

Effect of the Sex of the Surviving Children in First Two Parities on Subsequent Family Size (Surviving Children) Among Rural Rajput and Scheduled Caste (Chamars) Populations of Himachal Pradesh, India

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INTRODUCTION

The fertility level of a population observed at any given time is the outcome of a complex set of factors i.e. Biological, Social, Cultural, Economic and Political that are operating on the population and these factors interact with each other with regard to their effects on fertility. The people of India have strongly held social and cultural values with regard to marriage, fertility of a couple and particularly, preference for a son (Srinivasan, 1983).

In the hunting and gathering societies, the selection of daughter instead of son for infanticide lies in the fact that a man needed sons to hunt and fish for him when he was past his prime and therefore, it was uneconomic to raise female children – female infanticide was common (Balicki, 1929). In agrarian societies, particularly patriarchal ones, sons provide the family labour and eventually assume responsibility of parents in old age, as daughters usually marry out and are less likely to provide financial support. The multifarious values of a son are also emphasized by parents as indicated in several attitudinal surveys (Chaudhury and Latif, 1975; Lahiri, 1975; Arnold et al., 1975; Chaudhury, 1976; Barkat, 1976; Jones, 1977; Nag et al., 1978). A study by Lahiri (1974) in India also confirmed the strong preferences for a son. However, these findings do not hold true for all the countries of Asia and there are inter-countries and intracountry variations in son preference, as well. Son preference is also found to vary inversely within socio-economic classes in Asia (Arnold, et al., 1975; Mueller, 1976). There is virtually no preference for one particular sex over the other in the industrially developed countries of the world and this has been substantiated in several studies (Freeman and Coombs, 1974; Arnold et al., 1975; Goody et al., 1977).

It has been shown mathematically that if the probability of having a boy is the same for all individuals, a sex preference will not affect the

sex ratio in the population, but the expected family size will increase with increasing preference for one sex over the other. There is a conflict between the desire for a small family on the one hand and sex preference on the other (Sheps, 1963). It has been argued that the wish to have one or more surviving sons will naturally encourage higher fertility (Minkler, 1970). A regional survey by the ORG at Baroda showed that people aspire to reach a desired family size norm resorting to sterilization. The drastic improvement in child survival has contributed significantly to the small family norm.

Keeping the above findings in view, the present investigation has been carried out to see the influence (effect) of sex of children in first two parities on the subsequent family size (Surviving Children) of two rural mainly agricultural and labouring communities (Rural Rajput and Scheduled Caste i.e. Chamars) of Himachal Pradesh.

MATERIAL AND METHOD

The subjects were 121 women (mothers) from Rajput Community and 108 women (mothers) from scheduled caste (Chamar) communities living in the Bilaspur District of Himachal Pradesh. The sample pertaining to Rajput mothers has been selected at random from five villages named as Hatwar Proper, Galahi, Dehra, Chionwi, Patta and Tanda, while on Scheduled Caste women also from five villages called as Hatwar Proper, Harh, Hambot, Chiar and Pantehra Proper. These villages are located at the altitude of about 650 meters M.S.L. In this study the fertility performances of only those mothers who have completed their family size (i.e. either they have attained menopause or got sterilized or whose husbands got sterilized or preventing future conception by any mean) are included and secondly in this study the number of surviving children at present time are taken into account rather than total number of live births.

RESULTS AND DISCUSSION

For the present analysis, mothers were divided into four categories which were based on the sex of the first two surviving children at present time from the previous parities. These categories are:

1. Mothers having first child a male and second child also a male (IM IIM).
2. Mothers having first child a male and second child a female (IM IIF).
3. Mothers having first child a female and second child a male (IF IIM).
4. Mothers having first child a female and second child also a female (IF IIF).

In each of these categories the frequency of mothers was listed having surviving children (rather than live births) at present time numbered one to the maximum. Once tabulated, mean and standard deviation of surviving children in each category were obtained (Table 1-4).

In both the communities, mothers of the

Table 1: Having first child male and second also male (IM IIM)

No. of Child- ren	Rajpur Community		Chamar Community	
	Frequency of mothers	No. of surviving children	Frequency of mothers	No. of surviving children
2	11	22	14	28
3	11	33	4	12
4	5	20	4	16
5	2	10	4	20
6	1	6	3	18
7	1	7	0	0
8	0	0	0	0
9	0	0	0	0
	N=31	Σx=98	N=29	Σx=94
	Mean S.D.= 3.16 (1.246)		Mean S.D. 3.24 1.430	

Table 2: Having first child male and second female (IM IIF)

No. of Child- ren	Rajpur Community		Chamar Community	
	Frequency of mothers	No. of surviving children	Frequency of mothers	No. of surviving children
2	7	14	3	6
3	12	36	9	27
4	5	20	9	36
5	4	20	4	20
6	2	12	1	6
7	2	14	1	7
8	0	0	0	0
9	0	0	0	0
	N=32	Σx=116	N=27	Σx=102
	Mean S.D.= 3.625 (1.436)		Mean S.D. 3.78 1.165	

Table 3: Having first child female and second (IF IIM)

No. of Child- ren	Rajpur Community		Chamar Community	
	Frequency of mothers	No. of surviving children	Frequency of mothers	No. of surviving children
2	4	8	7	14
3	20	60	11	33
4	3	12	7	28
5	2	10	3	15
6	3	18	-	0
7	0	0	2	14
8	0	0	-	-
	N=32	Σx=108	N=27	Σx=104
	Mean S.D.= 3.625 (1.436)		Mean S.D. 3.78 1.165	

Table 4: Having first child female and second child female (IF IIF)

No. of Child- ren	Rajpur Community		Chamar Community	
	Frequency of mothers	No. of surviving children	Frequency of mothers	No. of surviving children
2	0	0	3	6
3	4	12	9	27
4	6	24	9	36
5	4	20	4	20
6	9	54	1	6
7	5	35	1	7
8	0	0	0	0
	N=28	Σx=5.18 (1.337)	(N=22)	Σx=4.45(1.475)
	Mean S.D.= 3.625 (1.436)		Mean S.D. 3.78 1.165	

category IF IIF have largest mean number of surviving children (5.18 in Rajputs and 4.45 in scheduled caste) while women of the category IM IIM have smallest mean number of surviving children (i.e. 3.16 in Rajputs and 3.24 in scheduled caste). On average mothers of Scheduled Caste Community have greater number of children than Rajput community except scheduled caste mothers of the category IF IIF. The smaller mean number of surviving children to scheduled caste mothers (4.45) as compared to Rajput mothers (5.18) of the type IF IIF may also be attributed to the smaller sample size of scheduled caste mothers (n=22) of type IF IIF included in the present study.

Frequency Distribution of Mothers (Women) from Rajput and Chamar communities in various categories on the basis of sex of first two surviving children.

From the 't' values for difference between mean number of surviving children in various categories (Table 5-6), it can be seen that there is significant difference between category IF IIF and any other category among both Rajputs and Scheduled Caste ($P < 0.05$). The significant

Table 6: 't' values for difference between mean fertility of various categories of families of scheduled caste (Chamars) belonging to Hatwar Area of Bilaspur District, Himachal Pradesh

Type of family	IM HM	ImHF	IF HM	If HF
IM HM	-	t=1.3709 p>0.05 d.f = 61	t=0.73 p>0.05 d.f = 61	t=6.00* p<0.05 d.f = 57
IM HF	-	-	t=0.719 p>0.05 d.f = 62	t=4.32* p<0.05 d.f = 58
IM HM	-	-	-	t=3.47* p<0.05 d.f = 58
IF HF	-	-	-	-

Table 7: Distribution of Mothers Having the Sex of the First and Second Child as Male/or Female among Rural Rajput Community of Bilaspur District, H.P.

Sex of Child	Male I	Female II	Total
Male	31+32=63(61.24)	32+32=64(63.76)	127
Female	32+28=60(59.76)	28+32=60(60.24)	120
	123	124	247

$\chi^2 = 0.0037$; $P > 0.05$

(statistically) difference between category IF IIF and any other category of Rajput mothers was found even at 1% level of probability. It is also found between category IF IIF and IM IIM among scheduled caste mothers.

Another test (T₂) applied to see whether the results obtained above were due to unequal distribution of mothers in each of four categories (Tables 7-8). The value of Chi-square was found to be insignificant ($P > 0.05$). So the possibility of unequal distribution of mothers in various categories of both these communities is ruled out.

From this analysis it can be seen that the birth of female children in early parities tend to further the family size while the birth of male child limit (restrict) the family size. The family size of Rajput women and scheduled caste (Chamar) women who had only male children surviving from early parities is 3.16 and 3.24 respectively and those with first child female second child also female have the mean family size (surviving children) of 5.18 and 4.45 respectively. This clearly indicates (establishes) the preference for boys as well as operation of a family norm when at least one of the first two surviving parities is a male child. The results of this study conform to the finding of Lahiri (1974) for strong preference for a son in India.

Table 8: Distribution of Mothers Having the Sex of the First and Second Child as Male/or Female among Scheduled Caste Community of Bilaspur District, H.P.

Sex of Child	Male I	Female II	Total
Male	29+27=56(57.5)	29+30=59(57.5)	115
Female	30+22=52(50.5)	27+22=49(50.5)	101
	108	108	216

$\chi^2 = 0.1672$; $P > 0.05$

The provision of health facilities and proper nutrition have led to child survival which have contributed significantly to the small family norm even in the agricultural and labouring communities of Himachal Pradesh. It can be due to the changing pattern of economy between these two communities.

KEY WORDS Effect of Sex First Parities on Family Size. Castes. Himalayas.

ABSTRACT The present investigation has been carried out to see the influence of sex of children in first two parities on the subsequent family size (surviving children) of two rural communities (Rural Rajput and Scheduled Caste) of Himachal Pradesh. From this investigation carried out in 1985, it can be seen that birth of female children in early parities (I-F, II-F) tends to further the family size that is number of surviving children (5.18 and 4.45 for Rajputs and Scheduled Caste Populations respectively). While the birth of male child (I-M, II-M) limit (restrict) the family size (i.e. 3.16 and 3.24 for Rajput and Scheduled Caste respectively). This clearly indicates the preference for boys as well as operation of a family norm when at least one of the first two surviving parities is a male child.

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