

# Son Preference in Anhui Province, China

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**Context:** Chinese couples, particularly those in rural areas, have historically had a strong preference for sons. This preference may affect couples' reproductive behavior and their treatment of girl vs. boy children.

**Methods:** A community-based household survey was conducted in two rural counties of Anhui Province in 1993. Responses from 5,779 women of reproductive age who had had at least one birth yielded data on sex ratios, duration of breastfeeding and childbearing patterns.

**Results:** The overall sex ratio was 1.18 male births per female birth, significantly higher than the expected ratio of 1.06; for first, second and third or higher order births, ratios were 1.17, 1.12 and 1.16, respectively. The sex ratio was low in 1980–1986, when the national one-child policy was strictly enforced, and was significantly elevated before 1980 (1.18) and in 1987–1993 (1.22). Last-born children, regardless of family size, had the highest sex ratio. Girls were breastfed for a significantly shorter duration than boys, particularly if they had an older sister and no brothers. Since 1980, couples with only a girl have been slightly more likely than those with only a boy to have a second child; those with two girls have been 5–6 times as likely as those with two boys to have a third child. The interval between pregnancies is shorter when the previous child was a girl than when the previous child was a boy.

**Conclusions:** Couples in Anhui control the size of their families and attempt to control the sex composition. If China's fertility decline continues and the preference for sons remains unchanged, discrimination against girls may intensify.

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Son preference has deep cultural roots in many Asian countries.<sup>1</sup> The sex ratio at birth in these countries exceeds the expected ratio of 106 male births per 100 female births,<sup>2</sup> possibly reflecting social or behavioral interference. In China, where son preference has historically been strong, sons are needed to carry out farm-

work, offer financial support to aging parents, continue the family name and receive the family inheritance; in the past, they also were responsible for ancestor worship.<sup>3</sup> Sons are particularly preferred in rural farming areas of China and among less educated parents.<sup>4</sup> Using a small subset of a population from Anhui Province in China, we explore son preference in rural agricultural areas, where the sex ratio at birth is generally higher than the ratio in urban areas.<sup>5</sup>

## Background

During the 1970s, under the *wan-xi-shao* (later, longer, fewer) policy, the Chinese government encouraged but did not enforce population control. Couples were urged to marry later, wait longer between births and have few children.<sup>6</sup> The national policy limiting families to having one child was announced in 1979.<sup>\*7</sup> The government also set a goal of a population of 1.2 billion in the year 2000, and to achieve that goal, it enforced the one-child policy more strictly over time: Between 1982 and 1983, the regulations included mandatory IUD insertion for all women who had one child, abortion for any woman who had an unauthorized preg-

nancy and sterilization for couples with two or more children. By 1983, there was an even stronger campaign for abortion and sterilization, and out of desperation for a boy, some parents may have killed newborn daughters.<sup>8</sup>

In 1984, with a shift in leadership, China restructured its population policy. While maintaining the goal of holding the population at 1.2 billion in the year 2000, the new policy allowed rural couples to have two children. It also eliminated forced abortions, mandatory IUD insertions and financial penalties for exceeding the limit, and gave couples more choice for contraceptive use.<sup>9</sup>

In 1985, the policy became less restrictive, as the overall population goal changed to about 1.2 billion in the year 2000. Under a 1986 regulation, couples were allowed to sign an agreement with the government not to have a third child, rather than undergo sterilization. Since 1988, several campaigns have promoted the status of girls and encouraged later marriage. Plans for more solid social security benefits have also been implemented, to lessen the need for children to care for the elderly.<sup>10</sup>

The population control policy, coupled with a decrease in desired family size, has been followed by increases in sex ratios at birth.<sup>11</sup> Three main reasons may explain the increased sex ratios: sex-selective infanticide, gender-specific abortion and concealment of female births.<sup>12</sup> Excess female infant mortality and couples' tendency to place female babies for adoption also may have played a role in the years since 1980.<sup>13</sup>

Fertility is higher in rural than urban areas, partly because the population policy allows for rural couples to have more children, and partly because enforcement is more difficult in rural areas.<sup>14</sup> Consequently, rural couples are more likely than their urban counterparts to have a son by chance. The extent to which individuals modify their childbearing behavior to achieve the desired sex composition of their children is not well understood.

\*Although the one-child policy was issued on the national level, each province decides the circumstances under which couples may have two children, so as to implement the policy in accordance with local social, economic, political and cultural conditions. In Anhui and other predominantly rural provinces, these circumstances are as follows: a couple's first child suffers from a nonhereditary disease or a disability and is unable to become a normal worker; one spouse is a veteran with a severe disability; one spouse has been working in mining continuously for more than five years, and the couple's first child is a girl; a peasant couple whose first child is a girl lives in a mountainous area where population growth has been negligible for a long time; both spouses belong to an ethnic minority group; in a rural family with no sons, a daughter marries uxorially (i.e., the husband joins the wife's family); one member of a rural couple is an only child; both spouses are only children; only one male child in a peasant family is able to reproduce; pregnancy occurs after a couple who have remained childless for many years adopt a child, and the wife is at least 35; one spouse in a second marriage has never had children and the other is widowed with two children; together, a remarried couple have fewer than two living children; and both spouses are returned overseas Chinese. (Source: reference 7.)

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## The Study Area

In the early 1980s, the population of Anhui Province totaled approximately 50 million; in 1997, it was about 61 million.<sup>15</sup> The province's socioeconomic status is low to medium for China: For example, in 1986, the per capital gross national product was 916 yuan nationally and 698 yuan in Anhui; in 1997, these figures were 6,048 yuan and 4,378 yuan, respectively.<sup>16</sup>

Our analysis, which focuses on the Anqing region, is based on a 1993 community survey conducted in two counties, Huaining and Zongyang, where the majority of people are employed as agricultural workers. In the mid-1980s, the population of Huaining was 745,500, and that of Zongyang was 934,000; the average life expectancy in both counties was similar to that for China overall (about 65 years).<sup>17</sup> The two counties are quite similar, the main difference being that Huaining produces cotton and Zongyang produces rice as a main crop. Additionally, Huaining was settled much more recently, has a substantial immigrant population and is closer to the city of Anqing than Zongyang.

Data from our preliminary work show that from the mid-1970s to the early 1990s, the ratio of male to female infant deaths in the province was low, although a detailed analysis was outside the scope of this article. Before one month of age, 99 male and 86 female infants had died, for a sex ratio of 1.15; before one year, the numbers were 219 and 193, respectively, for a ratio of 1.13. On the basis of data from developing and Western countries, the normal ratio expected is significantly higher—about 130 male to 100 female infant deaths before age one.<sup>18</sup>

Consistent with this, a life table based on life expectancies similar to those in contemporary China (67.5 years for females and 63.5 for males) showed a ratio of 129.<sup>19</sup> However, the nationwide ratio in a report of the 1982–1987 Two-per-Thousand Survey (114 male per 100 female infant deaths)<sup>20</sup> is very similar to Anhui's. Furthermore, a review of data from 44 developing countries, a number of which are characterized by son preference, revealed that the average ratio of male to female infant deaths was 1.20 in the 1980s and 1.14 in the 1970s.<sup>21</sup>

## Methodology

The household-based community survey was conducted in October–November 1993. The two counties were chosen at random from the province's eight rural counties. We selected four townships (three in Zongyang and one in Huaining), and a list of all households was supplied by local government

census bureaus. Specially trained interviewers and permanent staff from Anhui Medical University visited each household and conducted face-to-face interviews. The respondents were all Han, the main nationality in China. Approximately 16,000 women and 20,000 men were extensively interviewed about their health status and medical history, occupational exposures, smoking, living conditions and diet.

An additional questionnaire, administered to 14,017 women aged 15 or older, included questions on women's pregnancy history, lifestyle before childbearing, menstrual cycle and age at menarche. Of the 10,904 respondents who had had at least one delivery, 3,520 did not report their children's sex; since 84% of these women were born before 1950, we restricted the analysis to women born in 1950 and later.

The sample included 5,779 married women born in 1950 or later who had had at least one live birth and had complete reporting of birth dates and key background information. These women, who are representative of the district populations, had a total of 14,553 births.

We hypothesized that couples with sons would be less likely to have another child than would couples with one or two daughters. To determine the prevalence of son preference, we calculated sex ratios for three time periods (before 1980, 1980–1986 and 1987–1993) and over all three time periods, and compared them by birth order and family size. (The selected periods represent different phases in the development and enforcement of the national population policy.)

Furthermore, we hypothesized that sons and daughters would receive differential treatment. To test this, we examined duration of breastfeeding and place of delivery.

We hypothesized that the interval between births would depend on the sex of the previous children because of the desire to have at least one son. To determine waiting time to subsequent birth by the sex of the previous child, we calculated Kaplan-Meier life tables.<sup>22</sup> We used Cox proportional hazards models<sup>23</sup> to estimate the risk of second and third births, after adjusting for variables that were statistically significant at the .05 level according to the likelihood ratio test in univariate analysis. The analyses of childbearing patterns were confined to progressions from

**Table 1. Ratio of male births to female births, by parity, according to year, Anhui Province, China**

Parity	No. of births	All years (N=13,473)	Before 1980 (N=4,389)	1980–1986 (N=4,846)	1987–1993 (N=4,238)
All	13,473	1.18***	1.18***	1.07	1.22***
1	5,779	1.17**	1.20*	1.03	1.27***
2	4,451	1.12***	1.12	1.07	1.21**
≥3	3,243	1.16*	1.23**	1.14	1.07

\*Significantly different from expected ratio of 1.06 at  $p < .05$ . \*\*Significantly different from expected ratio of 1.06 at  $p < .01$ . \*\*\*Significantly different from expected ratio of 1.06 at  $p < .001$ . Note: Excludes 1,080 births with incomplete information on the year of birth.

first to second birth and second to third birth because too few women had had a fourth or a fifth child (703 and 371, respectively). Time to first birth could not be analyzed because information on marriage date was not complete.

## Results

### Sex Ratios

Overall, 1.18 male births occurred for every female birth (Table 1). For first, second and third or higher order births, the sex ratios were 1.17, 1.12 and 1.16, respectively. All of these sex ratios were significantly different from the expected ratio of 1.06. For each parity, the sex ratio was somewhat higher prior to 1980 than in 1980–1986. Given that the rural population of Anhui had almost no access to technology such as ultrasound and amniocentesis in the 1970s, these elevated sex ratios are not attributable to sex-selective abortion, but are probably due to underreporting of female births. In 1980–1986, the sex ratio was not significantly higher than expected for any parity, possibly because strict enforcement of population control policies included measures that made sex-selective abortion difficult to obtain and nonreporting of female births unlikely to occur.

For first and second births, sex ratios in 1987–1993 were significantly higher than expected (1.27 and 1.21, respectively). Fetal sex determination methods became available in the latter half of the 1980s, and are widely accessible today in China, although the government has outlawed them. Many couples find ways through the "back door" to learn the sex of their unborn child, and abortion is an accepted form of birth control in China. Thus, an abortion following an ultrasound examination is unlikely to be challenged. Furthermore, data from the survey suggest that in more recent years, couples' average desired family size has declined; this decline probably contributed to the high sex ratios at lower parities observed in 1987–1993.

Our results are generally consistent with national and provincial-level data from

**Table 2. Sex ratio at birth, by family size, according to parity**

Family size	No. of families	Parity				
		1	2	3	4	5
1	1,008	1.58***	na	na	na	na
2	2,213	1.68***	1.79***	na	na	na
3	1,484	0.95*	0.87***	1.73***	na	na
4	703	0.60***	0.60***	0.76***	1.69***	na
5	371	0.47***	0.44***	0.42***	0.53***	1.32*

\*Significantly different from expected ratio of 1.06 at  $p < .05$ . \*\*\*Significantly different from expected ratio of 1.06 at  $p < .001$ . Notes: Excludes 566 births with incomplete information on parity. na=not applicable.

surveys in the 1980s and 1990s.<sup>24</sup> The exception is that the overall ratio of 1.18 we found for Anhui prior to 1980 is significantly higher than the ratio of 1.07 reported for all of China during that period.<sup>25</sup>

The sex ratio for last-born children was high (1.32–1.79) regardless of family size (Table 2). By contrast, for families with three children, the sex ratio was slightly less than one for the first two children; for families with four or five children, the sex ratios were even lower before the last child. This illustrates that families with many daughters continue to have children until a son is born and then end childbearing, a phenomenon that has been attributed to the government control of family planning.<sup>26</sup> An analysis of Hebei and Shaanxi provinces has found a similar pattern.<sup>27</sup>

We also examined sex ratios for the last child by both family size and sex of prior children. The sex ratio for only children (1.58) was significantly higher than expected (Table 3), suggesting either that couples exert great effort to have their first child be a boy or that they are reluctant to report the birth if the first child is a girl. However, while the sex ratio for the last child was exceptionally high among couples with a total of two or three children when the prior children were girls (3.94 and 3.79, respectively), it was not significantly elevated if the prior children were all boys.

The sex ratios for two- and three-child families presented in Table 3 are higher than those reported from a 1990 survey in Anhui.<sup>28</sup> However, the 1990 data were based on women who may have gone on to have more children. When we included couples who had additional children, we also found lower sex ratios (not shown).

**Treatment of Children**

Overall, girls were breastfed for a significantly shorter period than boys, a practice that has also been documented in other studies.<sup>29</sup> Since women stop breastfeeding when they become pregnant, this finding may be because the women in our sample tended to become pregnant sooner after

the birth of a girl than after the birth of a boy.

The difference in breastfeeding duration between girls and boys increased with parity. For firstborn children, boys were breastfed for significantly longer than were girls, but the difference in the median durations was only one month (15.5 vs. 14.5).

However, girls with only an older sister were breastfed for a significantly shorter time (14.9 months) than boys or girls with only an older brother or than boys with only an older sister (18.2–18.5 months). The greatest difference in the duration of breastfeeding was for third-born children: Girls with two older sisters were breastfed for 14.9 months, whereas boys with two older brothers were breastfed for 23.9 months. Third-born children with a brother and sister were breastfed for 18.8 months.

The mean duration of breastfeeding for girls with one older sister and no brothers (15.7 months) was very similar to that for girls with only two older sisters (16.3). The duration of breastfeeding in families with two or three boys and no girls was not significantly different from that in two- or three-child families with both boys and girls.

Firstborn children who were delivered in hospitals had high sex ratios before 1980 (1.33) and in 1987–1993 (1.32), but not in 1980–1986 (1.02). The sex ratio also was high for firstborn children delivered at home before 1980 and in 1987–1993, and ratios among infants delivered at home were not significantly different from those of infants born at a hospital. This finding contradicts the notion that Chinese couples who know the sex of their unborn child seek hospital care for the delivery of boys, but not girls. However, it may also indicate that girls born at home are underreported.

During 1980–1986, the sex ratio for third-born infants delivered at home was significantly higher than expected (1.31). Couples who had a third child during this period of tight family planning control probably did not have a permit and delivered clandestinely.

**Waiting Time to Next Birth**

Couples whose first child was a girl were significantly more likely to have a second child, and were likely to have their second child sooner, than couples whose first child was a boy (Table 4). Couples with two girls were significantly more likely to have a third child than were couples with

two boys or a boy and a girl. For instance, 75% of those with two girls had a third child within 44 months after the previous birth. By contrast, 25% of couples with two boys had a third child within 34 months after the second, but fewer than 50% had a third birth. Thus, the sex of a couple's children apparently affects subsequent childbearing. Furthermore, there is no evidence of a desire to have at least one daughter, to balance out the sex composition, because couples with two boys appeared to be less likely to have a third child than were couples with a boy and a girl, although the difference was not statistically significant.

Before 1980, families with one boy did not differ from those with one girl with respect to the interval between first and second births (Figure 1). However, in 1980–1986 and 1987–1993, couples with one girl had a second child in a significantly shorter time than couples with one boy. For example, in both periods, 75% of couples with one girl had a second child after three years, whereas 75% of those with one boy had a second child only after more than four years.

For third-born children, the difference in waiting time was even more pronounced and was significant for all three periods. After 1980, couples with two girls waited substantially less time to have a third child than did couples with either two boys or a boy and a girl. For example, in 1980–1986 and 1987–1993, at least 75% of those with two daughters had a third child within four years after the previous birth, compared with 25% or fewer of those with two sons. In fact, the proportion having a third child was not significantly different between couples with two boys and couples with a boy and a girl, suggesting that couples do not make a particular effort to have a girl once they have had a boy. Couples with larger families have a higher prevalence of girls at low parities, reflecting the

**Table 3. Sex ratio for last-born children, by number and sex of prior children**

Prior children	No. of births	Sex ratio
<b>None</b>	1,008	1.58*
<b>One</b>		
Male	1,388	1.21
Female	825	3.94***
<b>Two</b>		
Both male	306	1.22
Both female	388	3.79***
One male, one female	614	1.29*

\*Significantly different from expected ratio of 1.06 at  $p < .05$ . \*\*\*Significantly different from expected ratio of 1.06 at  $p < .001$ . Notes: Excludes 176 births at parity three with incomplete information on the sex of the prior children.

pattern to continue childbearing to obtain a son. The general decline in fertility is reflected in the finding that in 1987–1993, couples with two boys were very unlikely to have a third child.

Contraceptive behavior is associated with the sex of previous children. Couples are more likely to use a method if they have had a son than if they have not; the difference in sterilization rates by the sex of previous children and the time period is particularly striking. In 1980–1986, 41% of couples with two boys and 32% of couples with a boy and a girl were sterilized, compared with 1% of couples with two girls. In 1987–1993, the proportions were 73%, 74% and 31%, respectively.

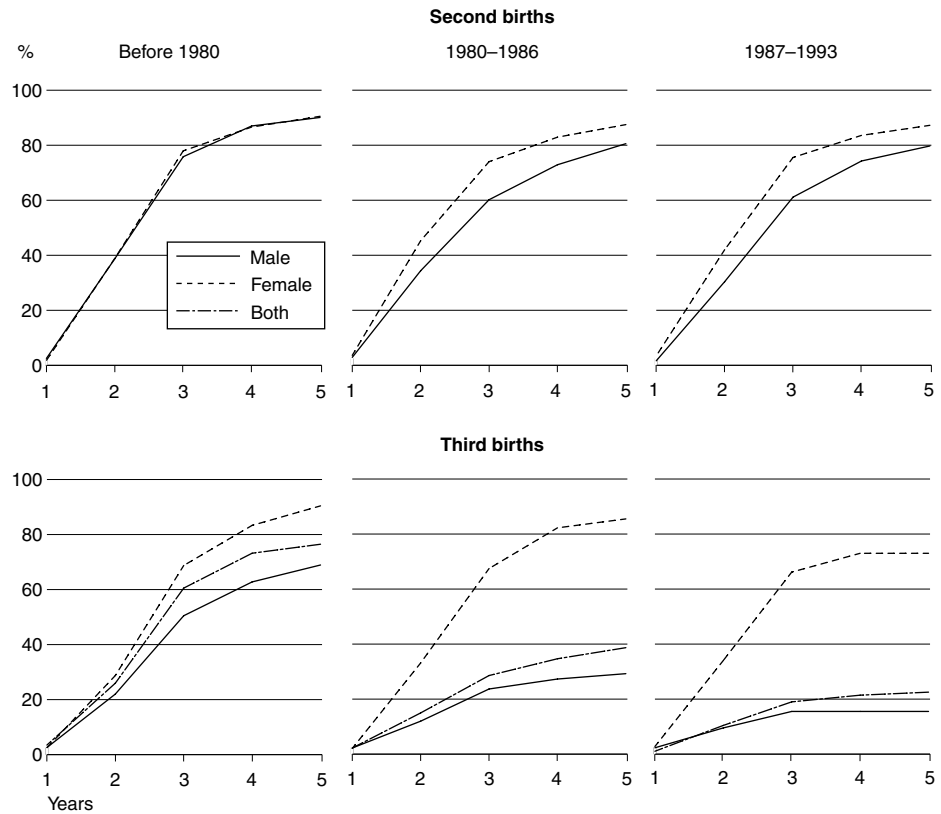
### Multivariate Analysis

We used multivariate analysis to estimate the net risk of having a second or third birth, controlling for the sex of prior children, time period of the previous delivery, interaction between these two variables, mother's age at the birth of the previous child, mother's level of education and township.\* The interaction between the time period and the sex of prior children was a significant factor (Table 5, page 76). Thus, the risk of having a second or third birth increased over time for couples who had daughters but no sons. For couples who had both a son and a daughter, the change in risk over time was not statistically significant.

The likelihood of a second birth did not differ according to the sex of the first child before 1980 (relative risk, 1.03). However, it was higher among couples with a girl than among couples with a boy in 1980–1986 (1.29) and 1987–1993 (1.42).† This pattern reflects the stricter childbearing policy of the 1980s, the general decline in desired family size and the fact that couples are eager to have a son.

For third births, the relative risk is even higher. Before 1980, couples with two girls were 1.65 times as likely to have a third child as were those with two boys. In

**Figure 1. Percentage of couples who had second and third births, by years since previous birth, according to sex of prior children and period**



1980–1986, this risk was 4.89, and in 1987–1993, it was 6.29. Compared with couples who had two boys, those with a son and a daughter were 1.27 times as likely to have a third child before 1980, 1.48 times as likely in 1980–1986 and 1.18 times as likely in 1987–1993. Since none of these relative risks is less than one, there is no evidence of a preference for a daughter and a son.

In the multivariate analysis, women in their early 20s had a significantly elevated risk of having a second birth, and those aged 30 and older had a significantly reduced risk. Women are highly fecund in their early 20s, and Chinese women have most of their children in their 20s. Mother's level of education was not significant for the risk of second births, but was for third births. The majority of women surveyed were illiterate, with fewer than 10% having completed more than a primary schooling (5–6 years). As expected, women with more than a primary school education had a lower risk of a third birth than illiterate women (0.79).

Couples in the Huaining township were significantly more likely to have a second child than were those in any of the Zongyang townships.

### Discussion and Conclusion

Our findings show that son preference is common in Anhui. Couples do not merely control the number of children they have, but they also control, or attempt to control, the sex composition of their children. That is, couples who have one or two girls are significantly more likely to have another child, and they wait a shorter time to have the subsequent child, than couples with only boys or with both a boy and a girl.

From the data available, it is not feasible to determine whether high sex ratios at birth are due to underreporting of the birth of girls or to sex-selective abortions. Induced abortions are performed frequently in China because of contraceptive "failures." However, examinations of aborted

\*Duration of breastfeeding and the use of contraceptives were also significantly associated with the risk of a subsequent birth in univariate analyses. However, since duration of breastfeeding is significantly associated with the sex composition of a couple's children, and contraceptives might be used to influence one's childbearing according to the sex composition of prior children, these variables were excluded from the multivariate analyses.

†These risks are calculated by multiplying the relative risk for couples with all girls by the risk for couples with all girls in the specific time period. Thus, for example, for 1980–1986, the risk that couples with one girl will have a second child is  $1.03 \times 1.29$ , or 1.29.

**Table 4. Average number of months until next birth, by number and sex of prior children, according to percentage of couples having a next birth**

Prior children	25%	50%	75%
<b>One</b>			
Male	22	29	46
Female	21	26	37
<b>Two</b>			
Both male	34	na	na
Both female	23	29	44
One male, one female	30	104	na

Note: na=not applicable.

**Table 5. Relative risk of having a second or third birth, by background characteristics**

Characteristic	Second birth		Third birth	
	Relative risk	N	Relative risk	N
<b>Sex of prior children</b>				
All male	1.00	2,668	1.00	1,230
All female	1.03	3,111	1.65***	995
Both	na	na	1.27**	2,226
<b>Period</b>				
<1980	1.00	1,592	1.00	1,045
1980–1986	0.81**	1,922	0.35	1,425
1987–1993	0.69***	2,265	0.24	1,981
<b>Interaction of sex of prior children and period</b>				
<b>Male</b>				
<1980	1.00	723	1.00	240
1980–1986	0.81**	948	0.35***	342
1987–1993	0.69***	997	0.24***	413
<b>Female</b>				
<1980	1.03	869	1.65***	805
1980–1986	1.25**	974	2.97***	1,083
1987–1993	1.37***	1,268	3.82***	1,568
<b>Both</b>				
<1980	na	na	1.27**	554
1980–1986	na	na	1.17	702
1987–1993	na	na	0.93	969
<b>Mother's age at previous birth</b>				
<20	1.00	662	1.00	84
20–24	1.10*	3,998	1.13	2,045
25–29	1.04	1,066	0.93	2,158
≥30	0.40***	53	0.71	164
<b>Mother's education (yrs.)</b>				
<5	na	3,676	1.00	3,022
5–6	ns	1,533	0.93	1,032
7–9	ns	570	0.79*	397
<b>Township</b>				
4	1.00	1,128	1.00	833
3	0.68***	821	0.86	619
2	0.80***	1,093	0.92	812
1	0.81***	2,737	1.12	2,187

\*p<.05. \*\*p<.01. \*\*\*p<.001. Notes: Township 4 is in Huaining; townships 1–3 are in Zongyang. ns=not significant. na=not applicable.

fetuses have shown that women with no sons and one, two or three daughters in particular abort many female fetuses.<sup>30</sup> The use of ultrasound has made sex-selective abortions more accessible since the 1980s, even to the rural population of China.<sup>31</sup>

Couples in Anhui not only attempt to assure that they have male offspring, but appear to provide differential treatment to boys and girls. Girls were breastfed for shorter periods than boys, and girls with one or two older sisters were breastfed for particularly short periods compared with boys who had one or two older brothers or sisters. The reason for this difference may be that mothers of baby girls are eager to conceive another child and therefore stop breastfeeding earlier. Alternately, women may, not necessarily consciously, nurture their boys more than their girls (perhaps because they receive more positive attention from family members and the community on the birth of a

boy), and as a part of their nurturing may breastfeed boys longer.

Overall, between the mid-1970s and the early 1990s, the ratio of boy infant deaths to girl infant deaths was 1.13, which is significantly lower than the expected ratio of 1.30. This might suggest that infant girls are being neglected compared with infant boys, but additional analysis is needed. In all of China, the ratio of infant boy deaths to girl deaths was 1.14 in the 1980s.<sup>32</sup> Thus, if this ratio is a valid indicator of neglect, the neglect of girls in Anhui is identical to the national average.

Efforts to assure male offspring were intensified from the 1980s through 1993. In 1980–1986, the sex ratio for all births, and for first, second and third or higher order births, did not differ significantly from 1.06, suggesting that individuals did not have access to the technology or had little freedom to use the technology to influence the sex of their unborn children. For the period 1987–1993, the sex ratio for all births was significantly higher than expected. An analysis of data through 1989 showed a similar pattern for all of China.<sup>33</sup>

In 1989, the Chinese Ministry of Health issued “an urgent notice on strictly forbidding use of medical technology to perform prenatal sex determination,” which reemphasized previous regulations.<sup>34</sup> Nevertheless, our data suggest that such behavior may be continuing. Likewise, in 1990 and again in 1994, Korea's Ministry of Health and Social Affairs strengthened the penalty for physicians who perform sex-selective tests there,<sup>35</sup> yet such activities probably continue in Korea also.<sup>36</sup>

The failure to prevent sex-selective abortions in Korea and China is interesting because both countries have had a very rapid decline in fertility since the 1960s; both have a long tradition of adherence to the Confucian ideology, with a strong emphasis on male offspring; and both have a population policy that encourages small families. The Korean government, in contrast to the Chinese, has never tried to enforce its population policy, and Korean couples have voluntarily limited fertility to below replacement levels since 1983.<sup>37</sup>

Our results reflect the situation in one province in China, which is characterized by social norms, attitudes and lifestyles that are typical of rural, farming areas of other provinces populated predominantly by Han. Therefore, the implications of strong son preference depicted here are issues for many rural parts of the country. If a fundamental change is to occur, the general public's perceptions and attitudes must change first.

Vital statistics from Beijing and Shanghai suggest that sex ratios at birth have declined in recent years to around the expected level (for example, 1.08 and 1.05, respectively, in 1990).<sup>38</sup> Residents of large cities such as Beijing and Shanghai do not indicate a strong son preference, according to data from the One-Per-Thousand National Sample Survey.<sup>39</sup> However, although this may reflect the true preference, it is also an indication of the local effect of the one-child policy and the influence of local family planning officials.

Perhaps the new generation of child-bearing adults has left the old attitudes of son preference behind. If the big cities are trendsetters for all of China (including rural areas), then concerns about son preference may soon be part of history.

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## Resumen

**Contexto:** Las parejas chinas, particularmente las que viven en áreas rurales, históricamente han tenido una fuerte preferencia por los hijos varones. Esta preferencia puede afectar la conducta reproductiva de las parejas y el tratamiento que dan a las hijas versus los hijos.

**Métodos:** En 1993 se realizó una encuesta comunitaria de hogares en dos condados rurales de la provincia de Anhui. Las respuestas de 5.779 mujeres en edad reproductiva que habían tenido al menos un parto, arrojaron información sobre la proporción de nacimientos según sexo, la duración de la lactancia materna y los patrones de maternidad.

**Resultados:** La proporción general de nacimientos por sexo fue de 1,18 nacimientos de varones por cada mujer nacida, significativamente más alta que la proporción esperada de 1,06; para el primero, segundo y tercero u otros nacimientos posteriores, las proporciones fueron de 1,17, 1,12 y 1,16, respectivamente. La proporción de nacimientos según sexo fue baja en 1980–1986, período en que se reforzó la política nacional de tener sólo un hijo, y fue significativamente elevada antes de 1980 (1,18) y entre 1987 y 1993 (1,22). Los hijos nacidos últimos, no importa el tamaño de la familia, presentaron la proporción más alta de nacimientos según sexo. Las niñas recibieron lactancia materna por un período significativamente más corto que los niños, particularmente si habían tenido una hermana mayor y ningún hermano. Desde 1980, las parejas con una hija solamente se han mostrado ligeramente más proclives a tener un segundo hijo que los que ya tenían un solo hijo; las parejas con dos hijas se han mostrado 5–6 veces tendentes que las parejas con dos hijos varones a tener un tercero. El intervalo entre embarazos es más corto cuando el embarazo anterior resultó en una niña que cuando era un niño.

**Conclusiones:** Las parejas en Anhui controlan el tamaño de sus familias y tratan de

controlar la composición de sexos. Si la fecundidad sigue disminuyendo en China y la preferencia por los hijos continúa sin cambiar, se puede intensificar la discriminación en contra de las niñas.

## Résumé

**Contexte:** En Chine, dans les milieux ruraux surtout, les couples ont toujours fait preuve d'une nette préférence pour les enfants de sexe masculin. Cette préférence peut affecter le comportement procréateur des ménages et le traitement qu'ils réservent aux enfants de chaque sexe.

**Méthodes:** Une enquête communautaire de ménages a été menée dans deux comtés ruraux de la province d'Anhui en 1993. Les réponses obtenues de 5.779 femmes en âge de procréer et qui avaient eu au moins un enfant ont fourni les données relatives aux rapports de masculinité, à la durée de l'allaitement et aux tendances procréatrices.

**Résultats:** Le rapport global de masculinité a été calculé à 1,18 naissance de garçon par naissance de fillette, soit un rapport largement supérieur à celui attendu de 1,06. Au premier rang de naissance, au deuxième et au troisième ou supérieur, les rapports étaient de 1,17, 1,12 et 1,16, respectivement. Plutôt faible de 1980 à 1986, pendant la période d'application stricte de la politique nationale de l'enfant unique, le rapport se révèle nettement plus élevé avant 1980 (1,18) et pendant les années 1987 à 1993 (1,22). Le rapport le plus élevé apparaît, indépendamment du nombre d'enfants par famille, au niveau des derniers nés. L'allaitement des fillettes s'avère nettement plus court que celui des garçons, surtout en présence d'une sœur aînée et en l'absence de frères. Depuis 1980, les parents de filles uniques se sont montrés légèrement plus susceptibles d'avoir un deuxième enfant que ceux de fils uniques, et ceux de deux fillettes, 5 à 6 fois plus susceptibles d'avoir un troisième enfant que les parents de deux garçons. L'intervalle entre les grossesses est apparu moindre lorsque l'enfant précédent était une fille plutôt qu'un garçon.

**Conclusion:** Dans la province d'Anhui, les couples contrôlent leur nombre d'enfants et s'efforcent de contrôler la composition sexuelle de leur famille. Si la fécondité continue à décliner en Chine et que la préférence des enfants de sexe masculin persiste, la discrimination à l'encontre des filles risque de s'intensifier.