.

In addition to marriage form, individual and family factors also influence age at first marriage. The individual factors mainly include education level, income, occupation, etc. Among these individual factors, education plays the most important role for it can not only influence the independence of one's behaviors but also determine one's income and occupation to a certain extent. Education affects age at first marriage primarily by means of institutional and human capital effects. The institutional effect of education is usually to increase age at first marriage for both genders (Oppenheimer, 1995). The human capital effect is positive for men and negative for women, making age at first marriage higher for men with low education and women with high

education (Br derl and Diekmann, 1997; Boonstra, 1998). Additionally, men with higher incomes are likely to marry earlier (Danziger and Neuman, 1999; Ahn and Mira, 2001), and age at first marriage both for men and for women increases with the increase of women's income (Zhang, 1995; Br derl and Diekmann, 1997; Danziger and Neuman, 1999). Thus, because of the institutional and human capital effects of education, the impact of education, income and occupation on age at first marriage is also likely to vary. Family factors include family size, economic status, and etc. People with more siblings or who are themselves among the older siblings, or those with better family economic status, are likely to marry earlier (Br derl and Diekmann, 1997; Tsuya and Kurosu, 2000). Children whose parents are well educated usually have better family economic status, which allows them to marry earlier (Ahn and Mira, 2001). However, some studies also find that higher family income and higher parental education may delay children's age at first marriage, because in these families children are usually required to get more education (South, 2001), which implies that people in lower socioeconomic strata marry earlier than those in higher strata (Poppel and Nelissen, 1999). The effects of individual and family factors on age at first marriage described above have been partly confirmed by some studies on age at first marriage in China. For example, well-educated women usually marry later (Zhang, 1999), and men with better family economic status and more brothers marry earlier (Campbell and Lee, 2003).

Social, economic and cultural factors also affect age at first marriage. The popularization of education, urbanization, increasing mobility and employment opportunities in modern sectors, economic development, as well as the transmission of the modern culture of marriage and childbearing, may all increase age at first marriage (Nguyen, 1996; Dillon, 2000; Tsuya and Kurosu, 2000; Zheng, 2002). Government intervention also tends to influence the realization of

institutional and human capital effects of education (Br derl and Diekmann, 1997). In China, government intervention and socioeconomic development both play important roles in increasing age at first marriage (Lei et al., 1994; Gao et al., 1995; Yin, 1998; Zhang, 1999; Cai, 2000; Li, 2000; Chen et al., 2002). Among these, the effect of the public policy on age at first marriage is the most important. Since the 1950s, the average age at first marriage of the Chinese population has been gradually increasing. In addition to the effects of socioeconomic development and dissemination of modern culture of marriage and childbearing, the Law of Marriage promulgated in 1950 and amended in 1981 has continuously increased the legal marriageable age, while the family planning policy promoting late marriage and childbearing since the 1970s has played an important role in increasing age at first marriage (Wang and Yang, 1996; Zhang, 1999; Li, 2000; Chen et al., 2002).

This paper studies the impact of marriage form and other factors on age at first marriage for both men and women, as well as on the spousal age difference. In particular, we are concerned with the following three questions. First, compared with virilocal marriage, does uxori-local marriage decrease women's age at first marriage, increase men's age at first marriage, and therefore increase spousal age difference? Second, do individual, family and social factors affect age at first marriage and spousal age difference? Third, do age at first marriage and spousal age difference differ in various regions? To address these questions we require data from both regular Han Chinese areas where virilocal marriage is dominant and special Han Chinese areas where both virilocal and uxori-local marriages are accepted and practiced. New surveys are beginning to provide the necessary data.

## DATA AND METHODS

### Data

Data used in this paper come from two sample surveys conducted by the Population Research Institute at Xi'an Jiaotong University of China, namely "Cultural transmission of son preference" conducted in Sanyuan county and Lueyang county of Shaanxi province in 1997 and "Marriage form and old-age support" conducted in Songzi county of Hubei province in 2000. Sanyuan is located in the central part of Guanzhong plain in central Shaanxi province, with scarce agricultural land and a population close to 400,000 in 1997. Sanyuan is a relative developed county, and its culture retains the core elements of the traditional Yellow River culture in China. Because it is located in a plain, its population is densely distributed and the size of its villages is usually big. Large family clans exist in almost every village and are influential in village social life. Villages maintain a strict patrilineal family system and patrilocal marriage, where virilocal marriage is absolutely dominant and uxoriocal marriage rarely occurs (Sanyuan County Gazette, 1996). Lueyang is located in the Qing mountains in the far south of Shaanxi province, with rich natural resources, especially minerals, forests, and arable land and a relatively small population of about 200,000 in 1997. It is relatively underdeveloped compared with other counties in Shaanxi, and its culture is that of Southern Shaanxi. The inhabitants of Lueyang are sparsely distributed on high mountains, and the size of its villages is relatively small. Large family clans in Lueyang are few and unimportant to village life. As a result, although the patrilineal family system still exists, it is much more relaxed in Lueyang than in other rural counties. Both virilocal and uxoriocal marriages have been widely accepted and practiced since the beginning of the 20th century (Lueyang County Gazette, 1992). Songzi, located on Jiangnan Plain in southwest Hubei on the southern side of the middle Yangtze River,

had a population of about 900,000 in 2000. Songzi is a relatively well-developed agricultural county. Because the swampland near a riverbank in the southeast county gradually became arable in the late Qing Dynasty, many settlers were attracted there. Accordingly, about a half of the residents are outsiders, whose arrival is too recent for any dominant family clans to form, which makes the patrilineal family system less rigid. Hence, both virilocal and uxorilocal marriages have been prevalent for almost a hundred years (Songzi County Gazette, 1986; Hu, 1990). In short, Sanyuan, Lueyang and Songzi are three very different counties in terms of their history, geographic environment, natural resources, level of economic development, family system and marriage customs. They provide sharp contrasts in which to examine the effect of marriage form on age at first marriage and spousal age difference in contemporary rural China.

The two surveys are retrospective and were conducted using both a structured household questionnaire and a structured community questionnaire. The targets of the community questionnaire were all the villages selected as the survey sites, and the targets of the household questionnaire were all households in the selected villages in which there was at least one living couple. The survey of “Marriage form and old-age support” is actually a continuation of the survey of “Cultural transmission of son preference” (Li et al., 1998; Jin et al., 2001); questions regarding information about couples and household economy are actually the same in the two surveys. These include each couple’s basic demographic and social background information, information about their marriage, fertility and contraception experience, their attitudes toward fertility, marriage and social life, and family economic status. Information collected in the two surveys make it possible to conduct a comparative study of determinants of age at first marriage and spousal age difference in the three counties. According to the study design, samples in each county should include at least 1,500 couples to ensure the validity of the estimates. In the

surveys, cluster sampling was used to select survey sites and couples. That is, a township was first selected, followed by a number of neighboring administrative villages within this township in order to make the survey implementation easier, until the number of couples was more than 1,500. Since uxori-local marriage is one of the key variables in the survey, selection of townships and villages in Lueyang and Songzi was based primarily on the prevalence of uxori-local marriage to ensure that the number of uxori-local marriages was large enough for statistical analysis. Since Lueyang is located in the high mountains, the size of villages and road conditions to villages were partly taken into account in selecting survey sites. Selection of survey sites in Sanyuan was based mostly on the location and size of townships. As a result, 1,866 couples in 1,567 households of five villages in Sanyuan, 1,581 couples in 1,364 households of nine villages in Lueyang, and 1,745 couples in 1,459 households of three villages in Songzi were included in the two surveys. Preliminary analysis reveals that the quality of data from the two surveys is quite satisfactory and reliable, with a relatively high consistency rate of about 93 percent between the sampled formal interviews and post-survey re-interviews in the 1997 survey and about 90 percent in the 2000 survey. A detailed description of the survey background, sampling design, contents, implementation, and data quality is given in the survey report (Li et al., 1998; Jin et al., 2001).

## **Methods**

This paper uses OLS regression to analyze factors affecting age at first marriage and spousal age difference. There are three dependent variables in the models: age at first marriage for husband, age at first marriage for wife, and spousal age difference. The independent variable is couple's marriage form. The control variables include couple's individual, family, social and regional factors. The individual and family factors include educational attainment, number of

brothers and sisters, adoption status, marriage arrangement and marriage circle. Educational attainment is referred to as “for wife” when analyzing age at first marriage for wives, and as “for husband” when analyzing age at first marriage for husbands. For those who leave their natal families and join their spouse’s families, factors such as their number of brothers, sisters and adoption status may have little impact on their spouse’s age at first marriage. Accordingly, information for these factors refers only to husbands in virilocal marriage and to wives in uxorilocal marriage. Marriage circle refers to the spatial distance between the villages where the husband and the wife reside before marriage and is divided into four categories, i.e., same village, same township, same county, and different county. Social factor refers to marriage cohort and may indicate the impact of socioeconomic development and cultural change on age at first marriage. Regional factor includes the three counties. The specific categories and statistical information for each variable in the models are presented in Table 1, where we see that couples in the three counties are quite different in terms of their individual and family characteristics.

Table 1 here

These variables are chosen in the models because in theory they are expected to have an impact on age at first marriage and spousal age difference, and in practice are available from the data of the surveys. Some other variables that have been proved to affect age at first marriage in previous studies are not considered in this paper. Such variables are of two types. One includes variables not included or with incomplete information in the surveys, such as birth order among siblings. The other includes attributes with little variation. For example, although uxorilocal marriage is more prevalent among some Chinese minorities, over 99 percent of couples interviewed in the surveys reported that they were Han Chinese, and minority status was therefore not used as a variable.

To study differences in age at first marriage and spousal age difference between virilocal and uxori-local marriages, we restrict this study to all virilocal and uxori-local couples in which both partners are in their first marriage. Due to incompleteness of the data for some respondents, this paper includes only 4,446 couples with complete information available, including 1,669 in Sanyuan, 1,242 in Lueyang and 1,535 in Songzi.

The analysis that follows is in two parts. First, we describe the situation, difference and dynamics in age at first marriage and spousal age difference for couples in various marriage forms in the three counties. Second, we employ OLS regression models to analyze age at first marriage for husbands and wives, as well as the spousal age difference, using analyses of pooled data from the three counties with and without the regional factor, and analyses for each individual county.

## **RESULTS**

### **Descriptive Information**

Data in Table 1 show that the proportion of uxori-local marriage among all couples in the three counties is 18 percent, with highest proportion of about 35 percent in Lueyang, lowest proportion of about 4 percent in Sanyuan, and Songzi having the moderate proportion of about 20 percent. Accordingly, while Sanyuan is a typical agricultural county in China with the proportion of uxori-local marriage extremely low, both Lueyang and Songzi are special in that both virilocal and uxori-local marriages are widely accepted and practiced. The average age at first marriage in the three counties is 23.05 years for husbands and 20.65 years for wives, generating an average spousal age difference 2.40 years. Among the three counties, the average age at first marriage in Lueyang is lowest for wives and highest for husbands, generating largest average spousal age difference.

Figure 1 shows the distribution of age at first marriage by marriage form for both husbands and wives. While the modal value of age at first marriage is around 20 years for wives in uxori-local marriage and 21 years for wives in viri-local marriage, it is about 23 and 22 years for husbands in uxori-local and viri-local marriage, respectively. The age at first marriage for wives in uxori-local marriage is concentrated on ages below 20 years old, indicating that early marriage is more prevalent in uxori-local marriage than in viri-local marriage. However, while the age at first marriage for husbands in viri-local marriage is concentrated on a narrow range of about 21 to 23 years old, husbands in uxori-local marriage show large variation in age at first marriage. In addition, the proportion of husbands in uxori-local marriage who marry after 26 years old is relatively high, implying that for males late marriage is more common in uxori-local marriage than in viri-local marriage.

Figure 1 here

Figure 2 presents the average age at first marriage by marriage form and marriage cohort for husbands and wives, respectively. It clearly shows that since the 1930s the average age at first marriage for husbands and wives in various marriage forms in the three counties has been increasing across marriage cohorts, reflecting the joint effects of socioeconomic development, cultural change and the government guided family planning policy that promotes late marriage and late childbearing. Except for couples married in the 1950s, the age at first marriage for husbands in viri-local marriage is lower than that for husbands in uxori-local marriage, but is higher for wives in viri-local marriage than for wives in uxori-local marriage. While the difference in husband's age at first marriage between viri-local and uxori-local marriages tends to decline gradually, the difference in age at first marriage for wives between viri-local and uxori-local marriages does not show any obvious trend.

Figure 2 here

Figure 3 presents the temporal trend of the average spousal age difference for various marriage forms across marriage cohorts. The spousal age difference for both virilocal and uxori-local marriages generally declines after the 1960s but is always larger for uxori-local marriage than for virilocal marriage. In fact, in a traditional Chinese marriage, the wife is usually younger than the husband. The declining spousal age difference may well reflect social modernization and improvement of women's social status (Zhang, 1999).

Figure 3 here

The above descriptions indicate that in the three counties, compared with couples in virilocal marriage, husbands in uxori-local marriage marry relatively later, wives marry relatively earlier, and their spousal age difference is bigger. This raises the possibility that uxori-local marriage has the effects of increasing age at first marriage for husbands, decreasing age at first marriage for wives, and enlarging spousal age difference. However, as individual, family, social and regional factors might also affect couple's age at first marriage, multivariate models are needed to analyze the net effects of marriage form on age at first marriage and spousal age difference.

### **Age at First Marriage for Husbands**

Table 2 presents the results of OLS regression models on the determinants of age at first marriage for husbands. There are five models: model 1 for all couples in the three counties without regional factor, model 2 for all couples in the three counties with regional factor, model 3 for all couples in Sanyuan, model 4 for all couples in Lueyang, and model 5 for all couples in Songzi. From the results of the five models, we can describe the effects of various factors on husband's age at first marriage as follows.

Table 2 here

Marriage form significantly affects husband's age at marriage. Among all the couples, husbands in uxori-local marriage marry 0.43 years later than husbands in viri-local marriage, and this declines to 0.26 years after controlling for the regional factor. This finding is consistent with the results of Pasternak (1985) on uxori-local marriage in Taiwan. However, regression models for each individual county show that uxori-local marriage has an effect on age at first marriage for husbands only in Songzi, and not in Sanyuan and Lueyang.

Marriage cohort has significant effects on husband's age at first marriage. Husband's age at first marriage increases with time, indicating the positive effects of socioeconomic development, cultural change and the family planning policy. This effect is stronger in Songzi and Lueyang than in Sanyuan.

All of the individual and family factors in the five models have significant impacts on husband's age at first marriage. Education has the significant effect of decreasing husband's age at first marriage in the three counties. Compared with illiterate husbands, literate husbands marry earlier, and those with junior high school education marry earliest. These results are consistent with those from previous studies (Bereczkei and Csanaky, 1996; Br derl and Diekmann, 1997; Li and Wang, 2000).

For viri-local marriage, husbands with more brothers marry later, and those adopted by parents marry earlier. For uxori-local marriage, the greater the number of the wife's brothers, the higher the husband's age at first marriage, and a husband whose wife is an adopted daughter is more likely to marry earlier. These effects of the number of siblings and adoption status are different in Sanyuan and Lueyang. In Sanyuan, the number of sisters has a significant impact on age at first marriage. A husband in viri-local marriage with more sisters, or a husband in uxori-local marriage with the wife having more sisters, marries later. However, adoption status

has no effect in Sanyuan. In Lueyang, the number of siblings has no effect.

Compared with husbands in introduced marriage, those in self-arranged marriage marry earlier except in Sanyuan, where the effect is not significant. Husbands whose location of residence before marriage is in a different county from that of their wives tend to marry later.

County of residence significantly affects husband's age at first marriage. Consistent with the descriptive results before, husband's age at first marriage is highest in Lueyang, moderate in Songzi, and lowest in Sanyuan where the age at first marriage of husbands is 1.04 and 0.37 years lower than that in Lueyang and Songzi, respectively.

### **Age at First Marriage for Wives**

Table 3 presents the results of the OLS regression models on the determinants of age at first marriage for wives.

Table 3 here

Marriage form significantly affects wife's age at first marriage in all three counties. Among all couples, wives in uxorilocal marriage marry 0.73 years earlier than those in virilocal marriage, which is consistent with previous findings (Pasternak, 1985; Shi, 2001). This effect is strongest in Sanyuan, moderate in Lueyang, and weakest in Songzi.

Similarly to the situation for husbands, marriage cohort also has significant impact on wife's age at first marriage, which increases with time. However, this positive effect of marriage cohort on wife's age at first marriage has reduced since the 1970s. In addition, the effect of marriage cohort appears to be stronger in Sanyuan and Lueyang.

Education may increase a wife's age at first marriage significantly. However, this effect is complex. For example, compared to illiterate wives, those with a primary school education marry earlier. The regional analyses show that the effect of education is nonlinear and especially strong

in Lueyang. In Sanyuan, only those wives with education at the senior high school or above level marry significantly later. In Songzi, education has no significant effect on wife's age at first marriage.

For virilocal marriage, wives whose husbands have more brothers marry later, and those whose husbands are adopted sons marry earlier. For uxorilocal marriage, the greater the number of brothers, the higher the wife's age at first marriage, and wives who are adopted daughters marry earlier. However, these effects differ between Sanyuan and Lueyang. Adoption status has no significant effect in Sanyuan, and number of siblings has no significant effect in Lueyang.

Compared to introduced marriages, self-arranged marriages significantly lower a wife's age at first marriage. The greater the distance between a couple's premarital residences, the higher the wife's age at first marriage, especially in Songzi.

County of residence significantly influences wife's age at first marriage, which in Songzi is about 0.5 years higher than in Sanyuan and Lueyang.

### **Spousal Age Difference**

Table 4 presents the results of OLS regression models on the determinants of spousal age difference. As the spousal age difference is the difference in the age at first marriage between husband and wife, results in Table 4 should theoretically be related to those in Tables 2 and 3.

Table 4 here

The results in Table 4 indicate that uxorilocal marriage increases the spousal age difference by about one year. This effect is seen in all three counties, and is largest in Sanyuan and smallest in Songzi. Spousal age difference is much higher for couples married after the 1950s than for couples married in the 1930s and 1940s but has not changed notably since the 1950s. Further regional analyses show that the effect of marriage cohort on spousal age difference is positive in

Songzi, negative in Sanyuan, and there is no significant effect in Lueyang. The higher the couple's educational attainment, the smaller is the spousal age difference. However, wife's education level has no effect on spousal age difference in Lueyang and Songzi. The more brothers of husbands in virilocal marriage or of wives in uxorilocal marriage, the greater the spousal age difference. However, this situation does not occur in Lueyang. The spousal age difference is greater for couples whose location of residence before marriage is in different counties, which mainly occurs in Songzi. Adoption status and marriage arrangement have no effect on spousal age difference. Among the three counties, the spousal age difference in Lueyang is significantly greater than that in Sanyuan and Songzi.

## **DISCUSSION AND SUMMARY**

Among the three agricultural counties studied here, Sanyuan is typical of areas where uxorilocal marriage is rare, Songzi is a special area where uxorilocal marriage is moderately prevalent, and Lueyang is also a very special area where uxorilocal marriage is highly prevalent. In terms of the degree of the prevalence of uxorilocal marriage, these three counties represent the spectrum of rural China. Therefore, by using data from the sample surveys conducted in the three counties, we should expose the effects of marriage form more completely and accurately than previous studies.

First, as we predicted, compared to the dominant virilocal marriage, uxorilocal marriage significantly decreases women's age at first marriage, increases men's age at first marriage, and expands spousal age difference. Thus, under the patrilineal joint family system in rural China, the differences in characteristics and functions of virilocal and uxorilocal marriages affect age at first marriage for both genders. Of course these are related to the causes of uxorilocal marriage,

including mainly succession, labor need, and marriage cost.

As described above, families without a son call in a son-in-law for one of their daughters mainly to ensure continuity of the family lineage, to meet the need for male laborers, and for their old-age security. Those having at least one son and doing so probably need to acquire male laborers because the son they have may be too young (Pasternak, 1985; Wolf, 1989; Li and Zhu, 1999; Jin and Li, 2003). Under such circumstances, early marriage of a daughter becomes one of the family strategies to ensure continuity of the family lineage and to meet the need for male laborers.

Marriage cost, including bridewealth and dowry, is also an important factor. In virilocal marriage, the practice of bridewealth constitutes an important family strategy by which the elders in a family or kin group may adjust household labor needs, validate a marriage agreement and the transfer of the rights and obligations over women (Yan, 2003). A dowry is a kind of gift given by parents for their daughter's post-marital welfare, which is less important in forming a marriage than bridewealth (Li and Wang, 2000; Philip, 2002). However, bridewealth and dowry in virilocal marriage are relatively high, and have been increasing in rural areas (Han and Eades, 1995). For example, the standard for bridewealth and dowry has increased more than ten times since the 1980s in rural areas of north China (Yan, 2003). Therefore, whether a family can accumulate enough bridewealth and provide adequate living facilities needed for a marriage is an important precondition of forming a virilocal marriage. By contrast, bridewealth and dowry are not very important for uxoriocal marriage and the corresponding marriage expenditure is lower.

For example, in Songzi, the wedding procedures for a uxori-local marriages are much simpler than those for a viri-local marriage. Further, the called-in son-in-law is usually not required to provide bridewealth to the bride's natal family, and the dowry is also relatively small (Jin and Li, 2003). In a viri-local marriage, the groom's parents call in a "daughter-in-law", while in uxori-local marriage, the bride's parents call in a "son-in-law", sometimes referred to as a "male daughter-in-law" (Freedman, 1957). Accordingly, the dowry in uxori-local marriage is in essence the same as the bridewealth in viri-local marriage (Jin and Li, 2003). The lower marriage cost in uxori-local marriage makes it easier for parents to meet the financial needs of calling in a son-in-law for one of their daughters, and this also makes it possible for daughters to marry earlier.

Poverty, the lack of women in marriage market, the desire to avoid forced military service in wartime, and unfavorable political status during the Cultural Revolution period have been important causes for men to adopt uxori-local marriage. Because of lower status and less respect from community, as well as high psychological cost, a uxori-local marriage is traditionally the last choice for the majority of called-in sons-in-law in rural China (Pasternak, 1985, Chuang and Wolf, 1995; Li and Zhu, 1999; Jin and Li, 2003). Therefore, men in uxori-local marriage usually marry later.

In fact, a daughter chosen to stay home and to call in a son-in-law is usually the one who is more valuable to her parents, and the sons required to leave home and marry out are usually the ones who are less valuable to their parents (Li and Zhu, 1999; Jin and Li, 2003), this is also one possible reason underlying that age at first marriage is higher for men in uxori-local marriage than

for men in virilocal marriage, and lower for women in uxorilocal marriage than for women in virilocal marriage.

Second, the effects on age at first marriage of some individual and family factors found in previous studies are confirmed in this paper. These factors include education, number of brothers, adoption status, marriage arrangement, marriage circle, etc. These can now be regarded as widespread determinants of age at first marriage for both virilocal and uxorilocal marriages.

The effects of education on age at first marriage differ between men and women. Compared with illiterate women, women with primary school education marry earlier, and those with junior high school education and above marry later. Thus education can increase women's age at first marriage when they are educated above a certain level. For men, the effects of education on marriage age are always positive, and literate men marry earlier than illiterate ones. This gender difference might result from the fact that the human capital response to education is usually positive to women's age at first marriage and negative to that of men's (Berezkei and Csanaky, 1996; Bröderl and Diekmann, 1997; Li and Wang, 2000). Additionally, under the conventional division of labor by gender, family economy and individual abilities are more important for men in arranging marriage, and this means that men from poor families or with less individual ability are less attractive in marriage market and have to delay their marriage (Berezkei and Csanaky, 1996; Bröderl and Diekmann, 1997). Specifically, in rural China, men prefer and choose younger spouses, and women choose spouses with higher education. Accordingly, women are less likely to marry "downwards" and men are less likely to marry "upwards". Education level

also represents individual abilities, parent's investment in children and family economy; therefore, men with higher education and women with moderate education will marry earlier. Meanwhile, the higher the education of both genders, the smaller the spousal age difference, which further reflects the negative effects of education on men's age at first marriage.

Regardless of gender, people with more brothers marry later and their spousal age difference is bigger. This is not consistent with the findings of a previous study (Campbell and Lee, 2003). A possible cause for the difference may be that, in families with several sons, parents need more time to accumulate enough bridewealth and prepare adequate residential facilities. That the number of sisters has no significant effect on age at first marriage further indicates that uxori-local marriage in the patrilineal family system also follows the norms of virilocal marriage. That is, parents do not need to take much time to accumulate wealth for a dowry. That adopted children marry earlier might reflect their greater value to families that adopted them, for they usually have fewer siblings.

Marriage arrangement refers to the way through which the husband and the wife get to know each other and reflects to some extent the degree of independence of their marriage decision-making. In general, age at first marriage for a self-arranged marriage is higher than that for an introduced marriage, because an older person usually has more autonomy and will be more independent in determining his or her marriage, which has been confirmed by the previous study (Nguyen, 1996). However, our results show that, couples in self-arranged marriages marry earlier than those in introduced marriages, which might be related to the fact that couples in self-

arranged marriages still depend financially on their parents through bridewealth and dowry, although they have already escaped from family arrangement in choosing their spouses (Yan, 2003). In addition, marriage arrangement is also modified by marriage circle. In the three counties, for self-arranged marriage the proportion of both husbands and wives coming from the same village is 37 percent, while the corresponding figure is only 17 percent in introduced marriage. Thus the proportion of couples that have known each other since childhood in self-arranged marriages is much more than that in introduced marriages, and the fact that the two sets of families reside in the same village makes them very familiar with each other and favors early marriage. In introduced marriage, parents usually need to find matchmakers, friends or relatives to introduce spouses for their children of marriageable age, and both parties then need time to get to know each other. As a result, introduced marriage might increase age at first marriage.

Expansion of the marriage circle could increase age at first marriage for both genders and increase spousal age difference significantly, in accordance with the commonly observed rule that mobility helps increase age at first marriage (Fan and Huang, 1998). However, the causes may differ among the various marriage forms. For virilocal marriage, those daughters-in-law who leave their natal families and marry in a totally new environment far from their natal families probably delay marriage because they can not find suitable spouses in local villages, or they have to wait until they are old enough to leave their parents after their engagement. For uxorilocal marriage, those sons-in-law who leave their natal families probably delay marriage because they are poor and have difficulty finding suitable spouses in local villages, or they move

many times to make a living after they grow up. Actually, in contemporary rural China, the underdeveloped transportation system, the patriarchal family system and the strong expectation for large kin networks usually result in short-distance marriage. Although rural reforms are increasing the mobility of Chinese peasants, short-distance marriage continues to increase as affinal laborers are sought during peak periods of the agricultural season in order to boost household production (Fan and Huang, 1998). Accordingly, age at first marriage has a tendency to decline with diminishing marriage circle.

Finally, regional difference exists in age at first marriage and spousal age difference. For women, while age at first marriage in Songzi is higher, it does not show any obvious difference in Sanyuan and Lueyang. For men, age at first marriage in Lueyang is highest, followed by Songzi and Sanyuan. Consequently, the spousal age difference in Lueyang is significantly greater than in Songzi and Sanyuan. Lavelly (1991) argues that uneven regional development is also the basis for “spatial hypergamy” in mate selection. If marriage is a precious opportunity for a woman to achieve social and economic mobility, and if she follows the patrilocal tradition of joining the husband where he lives, then the prospective husband’s location becomes an important factor in marriage decision-making. Place-based characteristics, especially the local economy, create both opportunities and constraints on men’s success in the marriage market. In China, rural men residing close to big cities or in coastal provinces experiencing rapid economic growth are considered more desirable than men in inland, remote, or mountainous locales (Fan and Huang, 1998). In the counties we studied, Sanyuan is near the big city and has a better

developed transportation system and economy, which makes it easier for men in Sanyuan to find spouses and marry earlier. However, in Lueyang, located in high mountains and with an underdeveloped economy, local men are relatively undesirable in the marriage market (Li et al., 1998), which probably delays their marriage.

The effects of marriage form on age at first marriage and spousal age difference also differ in various regions. The effects of uxorilocal marriage on lowering women's age at first marriage and expanding spousal age difference are strongest in Sanyuan, moderate in Lueyang, and weakest in Songzi. Furthermore, the effects of uxorilocal marriage on increasing men's age at first marriage is seen only in Songzi, indicating that such effects may be moderated by other factors. In Sanyuan, it is probably the high cost of virilocal marriage that increases age at first marriage for men in virilocal marriage and consequently reduces the gap in men's age at first marriage between virilocal and uxorilocal marriages. This effect may also be partially due to the low proportion of uxorilocal marriage. In Lueyang, the high proportion of uxorilocal marriage, the lack of discrimination by the community against called-in sons-in-law, as well as the low psychological cost to men in uxorilocal marriage, may have reduced the difference in the age at first marriage between men in the two forms of marriages.

Although the effects of the individual, family and social factors on age at first marriage and spousal age difference differ in the three counties, no obvious regional patterns are observed. The effects of these factors on age at first marriage are highly consistent across the three counties where the prevalence of uxorilocal marriage differs greatly. Among them, the effects of social

factors, i.e., the effects of marriage cohort, do not show significant differences among the three counties, suggesting that socioeconomic development, cultural change, and the related public policies on marriage and family planning are the most important factors affecting age at first marriage. (see also Chen et al., 2002). The effects of the individual and family factors differ in the three counties to some extent. For example, the number of siblings on men's age at first marriage has no significant effect in Lueyang, probably because of the higher proportion of uxori-local marriage and the fact that women in uxori-local marriage have no brothers or fewer brothers. Adoption status has no significant effect in Sanyuan, probably due to the extremely low proportion of adoption.

Our study has several limitations. First, the survey "Cultural transmission of son preference" and the survey "Marriage and old-age support" are not specifically designed to study age at first marriage in rural China. Accordingly, some important factors that are known to have an impact on age at first marriage are not included in our questionnaires; these include premarital family economic status, the birth order of the respondents among siblings, the marital status of siblings, family structure and family type, etc. (Zhang, 1999; Campbell and Lee, 2003). This may affect the validity of our research results. Second, the direction of the causality between age at first marriage and marriage form may differ between husbands and wives in uxori-local marriage. For the majority of families, the decision to adopt a uxori-local marriage for a daughter is likely an active choice, in which marriage form probably determines the age at first marriage; in contrast, the decision to adopt a uxori-local marriage for a son is likely a passive and last choice, in which

age at marriage probably determines marriage form. This possible difference in causality is not accounted for in our statistical models. Third, whether the relationship between marriage form and age at first marriage and spousal age difference observed in Sanyuan, Lueyang and Songzi is valid in other parts of rural China needs to be explored further.

Despite these limitations, our findings still have important consequences. In some underdeveloped areas, early marriage is usually taken as an economic survival strategy, or one way to ensure a girl is “protected” (Singh and Samara, 1996; UNCEF, 2001). Meanwhile, where low productivity makes economic development depend mainly on the number of laborers, families are eager to reproduce earlier and more by means of early marriage (Zhang, 1999). When the level of socioeconomic development is higher and contraceptive technology is well developed and widely used, marriage at a standard age does not necessarily lead to high fertility. However, in areas where the economy is underdeveloped and the traditional cultural values and norms of early marriage and childbearing are dominant, promoting late marriage could be an active and effective social measure to lower the fertility (Zhang, 1999; Wang, 2000). With mortality declining in China, control of population growth should change gradually from positive checks to preventive checks by way of late marriage (Campbell, 1998; Li and Wang, 2000). Actually, increasing age at first marriage has always been one of the important means by which the Chinese governments have controlled population growth. Due to the low level of socioeconomic development in rural China, the restoration of the family as a production unit under economic reform which has made the number of laborers one of the main factors for

increasing wealth, together with the sustained existence of the traditional culture promoting early marriage and childbearing, as well as the conventional customs according to which parents arrange and financially support their children's marriage, are all the possible factors stimulating decline in age at first marriage (Han and Eades, 1995; Zhang, 1999; Zhang, 2000). Accordingly, the objectives of increasing age at first marriage and stabilizing the rate of late marriage in rural China still conflict with the actual expectation of Chinese peasants. Marriage is a kind of social system, and labor, fecundity and women are all historically property transferable by marriage (Fan and Huang, 1998). In rural China, where the degree of modernization is still low, marriage has always embodied many practical economic values, such as succession, increasing the number of family laborers, establishing kin networks, providing old-age support, and transferring economic resources. As a result, Chinese peasants always have a strong tendency to marry early. It is worth noting that, with the rapidly increasing proportion of no-son families as a consequence of sustained low fertility in rural China, the demand for uxori-local marriages in rural societies of China is expected to increase in the foreseeable future and marriage customs will gradually change. Accordingly, findings in this paper may help to understand the processes of change in rural families and marriages in the context of demographic and social transition, and suggest avenues to promote late marriage and childbearing under low fertility in rural China.

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**Table 1 Descriptive statistics for variables used in OLS regression models**

	Three counties		Sanyuan		Lueyang		Songzi	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
<b><i>Dependent variable</i></b>								
Age at first marriage								
Husband	23.05	3.06	22.68	2.54	23.86	3.85	22.80	2.71
Wife	20.65	2.68	20.74	2.61	20.16	3.16	20.95	2.25
Spousal age difference	2.40	2.88	1.94	2.35	3.71	3.60	1.85	2.37
<b><i>Independent variable</i></b>								
Marriage form								
Virilocal	.82	.39	.96	.20	.65	.48	.80	.40
Uxorilocal	.18	.39	.04	.20	.35	.48	.20	.40
Marriage cohort								
1930–1949	.04	.19	.02	.16	.03	.18	.05	.21
1950–1959	.07	.25	.07	.25	.07	.26	.06	.24
1960–1969	.13	.33	.13	.34	.15	.36	.10	.30
1970–1979	.17	.38	.16	.37	.17	.37	.19	.39
1980–1989	.34	.48	.38	.49	.33	.47	.33	.47
1990+	.25	.43	.24	.42	.25	.43	.27	.45
Individual and family factor								
Education								
Husband: 0	.09	.29	.04	.20	.23	.42	.03	.17
1–6	.40	.49	.34	.47	.50	.50	.37	.48
7–9	.43	.49	.53	.50	.21	.41	.49	.50
10+	.08	.28	.09	.29	.06	.24	.10	.30
Wife: 0	.19	.39	.13	.34	.39	.49	.09	.28
1–6	.41	.49	.38	.48	.45	.50	.42	.49
7–9	.36	.48	.43	.50	.14	.35	.45	.50
10+	.04	.20	.06	.24	.02	.15	.04	.20
Number of siblings <sup>a</sup>								
Brothers	1.58	1.37	1.91	1.44	1.35	1.31	1.41	1.27
Sisters	1.71	1.41	2.10	1.44	1.45	1.39	1.51	1.28
Adoption <sup>a</sup>								
No	.93	.26	.97	.16	.89	.32	.91	.28
Yes	.07	.26	.03	.16	.11	.32	.09	.28
Marriage arrangement								
Introduced	.90	.30	.96	.19	.83	.38	.90	.30
Self-arranged	.10	.30	.04	.19	.17	.38	.10	.30
Marriage circle								
Same village	.19	.39	.11	.31	.30	.46	.19	.39
Same township	.42	.49	.60	.49	.21	.41	.40	.49
Same county	.23	.42	.16	.36	.26	.44	.28	.45
Different county	.16	.37	.13	.33	.23	.42	.14	.35
Regional factor								
Sanyuan	.38	.48						
Lueyang	.28	.45						
Songzi	.34	.48						
<b><i>Number of cases</i></b>	<b>4446</b>		<b>1669</b>		<b>1242</b>		<b>1535</b>	

<sup>a</sup> Referring to husband's information in virilocal marriage and wife's information in uxorilocal marriage, same as for the following tables;

Source: Data are from the survey "Cultural transmission of son preference" in 1997 and the survey "Marriage

form and old-age support” in 2000.

**Table 2 OLS estimation of determinants of husband's age at first marriage**

	Three counties		Sanyuan	Lueyang	Songzi
	Model 1	Model 2	Model 3	Model 4	Model 5
<b><i>Marriage form</i></b>					
Virilocal					
Uxorilocal	.43***	.26*	.29	-.02	.49**
<b><i>Marriage cohort</i></b>					
1930–1949					
1950–1959	1.84***	1.85***	1.02*	2.45***	1.62***
1960–1969	2.76***	2.68***	1.09**	3.35***	3.08***
1970–1979	3.94***	3.81***	2.18***	3.98***	4.6***
1980–1989	4.51***	4.34***	3.48***	4.32***	4.6***
1990+	4.57***	4.41***	3.04***	4.73***	5.10***
<b><i>Individual and family factor</i></b>					
Education					
0					
1–6	-2.12***	-1.84***	-1.18***	-1.72***	-2.10***
7–9	-2.58***	-2.12***	-1.49***	-2.17***	-2.37***
10+	-2.21***	-1.79***	-1.04**	-1.70**	-2.15***
Number of siblings					
Brothers	.24***	.26***	.44***	.08	.24***
Sisters	-.01	.01	.11**	-.06	.02
Adoption					
No					
Yes	-.49**	-.56**	.09	-.85*	-.46*
Marriage arrangement					
Introduced					
Self-arranged	-.51**	-.72***	-.41	-.87**	-.67**
Marriage circle					
Same village					
Same township	-.12	.10	.07	.07	.33+
Same county	-.01	.03	-.10	-.16	.39*
Different county	.66***	.72***	.78**	.55+	1.03***
<b><i>Regional factor</i></b>					
Sanyuan					
Lueyang		1.04***			
Songzi		.37***			
<i>R</i> <sup>2</sup>	.15***	.16***	.20***	.08***	.24***
<b><i>Number of cases</i></b>	4446	4446	1669	1242	1535

\*\*\* p < 0.001 \*\* p < 0.01 \* < 0.05 + p < 0.1

**Table 3 OLS estimation of determinants of wife's age at first marriage**

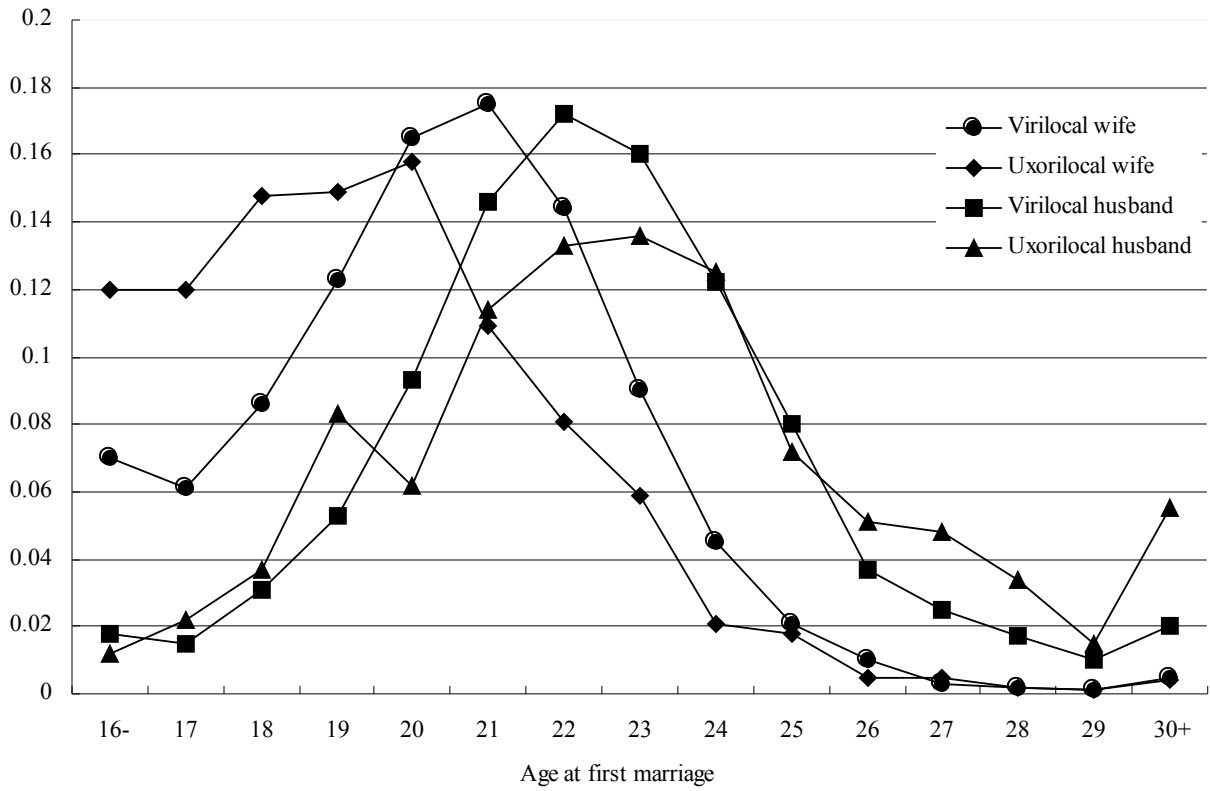
	Three counties		Sanyuan	Lueyang	Songzi
	Model 1	Model 2	Model 3	Model 4	Model 5
<b><i>Marriage form</i></b>					
Virilocal					
Uxorilocal	-.73***	-.76***	-1.17***	-1.04***	-.37**
<b><i>Marriage cohort</i></b>					
1930–1949					
1950–1959	.83***	.92***	.77*	2.04***	.44
1960–1969	1.42***	1.57***	1.67***	2.50***	.94**
1970–1979	3.18***	3.29***	3.32***	3.63***	3.21***
1980–1989	3.52***	3.69***	4.80***	3.60***	3.01***
1990 <sup>+</sup>	3.78***	3.94***	4.58***	4.72***	3.24***
<b><i>Individual and family factor</i></b>					
Education					
0					
1–6	-.30**	-.44***	-.09	-.79***	-.37
7–9	.31*	.13	.35 <sup>+</sup>	.19	-.15
10 <sup>+</sup>	1.10***	.97***	1.16***	1.54**	.21
Number of siblings					
Brothers	.08**	.09**	.15***	.05	.12**
Sisters	-.03	-.01	.05	-.06	-.02
Adoption <sup>a</sup>					
No					
Yes	-.40**	-.42**	.08	-.57*	-.54**
Marriage arrangement					
Introduced					
Self-arranged	-.61***	-.61***	-.54*	-.57*	-.48**
Marriage circle					
Same village					
Same township	.18 <sup>+</sup>	.21*	.42*	.14	.36*
Same county	.22*	.19 <sup>+</sup>	.25	.25	.31*
Different county	.34**	.37**	.56**	.53*	.42*
<b><i>Regional factor</i></b>					
Sanyuan					
Lueyang		.04			
Songzi		.50***			
<i>R</i> <sup>2</sup>	.24***	.24***	.39***	.15***	.28***
<b><i>Number of cases</i></b>	4446	4446	1669	1242	1535

\*\*\* p < 0.001 \*\* p < 0.01 \* < 0.05 <sup>+</sup> p < 0.1

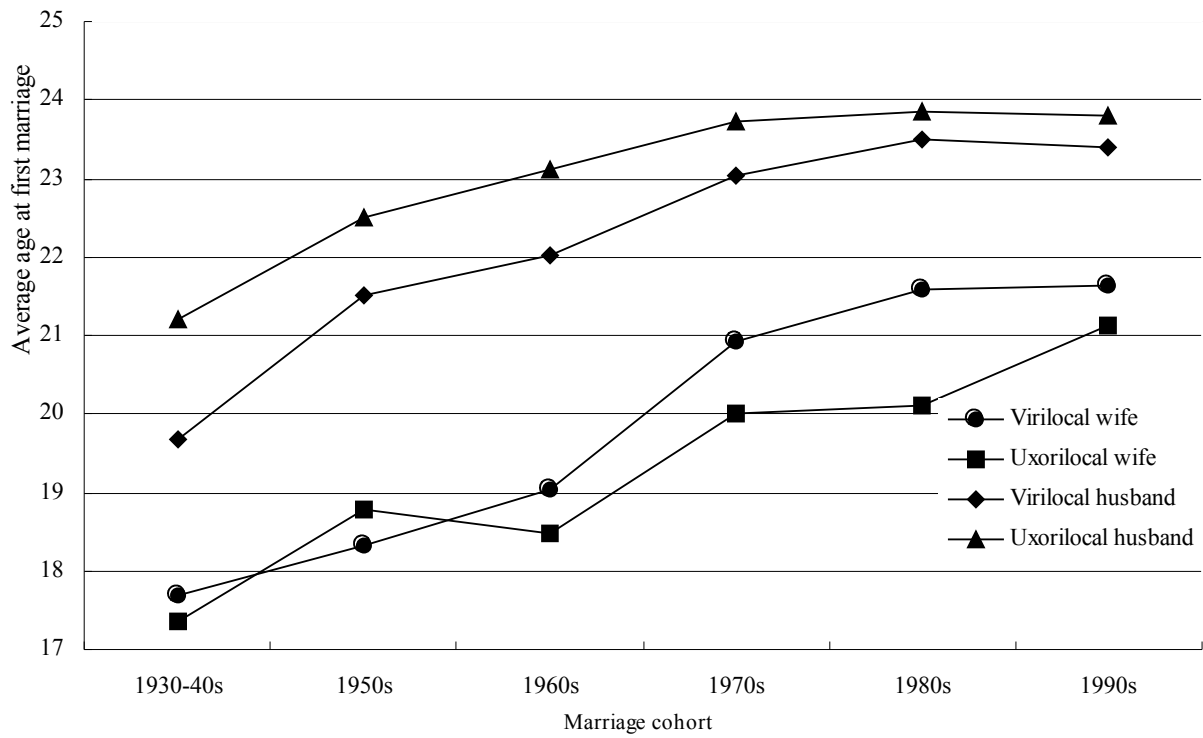
Table 4 OLS estimation of determinants of spousal age difference

	Three counties		Sanyuan	Lueyang	Songzi
	Model 1	Model 2	Model 3	Model 4	Model 5
<b><u>Marriage form</u></b>					
Virilocal					
Uxorilocal	1.21***	1.05***	1.52***	1.02***	.93***
<b><u>Marriage cohort</u></b>					
1930–1949					
1950–1959	1.08***	.97***	.39	.32	1.30***
1960–1969	1.64***	1.32***	-.12	.87	2.42***
1970–1979	1.04***	.69**	-.68 <sup>+</sup>	.16	1.74***
1980–1989	1.37***	.86**	-.72 <sup>+</sup>	.60	1.95***
1990 <sup>+</sup>	1.20***	.68**	-.93*	-.08	2.19***
<b><u>Individual and family factor</u></b>					
Education					
Husband: 0					
1–6	-1.27***	-1.01***	-1.34***	-.69*	-1.31**
7–9	-1.84***	-1.45***	-1.55***	-1.56***	-1.65***
10 <sup>+</sup>	-1.61***	-1.25***	-1.40***	-1.23*	-1.48**
Wife: 0					
1–6	-.58***	-.28*	-.48*	.12	-.38
7–9	-1.19***	-.69***	-1.09***	-.32	-.53 <sup>+</sup>
10 <sup>+</sup>	-1.72***	-1.22***	-1.82***	-.62	-.78 <sup>+</sup>
Number of siblings					
Brothers	.16**	.17***	.29***	.03	.11*
Sisters	.02	.03	.05	.01	.04
Adoption					
No					
Yes	-.08	-.13	.02	-.26	.07
Marriage arrangement					
Introduced					
Self-arranged	.10	-.12	.16	-.37	-.19
Marriage circle					
Same village					
Same township	-.27*	-.12	-.35*	-.06	-.03
Same county	-.24 <sup>+</sup>	-.18	-.35 <sup>+</sup>	-.46 <sup>+</sup>	.07
Different county	.30*	.33*	.16	.03	.57**
<b><u>Regional factor</u></b>					
Sanyuan					
Lueyang					
Songzi					
		.97***			
		-.10			
<i>R</i> <sup>2</sup>	.14***	.16***	.20***	.06***	.07***
<b><u>Number of cases</u></b>	4446	4446	1669	1242	1535

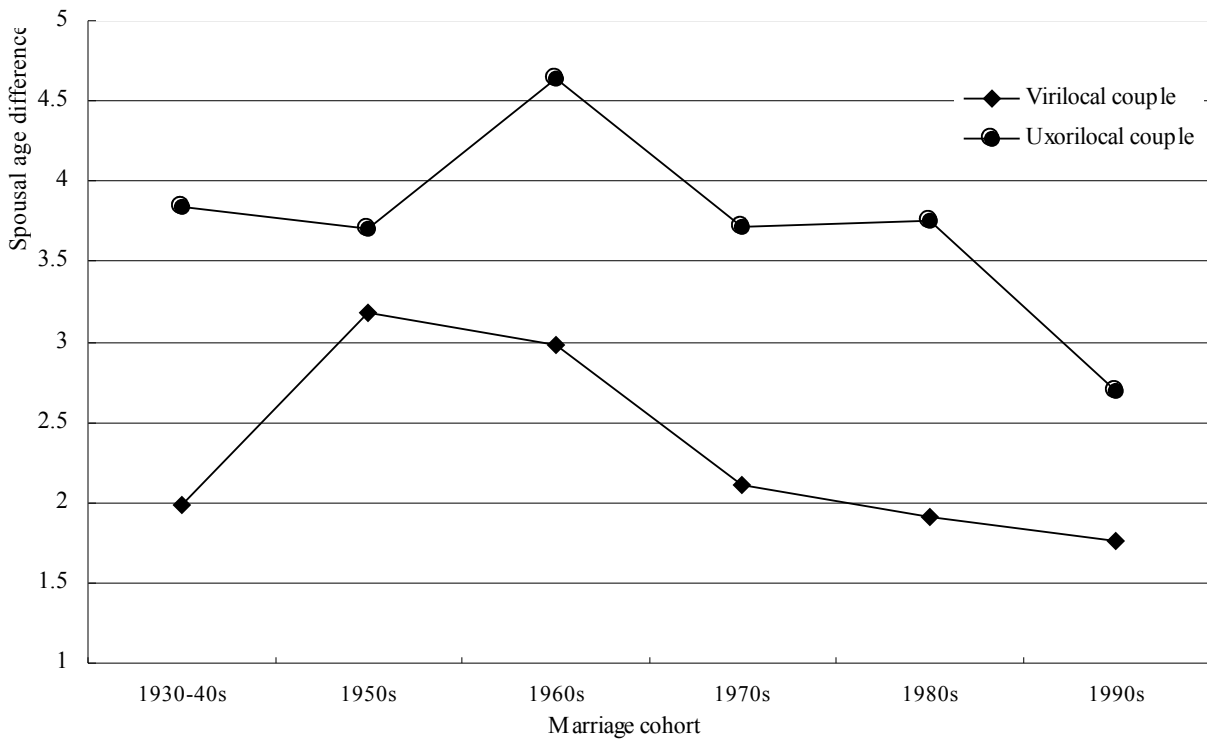
\*\*\* p < 0.001 \*\* p < 0.01 \* < 0.05 + p < 0.1



**Figure 1 Distribution of age at first marriage by marriage form**



**Figure 2 Age at first marriage by marriage cohort and marriage form**



**Figure 3 Spousal age difference by marriage cohort**