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Sex Preference in Relation to Desire for Additional Children in Urban India

Introduction

DESIRE for children is almost universal even in the modern world. In most societies childless marriage is considered incomplete. Children are not simply outlets for affection, but are obviously essential for achieving the social status of 'father'/'mother' recognised as basic in all communities. In developing countries like India, childlessness is considered a misfortune for a married woman. There still persists a common practice in some parts of India that after marriage of a daughter, her parents would not accept her cooking until she gets a child.

Males and females differ in their roles at various stages in their life cycle and also in their participation in economic and other activities ; hence some special value is attached to having children at least one of each sex. Moreover, there is also very strong preference for sons among Indian couples. Traditional religious beliefs, social customs (dowry systems, etc.) and economic benefits, including support of ageing parents are some of the underlying factors. The Vedic blessing for a married woman is, "May she bear ten sons and make of her husband an eleventh". In the light of this preference, we seek to analyse here the nature and degree of desire for additional children among Indian couples in the context of their current size and sex-composition of family. The concern for the sex of the desired child has also been examined.

Family Planning and Reasons for Desiring Additional Children

The well known factors affecting India's Family Planning Programmes are ignorance of birth control methods, lack of education, superstitions, traditional mores and religious beliefs of the people. As the strong preference for sons persists, the strenuous propagation of family planning does not result in significant reduction in family size. Thanks to high infant and child mortality, the desire for additional children remains strong, reflecting the attempt on the part of couples to ensure the survival of a sufficient number of children, especially an adequate number of sons, when they become old. (May and Heer, 1968; Immerwahr, 1967; and Rao and others, 1970).

In his discussion of social and economic development in India vis-a-vis a well designed National Family Planning Programme, Mukherji (1973) postulates : *Since the people are 'value oriented' towards having 'large families' and lack the 'felt-need' to form small and modern families, family planning is itself an aspect of social and economic development as it will be a step towards the establishment of an -achieving society'.*

He further suggests that, "the *null* point regarding the . . . postulate . . . refers to the common desire of the Indian couples to have at least two sons". On the basis of certain all India survey data, he shows that the "survival of the family" is the main reason for desiring children by the Indian couples. He notes other reasons for desiring children such as 'security in old age', 'preference for male children', etc. However, a critical study of the hypothesis "at least two sons is the *sine qua non* to the Indian couples" is needed so that the Government may be able to take appropriate measures in directing the National Family Planning Programmes. Mukherji feels, "Without a precise appreciation of the nature and degree of relevance of the above and allied postulates, any piece of 'social engineering' may be self-defeating".

Role and status of women in the home and in society are important factors affecting the notion of an ideal family in respect of its size and composition. In a male dominating society, women, excepting a small minority, are largely subordinate to men in all respects, especially in economic matters. A common Hindu belief is that a woman, throughout her life time, should be dependent upon a male member of the household,—her father until marriage, her husband during his life time and her son during her remaining period of life.

Here again desire for sons becomes predominant. Chandrasekhar, feels that, "the emancipation of women in full political, legal, social and particularly economic sense, can basically alter the magnitude of India's population". (Chandrasekhar, S. 1972).

Several studies show that employment of women outside the home is an important factor in lowering fertility and/or encouraging small sized family. But in the Indian social context, woman's participation in activities outside the home is very much restricted. Even women working outside the home before marriage devote their time mostly to household work after marriage.

Thus, if it becomes possible to curb the desires for additional children which are governed by a complex of social, psychological and economic factors, the progress of our National Family Planning Programme may gain momentum. All this lends importance to the study of the nature and intensity of desire for additional children, and the concern of parents for the sex of the desired child with particular reference to sex composition of the surviving children. Fortunately, data on desire for additional children by some of the important reasons are available for the vast population of entire Urban India.

Previous Studies

Several Indian studies show that two sons and one daughter are generally considered as ideal by a large proportion of the population. For example, preference for such a combination was observed by the Indian Institute of Public Opinion (IIPO, 1967). Lahiri (1974) showed that in urban India intensity of desire for a son was +33, that is, for every daughter two sons were considered ideal. Some other studies in different parts of India also showed strong preference for sons. On the basis of the views expressed by the 1,167 school children chosen from various socio-economic areas around Delhi, Pohlman and Rao (1969) found that out of all boys in class 8-11, 95% and 91% preferred the first child to be a boy in city and non-city area respectively : and 65% and 74% desired to have more boys than girls in their future family in city and non-city area respectively.

The 'Mysore Population Study' conducted jointly by the United Nations and the Government of India showed that desire for additional children expressed by the couples under study was dependent on the number of sons living. Frequently couples with only daughters expressed more desire for additional child-

ren than those with two or more children consisting of either at least one of each sex or two or more sons. In the case of persons having at least one child of either sex, sex preference (desire for boys or girls) has insignificant impact on the desire for additional children; the other motives, like "to make home happier" and "to ensure family survival", become prominent. Furthermore, the study indicates that among the husbands and wives with two or more daughters the desire for sons was the major motive for desiring additional children. On the other hand, desire for girls, and among the husbands with two or more sons, did exist, but it was not the main motive, (pp. 140-150). The report further says that, "Men, more frequently than women, emphasized the desire to ensure survival of the family as their main reason for wishing to have more children. On the other hand, more women than men were motivated primarily by the desire to be taken care of in old age", (p. 146).

General Approach of the Present Study¹

The present study is based on the data collected from a sample of some 16,000 husbands in a large number of cities and towns by the National Sample Survey in its sixteenth round (July 1960 to June, 1961). The question of sex can be studied by considering the responses from different sample persons about the size and composition of the ideal family. This has been done in another paper by the author [Lahiri, 1974]. In spite of the vagueness of the concept of ideal family² and consequent limitation of the data, the existence of extraordinarily strong preference for sons has been unmistakably found in all sections of the Indian people. We hypothesize, therefore, that most couples are guided in their desire for additional children by an ideal sex composition, which is commonly found to comprise 2 sons and one daughter.

Our analysis is based on published data of the above mentioned survey. Unfortunately, it does not permit separate consideration of the different groups of couples each characterised by a specified combination of sons and

1. The National Sample Survey, No. 116, Tables with notes on Family Planning, Govt. of India, 1967. Tables 5.7, 5.8 and 6.1 to 6.3 of the publication have been utilised for the derivation of the tables presented in this paper. Further particulars about the sample and methods of derivation of the tables, shown in this paper, are given in the Note attached at the end of the paper (see Appendix).

2. Definition of ideal family size, adopted by the NSS, was the number of children that a husband considered to be ideal in his circumstances. (Indian Statistical Institute, 1960).

daughters. Sex, therefore, appears as an explanatory or causal variable when, for example, we categorise persons by sex composition of the current family and make comparative study of the different categories in regard to desire for additional children. On the other hand, it appears as a dependent variable when, for example, we are considering the frequency of son-or daughter-desiring persons or of sex-cognisant persons defined as those who long specifically for a son or a daughter. We discuss the questions of sex in both of these roles singly or jointly.

The following hypotheses or assumptions have been used at times for the interpretation of the results. Reproductive couples with 2 or more daughters have on the average less than 2 but more than 1 (one) son, and *vice versa* (interchange 'daughter' and 'son'). But couples with only 1 (one) daughter have on the average more than 1 but less than 2 sons, and *vice-versa*. It is logically true that couples without any daughter have on the average more than 0 (zero) son, and *vice-versa*. In our present study there is a further restriction that daughterless couples have on the average less than one son and *vice-versa*. Couples, with *i* sons and *j* daughters, are, very roughly, as numerous as those with *z* daughters and *j* sons for the smaller values 0, 1 and 2 of *i* and *j*.

Factors Motivating the Desire for Additional Children : Overall Position

The desire for a child does not necessarily imply the desire for a son. In fact, the question of sex of a desired child may not always be uppermost in mind. In urban India, 50.30 percent of all respondents (husbands with wives under 45 years of age), expressed a definite desire for additional children and 39.01 percent were equally clear about their non-desiring attitude, but 8.69 percent remained indifferent to this question and 2.00 percent did not respond or could not be contacted. (Table 5.5 p. 56). As a strong preference for sons is postulated one would expect that concern for the sex of desired child should loom large in the minds of the parents. Surprisingly, it appears in the first instance at least that this is not so. Only 28.69 percent of the child desiring persons do clearly express a desire for a son or a daughter; they are "sex-cognisant" as defined above.

There is apparently not much concern for security in old age, only 12.83 percent of the child desiring persons show primary concern for such security.

It is notable in this connection that there is a strong school of thought which advocates social security measures as a necessary condition for the success of family planning programmes in a poor country like India.

Great majority, 55.21 percent, are on the other hand anxious about the survival of the family. In traditional Indian society, the term "to ensure family survival" means survival preferably through a son. Caution is, however, necessary in interpreting the data relating to motivation for desiring an additional child, because the desire for an additional child is influenced by a complex of motivational forces. What is reported is the principal reason so that when a person states, for example, that longing for a son makes him desirous of an additional child, one should not go away with a seemingly superficial impression that this desire has nothing to do, (even secondarily), with the question of his security in old age.

Motivating Factors : Comparative Study of Husbands with Different Family Sizes

Consciousness about the sex of the desired child or solicitousness for a child of a particular sex might depend upon the number of children one already has. Therefore, the percentage distribution of husbands desiring additional children by reasons according to specified number of surviving children is shown in Table 1. The main reason has been mentioned. Here only husbands, desiring additional children are considered.

TABLE 1-PERCENTAGE DISTRIBUTION OF CHILD-DESIRING HUSBANDS* BY REASON ACCORDING TO NUMBER OF SURVIVING CHILDREN

<i>Number of surviving children</i>	<i>Reasons</i>				<i>Total**</i>
	<i>Preference for child of either sex</i>	<i>To ensure family survival</i>	<i>Can depend in old age</i>	<i>Other reasons</i>	
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
0	6.53	80.61	10.44	1.86	100.00
1	35.66	48.04	13.97	1.16	100.00
2	48.91	33.96	13.44	2.30	100.00
3	46.32	31.68	17.94	2.78	100.00
4 and above	47.06	28.79	13.20	7.72	100.00
All	28.69	55.21	12.83	2.17	10000

*with wife under 45 years of age

**includes 'not recorded cases'.

Sex of the child is not of particular concern to childless persons. Only 6.53 per cent of them have the question of the sex of child uppermost in their mind. Perhaps the socio-economic characteristics of this group of persons are rather different from the others without any child. It possibly includes persons who have married a second time because the first marriage did not result in any son (or daughter).

There is a dramatic change as we move to persons with a child. As many as 35.66 per cent of the persons with one child show such concern for the sex of the desired child. There is a further substantial increase in this proportion for these with two children. Thereafter, the proportion remains more or less steady. At the initial stage of family building when persons are childless or just have one child, the dominant reason is to ensure family survival. Subsequently, when people have two or more children there is a shift, the major concern is expressed in terms of the sex of the desired child.

The general pattern of the attitude, shown by the variations (within Column 2) is not unexpected when one views this in the context of the most popular ideal family consisting of two sons and one daughter. With this ideal in view a person need not be concerned about the sex of the first child. But when one has already a child, roughly half of them, namely, those already with a daughter, wish to have a son in the next turn, but the other half with already a son can still afford to have another child without much concern for the sex of the desired child. With two children, whether (i) two sons or (ii) two daughters or (iii) one son and one daughter, the question about the sex of the next child may arise in every case. With three children, a small fraction of the persons would have already two sons and one daughter and they might not be very much concerned about the sex of the next child (assuming that those wanting more than three children would like to have at least two sons and one daughter). Therefore, "sex-consciousness" might slightly decrease compared to those with just two children.

Sex-cognisance and Number of Living Sons/Daughters

From the above discussion it is clear that it would have been more illuminating if data were analysed by different combinations of sons and daughters. Such tabulations are not available but separate analysis by number of surviv-

ing sons and daughters is possible. Relevant data are shown in Table 2³. Only the principally sex-cognisant persons are included.

TABLE 2—PERCENTAGE "SEX COGNISANT" AMONG CHILD-DESIRING HUSBANDS* BY NUMBER OF SURVIVING SONS/DAUGHTERS

<i>Number of surviving sons/Wj daughters[^]</i>	<i>Percentage sex-cognisant among child-desiring husbands with specified number of surviving</i>		
	<i>Sons(a)</i>	<i>Daughters(b)</i>	<i>(3)1(2)</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
0	24.23	14.92	0.62
1	32.77	38.01	1.16
2	42.23	60.19	1.43
3	42.92	63.55	1.48
4 and above	39.01	66.36	1.70
All	28.81	28.81	1.00

*Married only once with under 45 years of age.

(a) Whatever be the number of surviving daughters.

(b) Whatever be the number of surviving sons.

The increasing divergence between the percentage columns pertaining respectively to sons and daughters, as is quantified in column (4) of Table 2³, is conspicuous. This brings out the crucial role of the sex composition of the current family in moulding the attitude of the husband (and of the wife as well) towards the question of having additional children. The longing for sons far outstrips that for daughters.

The broad pattern of variations depicted here is very much similar to that shown by Table 1. The percentage "sex-cognisant" among husbands desir-

3. Care is needed in the interpretation of this and other Tables (2, 3, 4 and 6). The two categories of husbands with i sons (with or without daughters) and i daughters (with or without sons) are not mutually exclusive since both include husbands having $2i$ children with equal number (i) of sons and daughters. The proportion overlapping possibly decreases as i increases. The two categories shown against 'all' (aggregate of all the size class categories) are totally overlapping, that is, identical.

ing additional children is lowest when the number of surviving sons, daughters and children is 0 (zero). It increases successively as we proceed to the next two rows in both the columns. Thereafter it changes but marginally. Column 3 shows, however, proportions much higher in all rows excepting the first representing 0 son/daughter. The successive differential between first three rows is much more marked in Column 3 as compared to Column 2, Persons with 2 or more daughters are much more desirous for an additional child than those with 2 or more sons. This evidence seems to conform to the popular ideal of 2 sons and 1 daughter.

Desire for Additional Children and Number of Living Sons/Daughters

The intensity of desire to have an additional son or a daughter depends evidently upon the sex-composition of the current family. Although less obvious, the desire to have an additional child for security in old age, family survival, etc. also depends upon it, since sons and daughters do not generally serve these purposes equally well. We, therefore, examine the variation of percentages of persons desiring additional children according to the number of surviving sons and daughters. This type of comparison will help us to judge how the present sex composition of one's own children influences the parental motivation towards desiring additional children. The relevant data are shown in Table 3.

TABLE 3-PERCENTAGE DESIRING ADDITIONAL CHILDREN AMONG HUSBANDS* WITH SPECIFIED NUMBER OF LIVING SONS<*>/ DAUGHTERS^)

<i>Number of surviving sons(a)/daughters(b)</i>	<i>Percentage</i>		<i>(3)/(2)</i>
	<i>Sons(a)</i>	<i>with reference to surviving Daughters(b)</i>	
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
0	85.84	76.08	0.89
1	50.53	47.47	0.94
2	24.66	31.91	1.29
3	9.12	20.71	2.27
4-5	7.14	14.77	2.07
6 and above	3.55	9.42	2.65
All	51.41	51.41	1.00

*Married only once with wife under 45 years of age.

(a) Whatever be the number of surviving daughters.

(6) whatever be the number of surviving sons.

It is clear that the proportion desiring additional children for persons without any son is larger than the corresponding proportion for those without any daughter. This is in conformity with the strong desire for sons in India. Similar statement is also true when persons with one son are compared to those with one daughter. However, comparative study for persons with larger number of sons and daughters, shows just the opposite relation. To realize why this position is not quite unexpected, one has to note 2+-daughter persons with 1 son have a less satisfying sex-combination than what 2+-son persons with 1 daughter have, because the ideal combination is 2 sons and 1 daughter. Moreover, sonless 2+-daughter persons have a stronger desire for a son than what daughterless 2+-son persons have for a daughter.

Relative Importance of 'Direct' and 'Contingent' Motivating Factors and Number of Sons/Daughters

The reasons expressed by the respondents for desiring additional children can be broadly categorised into two groups : (1) desire for an additional child of particular sex expressed in direct and definite manner and (2) desire for an additional child for the expressed reasons of security in old age, family survival etc., the sex of the desired child not being the prime mover. Our chief interest is to study the sex preference reflected in the desire for additional children, and the former group is, therefore, of direct interest, and the other group called 'contingent' is of a complementary nature. Only those putting forward direct reasons are strongly sex-conscious.

It is notable that the contingent reasons falling in the second group were given by as much as 71.19 percent of the respondents. This preponderance is shown by all categories of persons with any specified number of sons, and also by those having one or no daughter. Remarkably exceptional categories are those with 2 or more daughters ; greater emphasis is laid by them on direct reasons ; some 60-66 per cent of them adduce such reasons (Table 2).

In Table 4 the various reasons have been ranked separately for each size class. Columns 2 and 14 give respectively the values of Kendall's coefficient of rank correlation⁴ (τ) between the overall (all persons) ranking and the rank-

4. If K reasons are ranked by two categories (and there is no tie) then Kendall's coefficient of rank correlation (T) is given by ;

$$\tau = \frac{4p}{n(n-1)} - 1,$$

where $p = r_1 + r_2 + \dots + r_n$, and r_i is the number of reasons having greater rank in both the categories than the corresponding ranks of the i -th reason. [Kendall, 1955; Chakravarti, *et. al*, 1967].

TABLE 4—RANKING OF 'REASONS'* BY FREQUENCY OF OCCURRENCE FOR SPECIFIED NUMBER OF SONS(a)/DAUGHTERS'(b)

<i>No. of surviving sons(a)/daughters(b)</i>	τ <i>between son and all</i>	<i>Reasons* with reference to sons(a)</i>					τ <i>between sons and daughters</i>	<i>Reasons* with reference to daughters(b)</i>					τ <i>between daughters and all</i>
		<i>direct</i>		<i>contingent</i>				<i>direct</i>		<i>contingent</i>			
		M	F	<i>fs</i>	<i>so</i>	or		M	F	<i>fs</i>	<i>so</i>	or	
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>	<i>(7)</i>	<i>(8)</i>	<i>(9)</i>	<i>(10)</i>	<i>(11)</i>	<i>(12)</i>	<i>(13)</i>	<i>(14)</i>
0	0.8	2	5	1	3	4	0.4	4	3	1	2	5	0.4
1	1.0	2	4	1	3	5	1.0	2	4	1	3	5	1.0
2	0.4	4	2	1	3	5	0.0	1	5	2	3	4	0.6
3	0.2	4	1	2	3	5	—0.2	1	5	2	3	4	0.6
4 and above	0.0	5	2	1	4	3	—0.4	1	5	2	3	4	0.6
All	—	2	4	1	3	5	—	2	4	1	3	5	1.0

*Reasons (given by husbands married only once with wife under 45 years of age): direct—desire for a male child (*M*), for a female child (*F*) ; contingent— family survival (*fs*), security in old age (*so*), and other reasons (*or*).

(a) Whatever be the number of surviving daughters.

(b) Whatever be the number of surviving sons.

ing for the specified size-class of sons/daughters. Column 8 gives τ between the rankings for the same size class of sons and daughters.

The 'reasons' for desiring an additional child, expressed by all husbands are ranked in decreasing order of frequency. The order of ranking shown in the last row is *fs*, *M*, *so*, *F* and *or*. The same ranking has also been found for 1-son/1-daughter persons. This common ranking may be taken as the standard of comparison. The 2-, 3-, and 4+- daughter persons follow a different but highly consistent ranking, viz., *M*, *fs*, *so*, *or* and *F*. The positions of the components of the two extreme pairs (*fs*, *M*) and (*F*, *or*) get interchanged. It is significant that for the 2⁺- daughter persons, the first and the last position are held respectively by *M* and *F*. The 2-, 3- and 4⁺-son persons, however, are not so highly consistent (rank correlation τ between the three possible pairs being 0.8, 0.6 and 0.4). Broadly speaking, the ranking (obtained by taking median of the three ranks) for 2+- son persons is *fs*, *F*, *so*, *M* and *or*; this happens to be the 2- son persons ranking. Thus the interchange of the position of *M* and *F* in the standard ranking gives the 2+-son ranking. Moreover, the overall rankings of 2+-daughter and 2⁺-son persons are uncorrelated (i.e. τ is zero). Zero correlation is also observed between the pair 2- son and 2- daughter persons.

The effect of differing sex composition on the motivational forces behind the desire for an additional child is perhaps most vividly brought out by the fact that Kendall's τ becomes negative when 3- or 4+- son persons are compared with 3- or 4+-daughter persons respectively; and further strength of the (negative) correlation become more acute (from -0.2 to -0.4), as the sex divergence increases in the two groups. The correlation between the rankings of son-less and daughter-less persons is 0.4. One would have expected a lower value for such widely different sex characteristics. A close examination, however, shows that the two groups are not really as widely differentiated as appears at first sight. This is so because son-less and daughter-less persons both include those who are childless, and this last group constitutes the major portion of the first two groups; (more than half the sample persons in either group are childless). Similarly persons with 1 son and 1 daughter are common to 1-son and 1-daughter groups, and the first (common) group must account for a substantial portion of either of the last two groups. The overlapping portions of 2+-son and 2⁺-daughter groups are fairly small and a comparison between their attitudes brings out the role of sex composition more clearly.

To sum up, (i) a relatively large number of daughters leads to the ranking M, fs, so, or, F , (ii) when there is a rough balance between the sexes the ranking is fs, M, so, F, or , and (iii) a relatively large number of sons gives the ranking fs, F, so, M, or .

Restricting to 'direct' reasons only, the relative positions of M and F in (i) and (iii) are obviously along the expected lines. Their relative positions in the sex-balanced case (ii) are the same as the daughter-dominant case (i) and opposite to the son-dominant case (iii). This is also not unexpected in the light of 2 sons and 1 daughter as ideal.

Now restricting to 'contingent' reasons only, there is a remarkable steadiness. The relative positions are uniformly the same, *viz.*, fs, so, or , and thus the priorities remain unaffected by the sex-composition of the [current family]. This statement should be qualified by the fact that the security in old age (*so*) has a low priority when very high male dominance (as for 4+-son person) is already established. So, the ranking now becomes fs, or, so . Taking both direct and contingent reasons together the position of *so* is uniformly in the middle.

Incidentally, a reference to Columns (2) and (14) of Table 4 shows that for correlations with the standard ranking Kendall's τ is never negative. This probably indicates that sex-composition, however lop-sided, cannot drastically change some basic underlying attitude which is perhaps given by the standard ranking fs, M, so, F, or . It is significant that whereas the strength of the correlation with the standard remains the same (0.6) as one passes from 2-, through 3-, to 4+-daughter persons, it (the strength) tapers off from 0.4 through 0.2 to 0 (zero) for corresponding changes in respect of sons. It probably reflects that the underlying attitudinal forces get substantially adjusted as the number of sons increases but increase in number of daughters beyond 2 does not call for further adjustments. A son or a daughter may be desired not only primarily as an end in itself but secondarily as a means to some ends, *viz.*, family survival (*fs*), security in old age (*so*), or other reasons (*or*). It would seem that the above three rankings [mentioned under (i), (ii) and (iii)] indicate that a son serves the purpose '*fs*' much better than a daughter, the purpose '*so*' is served by both but a son is somewhat more desirable.

Relative Frequency of Son and Daughter Desiring Persons and Number of Surviving Children

We have so far considered the attitude of individuals in regard to their

desire for additional children without any direct reference to the sex of the desired child. We shall now examine the desire for sons and also for daughters as reflected in Table 5 below.

TABLE 5—PERCENTAGE OF SEX-COGNISANT HUSBANDS* DESIRING ADDITIONAL SON OR DAUGHTER ACCORDING TO NUMBER OF SURVIVING CHILDREN

<i>Number of surviving children</i>	<i>Percentage desiring</i>	
	<i>Son</i>	<i>Daughter</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
0	94.62	5.38
1	79.44	20.56
2	76.45	23.55
3	80.98	19.02
4 and above	87.74	19.25
All	80.76	19.24

*With wife under 45 years of age.

One should not think naively that in India desire is only for son and daughter is just tolerated as it cannot be avoided. In traditional Indian Society 'even a daughter is desired because *Kanyadana* adds to the *Punya* of the parents' (Rele and Bhende, 1974). As the above table shows, merely one in every five sex-cognisant persons expressly desires a daughter and among those with two children this is one in four (Column 3). Initially, however, when a sex-cognisant person has no child, there is overwhelming preference for a son; only one in twenty desires a daughter.

Relative Frequency of Son and Daughter Desiring Persons and Number of Living Sons/Daughters

The preceding table does not give a full picture of the intensity of desire for daughters, and also for sons as it gives an impression that in all categories of

persons the desire for son dominates. However, this may not be quite so as there are quite a few significant groups for whom the desire for daughters is overwhelming. Data are presented in Table 6.

TABLE 6—PERCENTAGE DESIRING (ADDITIONAL) DAUGHTERS AMONG SEX-COGNISANT HUSBAND* WITH SPECIFIED NUMBER OF SURVIVING SONS/DAUGHTERS

<i>Number of surviving sons/daughters[^]</i>	<i>Percentage with reference to surviving</i>	
	<i>Sons (a)</i>	<i>Daughters(b)</i>
(1)	(2)	(3)
0	1.20	61.86
1	22.92	5.26
2	68.70	1.03
3	69.22	0.90
4 and above	86.54	0.00
All	20.27	20.27

*Married only once and with wife under 45 years of age.

(a) Whatever be the number of daughters.

(b) Whatever be the number of sons.

These data are in accord with the national ideal of two sons and one daughter. Among daughter-less persons as many as 62 per cent⁵ desire daughters. But the percentage falls very sharply to only 5 per cent as soon as they have one single living daughter, and further demand for daughters is almost negligible with the higher number of daughters. Among sonless persons the demand for

5. This, as also others, is a sample estimate, and there is need for some assurance that preference for daughters really exists, that is, the observed percentage is significantly greater than 50 per cent. The survey was conducted by two different parties in two different probability samples, called sub-samples. The two separate percentage estimates are also greater than 50 per cent, viz. 59 and 65.

daughter is practically nil. When there is just one son there is some, but not very high demand for daughters—only 23 per cent (or roughly one in four) have a desire for daughter. This may be so because the desire for the second son has not yet been met. Further, with increase in the number of sons the desire for daughters increases sharply, and as many as 69 per cent wish to have daughter when one has already 2 or 3 sons, and the percentage increases to nearly 87 per cent when one attains the status of 4 or more sons. The love for sons is apparently stronger. In spite of having 3 sons already, 3 out of 10 such sex-cognisant persons still desire a son. While desire for daughters dwindles down to insignificance as soon as one has two or more daughters, the desire for a son is still relatively strong even with 4 or more sons.

Discussion

The percentages given in the above tables are not only dependent on the sex ratio but also on the size of the family, that is, total number of children. This duplicity in factors does not cause any interpretational difficulty in Tables 1 and 5 where the basic classification is by family size. The position is not so simple for other cases. For example, in comparing the two groups characterised respectively by the same number of sons and daughters (Table 3), it would be desirable to consider the effect of variation in family size. Strictly valid comparisons would have been possible if separate data were available for the group $P(i, j)$ of persons with i sons and j daughters, the family size being the same namely, $i + j$.

Still in our comparison based on Tables 2, 3, 4 and 6, the effects of varying family sizes in the compared groups have been roughly equalised by making indirect use of above type of valid comparisons. This is so because of the somewhat crude but reasonable assumption that the groups $P(i, j)$ and $P(j, i)$ are comprised of roughly the same number of husbands. Therefore the aggregate $P(\dots, k)$ of persons with k daughters (which is the union of $P(i, k)$'s $i = 0, 1, 2, \dots$) and the aggregate $P(k, \dots)$ of persons with k sons (which is the union of $P(k, j)$'s $j = 0, 1, 2, \dots$) become roughly equivalent as far as the effect of current family size on the frequency or incidence of desire for additional children is concerned. Instead of going through all these component by component comparisons one may be inclined, due to lack of data, to accept straightaway more or less intuitively that persons with any given number of sons have on the average roughly the same family size as those with

identical number of daughters. Any difference (if not too small) between the percentages may then be attributed practically wholly to the sex difference between the compared groups.

The exact nature of the sex difference (i.e. excess of sons over daughters and *vice versa*) may or may not be quite clear. However, the position is definite when son-less persons are compared with daughter-less persons. Further, one may be inclined to accept that persons with 4 or more sons have on the average larger number of sons than those with 4 or more daughters'. But it is not obvious whether, for example, 1-son persons have or have not a larger number of sons on the average than those of 1-daughter persons. If one supposes that the former group (i.e. 1-son persons) have not,⁷ then the relative magnitudes of pairs of corresponding percentages in Tables 2, 3, 4 and 6 can all be neatly explained. Similarly, proper explanation can be made for others if 2- and 3-son persons have more sons on the average than what the 2- and 3-daughter persons have.

Summary and Conclusions

A major hurdle before the family Planning Programme of India is the desire for large families which is sustained partly by a strong desire for sons. The norm of a small modern family is to be inculcated. In order to be successful this aim should be a felt need. In an earlier paper the author had critically analysed variations in preference for sons and ideal family size in relation to various social and economic factors. Extraordinarily strong preference for sons was found in all sections of the Indian people. On an average, two sons for every daughter were considered ideal. Obviously, if no positive steps are taken to counter this strong preference for sons, the success of any general endeavour to press forward the family planning movement may be compromised.

6. This may be judged against the background that the average number of surviving children per person with wife in the reproductive ages is only about 2.4.

7. The validity of these assumptions can be substantiated by means of an elaborate process of derivation of cell frequencies from marginal ones in a two-way (number of sons by number of daughters) table ; the process will be described in another paper. This process also shows that the average number of sons is less than 2 not only for the 2-daughter but also for the 3- and 4+-daughter persons.

In the present paper, the data of sixteenth round of the NSS have been used to study (i) the nature and degree of the motivating forces behind the desire for additional children, and (ii) relative desire for sons and daughters among "sex-cognisant" persons with particular reference to sex-composition of the current family. The main findings of the present study are :

1. In urban India, among all persons (husbands with wives under 45 years of age), 50.30 per cent expressly desire additional children, 39.01 per cent are definite about their non-desiring attitude, 8.69 percent remain indifferent in this respect, and 2.00 per cent do not respond or cannot be contacted.

2. In general, 28.69 per cent of the child desiring persons show a definite and over-riding desire for a son or a daughter. Majority, 55.21 percent, express their desire to have an additional child for the survival of their families. A small proportion, 12.83 per cent are motivated primarily due to 'security in old age'.

3. At the initial stage of family building when persons are child-less, not even 7 per cent of the child-desiring persons are particularly interested about the sex of the desired child; vast majority of them, 81 per cent, are motivated for desiring an additional child in order to ensure family survival. Substantial shift from this position is observed as soon as they (child desiring persons) get a child ; nearly 36 per cent of them express longings for either a son or a daughter. However, in the context of the Indian Government policy commending limitation of family size to 2 or 3 children, it is important to assess the attitude of persons with 2 or more surviving children. Out of 100 such persons nearly 50 are over anxious about the sex of the desired offspring, slightly more than 30 are interested in the survival of their families and some 14 or 15, have security in old age in mind.

4. Desire for an additional child falls off quite rapidly as the number of sons increases. The desire for an additional child is twice or even more among persons with 3 or more daughters than among those with the same number of sons.

5. Sex-cognisance, depends upon the number of sons and daughters one already has. Among child-desiring persons sex-cognisance increases, strikingly, with increasing number of sons and also with increasing number of

daughters. But the rate of increase in the proportion sex-cognisant among the child-desiring persons, with increasing number of daughters, is more conspicuous than that for those with increasing number of sons. The proportion increases more than fourfold for daughters when the number changes from 0 to 2, whereas the corresponding increase is not even two-fold for sons. For higher categories about 40 per cent of the child-desiring persons are sex-cognisant and a relatively steady state, if not a downward trend, is observed. In contrast a larger proportion, nearly 65 per cent of them, become sex-conscious for the same number of daughters ; and the incidence of sex-cognisance has slow but distinctively increasing trend.

6. As many as 95% of the childless sex-cognisant persons desire a son. There is, of course, overwhelming preference for sons (nearly 99%) when the persons are son-less. However, it is not true that the Indian couples desire to have son only and the daughter is just tolerated as it cannot be avoided. The proportion desiring daughters among the 'sex-cognisant' persons increases very rapidly with increase in number of surviving sons and it goes up from a negligible proportion for no son to nearly 70 percent for 2 sons and 86 per cent for 4 or more sons. However, demand for daughters peters out quite quickly— it reduces to 5 percent as soon as a person gets a single daughter.

The rankings of reasons put forward by the husbands for desiring additional children in decreasing order of importance as judged by the frequency of their adduction are given below for the three specific sex-differential categories.

1. Relatively large number of daughters *M, fs, so, or, F*
2. Roughly balanced number of sons & daughters *fs, M, so, F, or*
3. Relatively larger number of sons *fs, F, so, M, or*
 [Desire for a male child (*M*); Tor female child (*F*) ;
 family survival (*fs*), [security in old age (*so*), other
 reason (*or*)]

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APPENDIX

The Sample Supplying the Quantitative Estimates and Methods of Derivation of the Tables

Data were collected by male fieldworkers from some 16,000 husbands whose wives were alive and not divorced or permanently separated at the time of interview. In our present study, the husbands with wives below 45 years of age are taken into account.

The sampling design of survey was a broadly stratified two stage one with urban blocks as first stage units and household as second stage units. The urban areas of India were divided into two sectors. The first sector consisted of towns and cities with population of 50,000 or more according to the 1951 census. The rest of urban areas formed the second sector. The all India allocation of the sample blocks to the Sectors 1 and 2 was made in the ratio 2 : 1 and the quota of each sector was allocated to each state in proportion to the respective sectorwise population of the state. The full sample was split into two valid sub-samples called Sample 1 and Sample 2. These two samples were covered by two different parties of investigators or enumerators. Further details of the sample design and procedure of estimation can be found in Tables with notes on Family Planning National Sample Survey, 1957, (pp. 155-156).

Derivations of the Tables shown in this paper are described below : Tables 1 to 4

: Estimates are obtained from the Tables 6.1 [1] ; 6.2 and 6.3 [2] ; 5.7 and 5.8 [3] ; 6.1, 6.2 and 6.3 [4], of the report. Figure within the bracket [] stands for the table number used in this paper.

Table 5 : Col. (2) and Col. (3) of the Table 5 are obtained by computing the ratios $100 \times \text{Col. (5)} / [\text{Col. (5)} + \text{Col. (6)}]$ and $100 \times \text{Col. (6)} / [\text{Col. (5)} + \text{Col. (6)}]$ from the Table (6.1) of the NSS report.

Table 6 : Col. (2) and Col. (3) are obtained by computing the ratios $100 \times \text{Col. (6)} / [\text{Col. (5)} + \text{Col. (6)}]$ from the Tables 6.2 and 6.3 respectively.