

Son preference in India is a well-documented phenomenon, and its implications for skewed sex ratios, female feticide and higher child mortality rates for girls have drawn research and policy attention. Less well researched are the underlying determinants of son preference as an ideology and its implications for living girls. Rohini Pande, Sc.D., at the International Center for Research on Women (ICRW) has used data from the National Family Health Survey (NFHS-I) to address these three important questions:

- (I) What does a culture of son preference mean for the health and care of girls who are born and survive infancy?
- (2) How strong is the ideology of son preference in India?
- (3) What factors exacerbate or diminish its strength?

This brief highlights the findings from ICRW's study addressing these questions. It also outlines the important implications of these findings for the policy and research agenda on gender discrimination against girls.



### **KEY FINDINGS**

- In India, son preference is strong but not universal. Many mothers want a balance of sons and daughters, and so, at least some girls are wanted.
- (2) Mothers' education is the single most significant factor in reducing son preference. Access to media also significantly reduces son preference.
- (3) Wealth and economic development do not reduce son preference.
- (4) Living girls face discrimination but all girls are not equally vulnerable: Girls with older sisters are most likely to suffer in terms of health and nutrition.

### **BACKGROUND**

For more than 100 years, the Indian census has shown a marked gap between the number of boys and girls, men and women. This gap, which has nationwide implications, is the result of decisions made at the most local level—the family. Common wisdom is that the preference for sons is motivated by economic, religious, social and emotional desires and norms that favor males and make females less desirable: Parents expect sons—but not daughters—to provide financial and emotional care, especially in their old age; sons add to family wealth and property while daughters drain it through dowries; sons continue the family lineage while daughters are married away to another household; sons perform important religious roles; and sons defend or exercise the family's power while daughters have to be defended and protected, creating a perceived burden on the household.

These issues present researchers with several questions that have implications for public policies and programs. Since a preference for sons is not equally strong in every part of India, nor among every family, what specific factors contribute to it? In particular, how do factors that signal development and modernization influence this preference—do parental preferences become more gender egalitarian or does development offer families more efficient ways to implement unchanged gender-biased preferences? A question with relevance to millions of living girls in India is how they are treated by their families given the culture of strong son preference. Do all living daughters suffer discrimination as a result of a family's desire to sustain sons or are some more vulnerable than others? The research summary that follows provides some answers to these questions and points the way to the next set of issues that needs to be studied to address the problem of gender discrimination caused by son preference in India.



### **DATA AND METHODS**

In this study, ICRW researchers analyzed a rural sample of 50,136 ever-married women and their surviving children, younger than 5, from the National Family Health Survey, India, 1992-93. The two key outcomes of interests were:

- (1) Mothers' gender preference for their family composition, measured by women's ideal combination of sons and daughters if they could start their families over; and
- (2) Gender differentials in child health, measured by two variables:
  - (a) Severe stunting (using the World Health Organization standard) as the height-for-age measurement that indicates sustained neglect in a sample of 14,715 children ages 6-47 months; and
  - (b) The level of immunizations among a sample of 25,549 children ages 12-60 months.

To understand what factors affect these outcomes, we conducted multivariate analysis, using ordered logit regressions to analyze son preference and immunization, and logit regression to analyze severe stunting. We examined a number of possible explanatory factors at the individual, household and community levels:

**Individual level:** level of maternal education, whether a mother earns cash, her access to media and (for the health outcomes) the sex of older siblings.

**Household level:** household wealth and family structure (extended family, nuclear family, etc.) as well as caste and religion.

**Community level:** regional-, state- and village-level economic development as measured by access to roads, electricity and health care facilities; and village-level status of women as measured by female literacy and employment outside the home.

Table | Women's Ideal Family Composition

Percent of women who consider 0, 1 or 2+ boys or girls as ideal:

| Ideal Number | Boys  | Girls |
|--------------|-------|-------|
| 0            | 7.1%  | 12.8% |
| I            | 33.1% | 63.9% |
| 2+           | 59.8% | 23.3% |

### Percent of women who want:

| More boys than girls:               | 45.9% |
|-------------------------------------|-------|
| More girls than boys:               | 2.6%  |
| Equal girls and boys/no preference: | 51.5% |

#### **RESULTS**

## I. Son preference is strong but not universal, and some girls are wanted.

When Indian women are asked about the ideal sex composition of their families, it is clear that boys are generally preferred over girls. When asked how many sons they ideally would like, a majority (59.8 percent) want at least two and an additional third of the women (33.1 percent) want one son. But parents do not want only boys. An overwhelming majority (87.2 percent) of the women want at least one daughter as well, although typically not more than one. That son preference is not universal is also clear from the overall balance between boys and girls that women prefer: While 46 percent of women stated that they want more boys than girls, a higher percent, or more than half (54.1 percent), said they want equal numbers of boys and girls, had no specific sex preference or actually preferred girls over boys.

# 2. Wealth and economic development do not reduce son preference, but women's education and media exposure do make a difference.

One might expect that women living in economically more developed areas and those from wealthier families would be less likely to exhibit son preference. However, our data show that neither is the case. Village-level economic development variables show no statistically significant relationship with son preference. Owning traditional sources of wealth—such as land—also does not influence son preference. Finally, wealth in terms of ownership of assets has a modest weakening influence on son preference, but only among the wealthiest. Women in the wealthiest quintile of households show weaker son preference than the poorest, but this is not so for women in any other wealth quintile. These findings are consistent with other research. Recent studies on the growth of sex-selective abortion in India suggest that women and families in wealthier households and communities merely change the way they implement son preference, not the preference itself.

Our study also contributes evidence that son preference has spread across the country. In an analysis using a fixed effects model, we did not observe India's North-South divide that traditionally demarcated areas of weak son preference and greater gender equality (southern states) from those with strong discrimination against girls and women (northern states). Though on average northern states show greater son preference than southern ones, we find significant exceptions to this regional generalization. For instance, the state of Andhra Pradesh in the south and several eastern states have similar or higher levels of son preference than do northern states.

The story is not, however, all gloom. The relationship of son preference to women's education and media exposure shows encouraging results. Our analysis finds that women's education is the single most significant factor in reducing

Table 2

### **Factors Influencing Son Preference**

Selected Coefficients from Ordered Logit Regressions (Positive coefficients indicate that the variable increases son preference while negative coefficients indicate that it reduces son preference.)

| ,                             |          |  |
|-------------------------------|----------|--|
| Variable                      | Coeff.   |  |
| Community Level Development   |          |  |
| Village has roads             | -0.03    |  |
| Village has health facilities | -0.0 I   |  |
| Household Wealth              |          |  |
| Household owns land           | 0.02     |  |
| Household Wealth Quintile     |          |  |
| Compared to Poorest 20%       | 0.00     |  |
| 2nd poorest 20%               | 0.04     |  |
| 3rd (middle) 20%              | 0.01     |  |
| 4th (richest) 20%             | -0.01    |  |
| Richest 20%                   | -0.11**  |  |
| Education                     |          |  |
| Level of Schooling            |          |  |
| Compared to no schooling      | 0.00     |  |
| Primary                       | -0.19*** |  |
| Middle                        | -0.29*** |  |
| Higher                        | -0.59*** |  |
| Village Female Literacy       | -0.53*** |  |
| Media exposure                |          |  |
| Listen/watch radio/TV weekly  | -0.17*** |  |
| Go to cinema monthly          | -0.22*** |  |

<sup>\*\*\* (</sup>P Value .001); \*\* (P value .05)

Coefficients presented on model controlling for all other background factors. For the full regression model, see Pande and Astone, 2007 (forthcoming).

**son preference.** Educated women are less likely to prefer sons over daughters, and highly educated women are especially less likely to do so. As table 2 shows, women's exposure to primary-level schooling reduces son preference; their exposure to secondary-level education or higher is even more profound.

Moreover, **how many** women are educated also matters: The scale or spread of women's education in a given community is important. Table 2 shows that women in villages with higher levels of female literacy are less likely to prefer sons than women in villages where most women are illiterate. This influence of women's education at multiple levels holds when all other factors are controlled, indicating that it is not simply a matter of enhanced economic capacity or opportunity.

Access to media and cinema yields a similar result: Greater exposure to various sources of media is significantly associated with weaker son preference. That this is so, after taking into account education and wealth, suggests that

# Whether parents discriminate against a daughter depends on the sex of her older siblings.

access to "modern" information and ways of life can contribute to making women's preferences more egalitarian.

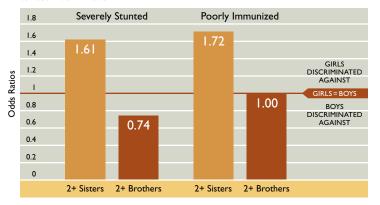
Current research in India also shows that better educated women from urban, wealthy environments are most likely to practice sex-selective abortion. The two results are not necessarily contradictory. While fewer educated women may prefer sons, those who do also have greater access to means, such as sex-selective abortion, to achieve their desired family size—which tends to be smaller—and sex composition.

## 3. Living girls face discrimination but all girls are not equally vulnerable.

That son preference leads to adverse sex ratios and excess female child mortality is well documented. But what happens to girls who are born and who survive? Our analysis shows that during early childhood, girls suffer health and nutritional discrimination. By age 5, 6 percent more girls than boys are severely stunted, and 13 percent more girls than boys are unvaccinated. Not all girls, however, are equally vulnerable to these forms of discrimination. Rather, whether parents discriminate against a daughter depends on the sex of her older siblings. These results are consistent with the finding that at least some daughters are desired even in a culture where many are not.

Specifically, **if parents** *already have sons*, **they are more likely to nurture a daughter** than if she is at the end of a line of only daughters. Girls with two or more brothers and no older sisters are significantly less likely to be stunted than a boy with only brothers. But if a family already has a daughter, they are less likely to nurture a second. Girls with two or more older sisters are the most neglected: They have the highest likelihood of being stunted and are much less likely to be fully immunized than boys with two or more sisters.

Table 3 **Health Discrimination: Girls Relative to Boys**Odds ratios of more than 1 indicate that girls are more likely than boys to face discrimination.



### **CONCLUSIONS AND IMPLICATIONS**

One of the biggest concerns in India with regard to son preference is that decades of policy efforts have not achieved positive change. In fact, the worsening sex ratios indicate the situation is deteriorating rather than improving. Our results suggest that the specific focus of the policy aimed at addressing this problem may matter a great deal in whether it is effective. Today the focus of most Indian government policy related to son preference has been to reduce sex-

selective abortion. Our results indicate that it also may be important to address the underlying parental motivation than just the means through which it is implemented. One important source for policy inspiration on this issue would be to better understand the motivations and social norms of the significant proportions of women and communities in India who do not express a son preference.



Our results also suggest that while India's worsening sex ratios continue to require policy attention, it is equally important to focus on what is happening to surviving girls. While feticide and excess female mortality are important manifestations of son preference, so is health and nutritional discrimination against living girls. While it is important to address the nutritional and health needs of all surviving girls—in fact all children—our results suggest that a specific category of surviving girls is much more vulnerable than the rest—girls with older sisters. They require special attention in nutrition and immunization programs.

Our research and its policy implications raise a number of questions for further research and policy analysis:

- (1) Why do more than half of Indian women not express a preference for sons? What is special about these women and communities, and how can these "positive deviants" be studied as a possible resource for policy design?
- (2) Do worsening sex ratios mean that economic development and increasing wealth in India is resulting in a change in how families implement gender preferences rather than a decrease in the preference itself?
- (3) How can we harness the apparent power of education and media to influence gender preferences and the practice of gender preference either through neglect of living girls or sex-selective abortion?



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