# Effect of Sex Preference on Demand for a Child: A comparative Study of Men and Women in Bangladesh

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Abstract: The paper uses the Bangladesh Demographic and Health Survey 1999-2000 data to examine the extent to which sex preferences have constrained the success of family planning program. The findings of the study indicate that the fertility behavior of both men and women is influenced by a strong desire to acquire a minimum number of surviving sons in the family. Again, desire to acquire a daughter is significantly higher among women than men those who have both sons. Since women exhibit greater demand for sons as well as a daugher, measures related to improve the status of women should be taken up to eliminate the sex preference prevailing in Bangladesh.

# Introduction

The preference of couples worldwide for a male or female child is an age-old phenomenon. As in societies of East Asia, North Africa, the Middle East and the other parts of South Asia couples have observed to have a strong preference for sons over daughters (Arnold 1996: Arnold 1997: Cleland, Verral and Vaessen 1983; UN 1981; UN 1985: Williamson 1976) and to accord a low status to women (UN 1995). a number of recent studies (Freedman and Coombs 1974) have documented evidence to show that couples have a decided preference for a particular sex combination of children. Previous studies have founded that a number of cultural, social and economic factors influence the relative benefits and cost of sons and daughters and ultimately parent's gender preferences (Arnold et al, 1995: Bulatao 1981: Espenshade 1977: Friedman, Hechter and Kanazawa 1994: C Vlasoff 1990: M. Vlasoff 1979).

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Son preference is prevalent in many less developed countries particularly in the rural areas where sons are often period as assets for working on the family farm, as providers of security in old age and so on. For example, in many South Asian countries including Bangladesh, there is a strong preference for sons over daughters. Also there is evidence that parents may prefer to complete their families with a daughter (Mannan 1988; Rahman and others 1992) Das (1989) has claimed that the desire for at least one son and one daughter and the tendency to continue childbearing until the desired minimum has been attained would increase the total fertility rate. In fact son preference has been considered to be one of the factors responsible for the high fertility in these countries and thus sex preference has affected the success of family planning program by acting as a significant barrier to rapid fertility decline in these countries particularly in countries which are continuing to experience a fertility transition.

The impact of sex preference on fertility has usually been investigated by examining data relating to the sex composition of living children of couples who do not want any more children, the assumption being that if son preference has an impact on fertility, couples who have sons are much more likely do not want more children and to practice contraception. Such evidence has been documented and empirically demonstrated in several South Asian countries including Bangladesh (Chowdhury and Bairagi 1990).

Most fertility surveys which seek to measure the demand for children and sex preference are confident to currently married women and hence assume that the women's response reflects the preferences of the couple. Thus, it remains unclear whether it is the men or the women who exhibit a greater demand for children particularly male children. Caldwell (1982) argues that in pretransition society's men receive a disproportionate share of their children's love, loyalty and labor while women have to bear the costs of childbearing and rearing and in such social settings, the fertility desire of men will be higher than those of women. In contrast, Cain and his associates (1979) suggest that in South Asian countries where women are economically dependent on their male family members, women will be motivated to want a greater number of children, especially sons, who are perceived as an insurance against the risks of divorce, widowhood and old age.

In an extensive review of the literature on the differences between men's and women's reproductive references in developing countries, Mason and Taj (1987) conclude that although gender differences in fertility desires appear to be small and statistically insignificant whenever differences do exist, there is a tendency for men rather than women, to prefer more sons.

In this article, an attempt is made to examine the impact of sex preferences on fertility behavior and it examines the sex differences in fertility decisions by comparing the extent to which preferences for the sex of children differentially affect the reproductive desires of married men and women. It is hypothesized that the sex composition of living children has a strong impact on the desire for more children among both men and women in Bangladesh.

### **Data and Methods**

The present study utilizes data from Bangladesh Demographic and Health Survey 1999-2000. The BDHS is a part of the worldwide Demographic and Health Surveys (DHS) program and a nationally representative survey that was implemented by Mitra and associates and ORC Macro USA under the authority of the National Institute of Population Research and Training (NIPORT), Bangladesh. The study covered 8782 (6154 rural and 2628 urban, 7655 Muslim and 1127 non-Muslim, 6068 below secondary and 2714 secondary & higher level of education according to the characteristics place of residence, religion and level of education respectively) currently married women aged (10-49) who are able to bear children among 10,544 ever-married women aged (10-49) years. The respondents under sterilization, widowed divorced and declared infecund were not considered in the sample because they are not able to bear any more children. On the contrary, 2323 (1614) rural and 709 urban, 1998 Muslim and 325 non-Muslim, 14.34 below secondary and 889 secondary & higher level of education according to the aforesaid characteristics) currently married men aged 15-60 are considered in the sample for comparison about the attitude toward demand for additional children.

Cross-tabulation of data pertaining to the desire for an additional child with the number of living children and living sons was done separately for men and women and examined to see whether the sex composition of surviving children influences future fertility intentions. Further, in order to compare gender differences in sex

preference, an attempt was also made to quantify these preferences by using the techniques proposed by Chang et al. (1981) and Arnold (1985). The method of Chang et al. can be used to compute son preference and desire-for- balance ratios for respondents with two or more living children. In this article these ratios have computed for respondents with two living children only who desired no more children. The son preference ratio was obtained by dividing the percentage of respondent with two sons who did not demand any more children. The desire-for-balance ratio was computed by dividing the percentage of respondents will two children of the opposite sex who did not demand any more children by the percentage of respondents with two children of the same sex who did not demand any more children.

In order to quantify the overall impact of sex preference for children on fertility the method proposed by Arnold (1945) was used. This method assumes that in the complete absence of sex preferences, at any given parity, all the couples would behave in a similar fashion as those at the same parity who were most satisfied with the current sex composition of their children, that is at the maximum rate within that parity (Arnold 1985; Arnold et al. 1986). this technique is fairly flexible and can be used with a fertility measures. In the present study, it was used to calculate the impact of sex preference of demand for additional children.

**Table-1:** Percentage of men and women respondents not wanting additional children by number of living children and living sons.

No-of living	entami, este cim e variat sociologichi este vis-restori muni	No of Living	Men		Women		Difference
Children		Sons	%	N	%	N	
0		0	3.2%	251	5.2	1126	20
1	o	0	20.0	210	17.8	. 908	
4.		1	24.8	254	20.4	986	
	Sub-Total		22.6	464	19.2	1894	3.4
2		0	51.0	98	48.4	413	2.6
		1 2	81.0 77.3	305 132	80.1 65.0	1094 552	1.9 12.3*
	Sub-Total		75.1	535	69.7	2059	5.4**
3		0	59.0	39	61.1	167	
		1	88.1	134	85.2	559	
1		2 3	94.0 81.6	166 49	93.5 79.4	585 175	
	Sub-Total		86.9	388	85.1	1486	1.8
3+		0	69.6	23	77.6	76	
		1	93.9	114	94.8	406	
		2	99.0	192	96.5	665	
		3	95.2	186	97.7	618	
		3+	96.5	170	96.7	452	
	Sub-Total		95.5	685	95.9	2217	0.4

\* indicates p<0.01, \*\* indicates p<025

Source: BDHS 19999-2000.

**Table-2:** Percentage of men and women respondents having two children not wanting additional children and their differential, son preference ratio, desire for balance ratio under selected background characteristics.

Len Len		ne for barance		Place of residence		Religion		Level of education	
No. of Living Children	No. of Living sons	Sex		Rurual	Urban	Muslims	Non-Muslim	Below Secondary	Secondary and higher
	0	Men	%	50.7	51.9	50.0	57.1	46.	8 58.3
			N	71	27	48	14	62	36
1		Women	%	42.4	62.6	45.2	64.7	42.5	59.3
			N	290	123	345	68	268	145
		Difference		8.3	10.7	4.8	4.3	4.3	1.0
	1	Men	%	81.3	83.2	78.8	95.0	77.4	87.6
		N	N	198	107	245	60	168	137
2		Women	%	778	84.7	77.5	92.8	77.8	841
			N	729	365	913	181	698	396
1		Difference		3.5	1.5	1.3	2.2	0.4	3.5
	2	Men	%	75.3	80.4	73.0	100	70.3	86.2
ì			N	81	51	111	21	74	58
		Women	%	62.6	69.9	62.1	80.7	59.4	75.4
			N	366	186	464	88	357	195
		Difference		12.7**	10.5***	10.9**	19.3*	10.3****	10.8***
Total		Men	%	73.7	77.8	71.8	90.5	69.4	82.7
			N	350	185	440	95	304	231
		Women	%	66.4	76.6	66.9	84.0	65.7	76.9
			N	1385	674	1722	337	1323	736
		Difference		7.3**	1.2	4.9****	6.5****	3.7	5.8****
Son		Men		1.49	1.55	1.46	1.75	1.50	1.48
perference ratio		Women		1.48	1.12	1.37	1.25	1.40	1.27
Desire-for		Men		1.08	1.03	1.08	0.95	1.10	1.02
balance ratio		Women		1.24	1.21	1.25	1.15	1.31	1.12

<sup>\*</sup> indicates p<0.01, \*\* indicates p<0.025, \*\*\* indicates p<0.05, \*\*\*\* indicates p<0.10 **Source :** BDHS 1999-2002

**Table-3:** Effect of sex preference on demand for additional children among men and women under selected background characteristics.

		% respondents having two childen not wanting additional children						
Charact	eristics	Sex	Actual Col.1	In absence of sex preference col.2	Difference col.2- col1			
Overall		Men	75.1	82.0	6.9**			
		Women	69.7	80.1	10.4*			
Types of Place of residence	Rural	Men	73.7	81.3	7.6*			
		Women	66.4	77.8	11.4*			
	Urban	Men	77.8	83.2	5.4			
		Women	76.6	81.7	8.1*			
Religion	Muslim	Men	71.8	78.8	7.0***			
		Women	66.9	77.5	10.5			
	Non- Muslim	Men	90.3	95.0	4.7			
		Women	81.0	92.8	8.8			
Level of education	Below Secondary	Men	69.4	77.47	8.0****			
		Women	65.7	77.8	12.1*			
	Secondary and higher	Men	82.7	87.6	4.9			
		Women	76.9	84.1	7.2*			

<sup>\*</sup> indicates p<0.01,\*\*indicates p<0.025, \*\*\*indicates p<0.05, \*\*\*\*indicates p<0.10.

Source: BDHS 1999-2000.

## Results and Discussion

For a given parity, the combinations of sons and daughters associated with relatively higher percentages of respondents who did not want more children can be interpreted as respondents had achieved their preferred sex composition of children. If son preference were to affect the demand for additional children then, within any parity, those with one or more sons would be more likely not to demand more children as compared to those who did not have any sons. Again, if the desire for a balance sex combination was to affect fertility, respondents who had either all sons or all daughters would be more likely to demand additional children as compared to those who had children of both sexes (Nag 1992; Arnold 1992; Knodel and Prachuabmoh 1976; Malhi 1993). Table 1 presents a distribution of the male and female respondents who did not demand any more children by number of living sons. Table 1 clearly indicates the evidence of son preference both among men women and the percentage of respondents who did not demand additional children increased with number of sirviving sons. It is also observed from the table, the demand for additional children is significantly higher among women than among men at parity two.

We know that the family planning program in Bangladesh still actively advocates a two-child family norm, an examination about demand for children among men and women those currently had two children were used to assess significant difference under selected background characteristics. Table 2 presents that the demand for additional children is significantly higher among rural women than rural men but the difference is not significant among men and women in urban areas. Also demand is significantly higher among Muslim and non-Muslim women than men. From the findings it is also observed that demand is higher among women than men having some secondary and higher level of education and the difference is not significant among men and women having lower level of education. From table 2 it is observed that there is no significant difference about demand for additional children between men and women having both daughters under all the selected background characteristics. Similar conclusion can be drawn about men and women having one son and

one daughter. But the demand for additional children is significantly higher among women than men having two sons under all the selected background characteristics. It may due to the fact that the couples of Bangladesh having all sons prefer a daughter and such daughter preference is mainly deserve by the women in the society. That is at parity two, both men and women who did not have a son wanted a son while the demand for a daughter was deserve by the women than by men those who did not have a daughter. According to son preference ratio we may conclude that among men with two children those who had sons only were approximately 1.5 times as likely as those who had daughters only to want no more children. In comparison, 1.3 times as many married women wanted to terminate childbearing after two children if both children were sons as compared to those who had two daughters. Again, desire-for-halance ratio was higher for women than men and son preference ratio was higher for men than women. Son preference ratio and desire-for-balance ratios are calculated for the selected background characteristics and their differentials are shown in the last two rows in table 2.

The overall impact of sex preferences for children on the demand for additional children was quantified by the technique by Arnold (Arnold 1985). The results outlined in table 3 indicated that when sex preferences were eliminated, the percentage of respondents who did not demand more children increased approximately by 8 percent (6.9 percent for men and 10.4 percent for women). Though the increase is substantial, it is important to note that the rate of increment is higher among women than among men. The results of the present study thus reveal a higher preference for sons among women as compared to men. It is observed that preference for a single daughter is also higher amonng women as compared to men those who had two sons only. It appears that in social settings wheree women are relatively more economically and socially dependent on men, their concern about security is more marked and sons are perceived as an essential future investment. On the contrary, the women those who had two sons only prefer a single daughter, to get help with housework, childcare, mother's companionship and emotional support in old age.

Finally, the findings of the present study clearly indicate that the fertility

behavior of both men and women is influienced by a strong desire to acquire a minimum number of surviving sons in the family. It is also indicated from the findings that the desire to acquire a single daughter is significantly higher among women than men those who had two sons only. In the light of these findings it appears that despite the declining fertility level in Bangladesh, future reductions in fertility may become increasingly more difficult to achieve unless there is a decline in the preference for male children. Moreover, since women exhibit a stronger demand for sons as well as a daughter and the overall impact of sex preferece is higher among women, measures related to improve women's status in society, would be one way of hastening the erosion of prevailing social norms which support and sustain sex preference in the country.

# References:

- Amold F. R. A. Bulatao. C. Buriplakdi. B. I. Chung. I. T. Faweett, T. Iritani, S. I. Iee and T Wu/ (1975). "The value of children: A Cross-national study, Vol. I. Introduction and comparative analysis East-West Center, Honolulu, USA.
- Arnold F. (1985): "Measuring the effect of sex preference on fertility: The case of Korea" Demography, Vol. 22. 280-282.
- Arnold. F. and Z. I iu (1986): "Sex preferences, Fertility and family planning in China" Population and Development Review, Vol. 12 pp. 221-246.
- Arnold. F. (1992): "Sex preference and its demographic and health implications."
- International Family Planning Perspectives, Vol. 18 pp 93-101
- Arnold. F (1996): "Son Preference in South Asia", Paper Presented at the International Union for the Scientific Study of Population (IUSSP) Seminar on Comparative erspectives on Fertility Transition in South Asia, Islamabad, 17-20 December, 1996.
- Arnold, F. (1997): "Gender Preferences for children: Findings From the Demographic and Health Surveys". Paper Prepared for the 23'd General Population Conference of the International Union for the seientific Study of Population (Iussp), Beijing, 11-17 October, 1997
- Asari, G. V. (\*1994), "Determinants of Contraceptive use in Kerala: The case of son/daughter preference". The Journal of Family Welfare, Vol. 40, No. 3, pp, 19-25.
- Bulatao. R. A. (1981): "Values and disvalues of children in successive childhearing decision" Demography, Vol;. 18 pp 1-25
- Cain, M. T. S. R. Khanam and S. Nahar (1979): "Class patriarchy and women's work in Bangladesh". Population and Development Review. Vol. 5 pp 405-437.
- Caldwell. I. C. (1982): "Theory of Fertility Decline". Academic Press. New York.
- Chang M., R. Freedman and T. Sun (1981): "Trends in fertility, family size preferences and family planning practice: Taiwan. 1961-1981" Studies in Family Planning Vol. 12 pp. 211-228.

- Chowdhury, M. K. and R. Bairagi (1990):L "Son preference and fertility in Bangladesh". Population and Development review, Vol. 16 No. 4 pp 749-757.
- Cleland. I. I. Verall and M. Vaessen (1983): "Preferences for the sex of children and their influence on reproductive behavior" World Fertility Survey Comparative Studies No. 27, International Statistical Institute, Voorburg, Netherlands.
- Das. N. (1989): "A model study of the effects of sex preference and mortality on current fertility" in S. N. Singh, M. K. Premi, P. S/. Bhatia and a. Bose (eds.) Population Transition in India, Vol. I, (Delhi, B. R. Publishing Comp.), pp. 327-340.
- Espenshade, T. J. (1977): "The value and cost of children." Population Bulletin, Vol. 32, pp. 3-47.
- Freedman, R. and J. C. Coombs (1974): "Cross-cultural comparison:
  Data on two factors in fertility behavior" Report of a Project of
  the Sub-Committee on Comparative Fertility Analysis of the
  IUSSP, Population Council, New York.
- Friedman, D., M. Hechter and S. Kanazawa (1974): "A theory of the value of children". Demography, Vol. 31, pp 375-401
- Knodel, J. F. and V. Prachuabmoh (1976): Preference for sex of children in Thailand: A comparison of husbands' and wives' attitudes "Studies in family planning, Vol 7 pp 137-143.
- Malhi, P. (1993): "Impact of Women's education on sex prefeence, value and aspirations for children: Evidence From Haryana," Man and Development, Vol. XV. pp. 46 623.
- Malhi, p (1995): "Influence of Gender Preference for Children on Fertility Behavior: A Comparative Study of men and Women in Haryana". The Journal of Family Welfare, Vol. 41. No. 2, pp. 53-60.
- Malhi, P. and J. Jerath (1997): "Is Son Preference Constraint Contraceptive Use in India?" Guru Nanak Jaurnal of Sociology, Vol. 18, No. 2 pp. 77-92.
- Mannan, M. A. (1988): "Preference for son, desire for additional children and contraceptive use in Bangladesh". Bangladesh Development Studies, Vol, 16 No 3, pp. 31-57.

- Mason, K. O. and A. M. TaJ (1987): "Differences between women's and men's reproductive goals in developing countries". Population and Development Review, vol. 13, pp. 611-638.
- Mutharayappa, R., M. K. Choe, F. Arnold and T. K. Roy (1997): "Son Preference and its Effects on Fertility in India". National Family Health Survey Subject Report: Mumbai, IIPS and East-West Center Program on Population, Honolulu, Hawaii, USA.
- Nag. M. (1992)." "Sex Preference in Bangladesh. India, Pakistan and its effects on fertility." Demography India, Vol. 20. pp 163-185
- Rahman, M., J. AKbar, J. F. Phillips and S Becker (1992): "Contraceptive use in Matlab. Bangladesh: the role of gender preference". Studies in Family Planning, Vol. 23, No. 4 pp. 229-242.
- Tabutin, D. and M. Williams (1995): "Excess female child Mortality in the developing world during the 1970s and 1980s". Population Bulletin of the United Nations, Vol 39, pp. 45-78.
- United Nations (1981): "Selected factors affecting fertility and fertility preferences in developing countries". In World Fertility Survey Conference 1980, Vol. 2, World Fertility Survey, Iondon.
- United Nations (1985)." "Fertility preferences: Selected findings from the world fertility survey data." New York." Department of Intermational Economic and Social Affairs, United Nations.
- Vlasoff, M. (1979): "I abour demand and economic utility of children: a case study of rural India, "Population Studies, Vol. 33, pp 415-428.
- Vlasoff M (1990): "The value of sons in and Indian village: How widows see it"? Population Studies Vol. 44 pp. 5-20.
- Williamson, N. F. (1976): "Sons or Daughters; A Cross-cultural Survey of Parental Preferences" Sage Publications,. Beverley Hills, California.