

Extended Abstract

**Childcare in the Context of One-Child Policy in China:
Effects of the Number and Gender of Children in the Household**

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The well-known one-child policy in the People's Republic of China has been implemented since the late 1970s. Its consequences on social and economic development, population structure, elderly care, and child and family wellbeing have been discussed widely in the media and literature. In contrast to this drastic policy change, traditionally there has always been a strong preference for many children, particularly sons, in the Chinese society. China's present low birth rate is at least partially state-enforced through the one-child policy. Couples have limited control over their own family building and many couples have fewer children or certain gender of children than that they have preferred. Therefore, one of the issues regarding child wellbeing might be whether the number and gender of children in the household matters. For example, childcare arrangement and investment are important decisions that parents make and they often have both short-term and long-term impacts on child development and wellbeing.

This study focuses on the effects of number and gender of children in the household on childcare in China. Specifically, do children with siblings receive less care on average than the only children in terms of quality and quantity? Do only girls receive less care than only boys? As a background of the study, this paper first introduces the one-child policy and the preference for many children, particularly sons, in China. The second section critically reviews findings in the literature related to the effects of gender and number of children on childcare. The third section specifies the data and methods employed for this study. The fourth section presents the results of the analysis. The final section summarizes the major findings of this study and discusses its limitations and implications for social policy making and future research.

China's one-child policy, which mandates couples to control their fertilities, has been implemented for more than 25 years. In contrast, the traditional childrearing values—the preference for many children, particularly sons—have existed for thousands years in China and

still prevail among many Chinese. The conflicts between the two institutions have made it a critical issue whether the only children have been better off compared to their peers with siblings, and whether girls have been discriminated in the family. To capture the differences of child wellbeing, one important indicator is childcare. Specifically, it is critical to examine whether the number and gender of children in the household have significant effects on childcare arrangement, time, and expenditure in the context of the coexistence of these two institutions.

In the literature, few studies have directly explored the effects of the number and gender of children on childcare in China. Among the available studies, many findings were inconsistent and some studies showed critical problems of sampling and research methods. Specifically, the number of children in the household has been found to be associated with childcare expenditure, arrangement, and parental involvement. Findings regarding the effects of child gender on childcare are inconsistent.

This study uses the China Health and Nutrition Survey (CHNS) 2000 wave data. The newly released 2000 wave data include 4,064 households and 15,648 individuals in the original dataset after merging 15 sub-datasets at household and individual levels. Among them, 643 households have children of 6 years old and younger, with totally 3,371 household members and 795 children of age 6 and younger. The final sample is limited to those 795 children.

There are three dependent variables in this study, including childcare arrangement, time, and expenditure. Results show that among children of age 6 and younger, 28% received parental care only, 6% received grandparental care only, 51% received parent-grandparent joint care, and 14% received center-based care. The average parental care hours were 6.14 per week. On the average, families spent 62 yuan per child on child care last month.

The independent variables of this study include the characteristics of children, parents, household, and community. One of the key independent variables is the gender of child. About 55% of children in this sample were boys. The average age of these children was 3.41. On the average, children in the study had 0.14 young male and 0.11 young female siblings (age 6 and under), and 0.10 old male and 0.21 old female sibling (age between 6 and 17). In terms of one-child policy, about 37% of children lived in communities allowing couples to have a second child, but only 11% in communities allowing having more than two children.

The analysis includes three models. Model 1 included the characteristics of children: gender, age, and number of children in the household measured by number and gender of both young siblings (age 6 and younger) and old siblings (age between 6 and 17). Model 2 included the characteristics of parents and the household: parents' marital status, age, education, and employment status, total monthly household income, and the presence of grandparents and other adults. Model 3 included the characteristics of the community: urban or rural residency, the availability of childcare facility, and one-child policy in the localities—whether allowing a second child or more than two children.

The first dependent variable—childcare arrangement—includes four categories, and accordingly, multinomial logistic regression was used for analysis. The other two dependent variables—parental care hours and childcare expenditure—are continuous variables, and thus ordinary least squares (OLS) and tobit regressions were used in the analysis. In addition, the analysis used multiple partial F tests to examine the overall effects of the gender and number of children in household on childcare.

Multiple partial F test results showed that the overall effects of number and gender of children in the household only had statistically significant effects on childcare arrangement in

Model 1 ($p < 0.10$ for the gender of the focal child and $p < 0.001$ for number of siblings) but not in Models 2 and 3 ($p > 0.10$). Compared to parent-grandparent joint care arrangement, in Model 1, boys were less likely to receive grandparental care only (by 49%) and center-based care (by 32%) than girls, but these relationships were not statistically significant in Models 2 and 3 when the characteristics of parents, household, and community were added in. There was no other significant difference of childcare arrangement between boys and girls. The number of young male siblings showed significant effects, and children with one young male sibling were 66% (in Model 3) less likely to receive center-based care. Children in communities where the one-child policy allowed a second child were 55% less likely to receive center-based care but about 2.77 times more likely to receive grandparental care only, while those in communities allowing two more children were 60% less likely to receive parental care only arrangement. These findings were robust when using different types of childcare arrangement as the reference category. To further examine whether childcare arrangement was different for only boys and only girls, the analysis restricted the sample to the only children ($N = 465$, 59% of all children). The results showed that there was no significant difference in childcare arrangement between only boys and only girls, indicating that the effect of the number of children might dominate that of gender. Most of other findings were consistent with those from the full sample.

Multiple partial F tests showed that, overall, neither the gender nor the number of children in the household had statistically significant effects on parental care hours. There was only one variable related to the characteristics of children—age of child—showing significant effect on parental care hours. One year older of children received about 0.6 hours less of parental care per week. Among one-child families, it was found that only boys received less parental care than only girls, which was statistically significant in Model 3. Interestingly, however, most other

findings in the full sample, such as child's age, mother's education, father's employment status, the presence of grandparent in the household, and the availability of childcare facility in the community, were not statistically significant anymore in the sample of only children. This might imply that the variable of one-child itself dominated the effect patterns of parental care hours so strong that many other variables could not demonstrate significant effects.

Multiple partial F tests indicated that the number and gender of siblings overall had significant effects on childcare expenditure ($p < 0.001$ in Models 1 and 2 and $p < 0.05$ in Model 3), while the gender of the focal child was not statistically significant. Childcare expenditure was negatively related to the number of siblings of the focal child, with the number of old siblings having stronger and consistent effects compared to that of young siblings. Specifically, children with one additional old male sibling received 27-41 yuan less per month on childcare expenditure, while those with one additional old female sibling received 23-31 yuan less. Although in Model 1 children with young siblings received less (19-51 yuan for one additional young male sibling and 35 yuan for one additional young female sibling), the relationship was not statistically significant for young female siblings in Models 2 and 3. Older children received more (7-11 yuan per month for one year older) expenditure on childcare. At the community level, children in communities allowing couples to have a second child received 28 yuan less per month on childcare expenditure than those in communities where a second child was not allowed. The results among the only children presented similar results as those from the full sample.

This study found that the gender of other children in the household had some effects on the childcare of the focal child. For example, compared to the arrangement of parent care only, children with young (age 6 and younger) male siblings were less likely to receive center-based care. However, as a whole, this study did not demonstrate that the gender of children, no matter

only children or those with siblings, had significant effects on childcare arrangement, parental care hours, or childcare expenditure. Although there might be some unobserved variables confounding the relationships, the findings of this study might be the evidence that boys were not more advantaged in childcare than girls, which, apparently, is inconsistent with the traditional childrearing values of son preference. It is possible that son preference either is not as strong as people usually believe especially in the recent context of one-child policy, or does not have significant effects on childcare arrangement, parental care time, and childcare expenditure. This is the case at least among families with children of 6 and younger.

In contrast, the number of siblings was found to be negatively related to the possibilities of receiving center-based care and the amount of childcare expenditure of the focal child in the study. One implication is that, compared to those with siblings, the only children were more likely to receive center-based care and more on childcare expenditure, and thus were overall better off since center-based care has been regarded as one of the best childcare arrangements in the context of China. This may also partially explain why boys did not appear to receive “better” childcare than girls. As demonstrated in the analyses of childcare among the only children, it is possible that the effect of whether a child is the only child in the household dominates that of the gender of child. With the presence of one-child policy, the impact of traditional son preference values fades greatly among parents and the only children, no matter girls or boys, receive better care than those with siblings.

There are several limitations in this study. First, although this study made efforts in controlling for as many variables related to the characteristics of children, parents, household, and community as possible, some unobserved factors might play important roles in confounding the relationships between childcare and the gender and number of children. Second, the limited

information of some key variables in the data restricted further analysis. Third, the sampling methods of the survey might limit the generalization of the findings.

Despite the limitations of this study, it provides important implications for policy making and research on childcare in the context of one-child policy and the preference of many children, particularly sons, in China. It uses a newly released, better nationally representative sample and controlled for more unobserved variables than most previous studies, and thus the findings may be more updated and reliable. The overall findings show that boys were not more advantaged in childcare than girls; the only children received better care than those with siblings; and children with fewer siblings received better care than those with more siblings. However, these findings do not support that the one-child policy was better than a multiple-children policy since the study also found that being allowed for a second child by the one-child policy tended to make children receive lower quality of childcare. It is possible that parents tend to provide better care for their only children, regardless of their gender.

Accordingly, given that children with siblings tend to receive less quality of childcare, policy makers should make efforts to help them receive the same quality and quantity of services and benefits as the only children. The current practice for families that violate the one-child policy has been primarily economic penalties, which might be harmful to the wellbeing of children in these families. The policies may make efforts to limit the number of children that couples could have, but children born in these families should have the equal opportunities to receive the same childcare as their peers of the only children so that they will not be left behind. As to the implication for research, further studies should manage to eliminate the limitations in sampling and measurement of this study, as mentioned above, and draw a clearer picture regarding the effects of the gender and number of children on childcare.