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EXISTENCE AND INDICATORS OF GENDER PREFERENCE AMONG THE TRIBES OF PURBI SINGHBHUM DISTRICT, JHARKHAND

Introduction

In the last 20 years fertility has declined very rapidly in India, due to introduction of family planning programme. Many pilot surveys were undertaken by Health and Family welfare Department for implementation of family welfare programmes in order to meet the needs of women experiencing unwanted birth risks which further assisted in accelerating the fertility decline in the country. According to the first National Family Health Survey (NFHS) of 1992- 1993, the average total fertility rate per women was 3.4 children. In the next two surveys, NFHS-2 (1998-1999) and NFHS-3 (2005-2006) the TFR per women dropped first to 2.9 and then to 2.7 children respectively. Although India is experiencing a decline in fertility, yet at the same time it is also witnessing a strong preference for gender. India's population experienced an increase in masculinity due to deterioration of the sex ratio in juvenile ages and a growing international concern on the issue of missing females at the same time (Mayer, 1999; Sudha and Rajan, 1999; Agnihotri 2000). A wide variety of data from northern parts of the country supports a strong preference for sons in India (Willamson, 1976;Miller, 1981; Arnold *et al*., 1998). Many findings illustrate a sizable positive effect of son preference on contraceptive use and fertility (Das, 1987; Malhotra *et al*., 1995;, 1995; Mutharayappa *et al*., 1997; Kulkarni, 1999; Akhter *et al*. 2014). Son's are considered as a valuable asset than daughters in India which justifies the fact that son preference is deeply rooted in Indian society. It is deeply rooted in ideologies of the patriarchal family system that encourages and advocates male (sons) supremacy over females (daughters) (Gupta *et al*, 2003). The whole traditional setup revolves around a belief that a man attains salvation only when a son performs certain rights at his funeral while having a daughter is like "watering your neighbor's garden"(Malhotra *et al*, 1995). Thus, the birth of a son was celebrated and associated with prestige, power and privilege whereas birth of daughter was rejoiced less and met with less enthusiasm. Foundation of gender

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inequality is laid by a number of structural factors like marriage norms, kinship, organization of agrarian economy and rituals associated with caste and religion. In Dyson and Moore's path breaking article in 1983, a broad difference in northern and southern kinship patterns largely determine gender inequality and son preference. In northern kinship system parent's of a girl bear the enormous cost of marriage and provided large dowry whereas dowry was not a major marriage transaction in marriages in South India.

Women's sexuality and freedom of movement was less curtailed in South India when compared to women in North India (Dyson and Moore, 1983). Caste and organization of agrarian economy was often seen associated with cultural practices that influenced women's roles. Women in an agricultural set up in east and south India played an important role in weeding, threshing, transplantation and harvesting whereas in north and west India the work was more male biased and involved a lot of muscle power. Thus less discrimination against girls was noticed in rice growing areas than in wheat growing areas. A number of studies have examined the relationship of son preference with household wealth and household structure (Pande and Astone,2007). Women from a wealthy household may have a weaker son preference due to alternative sources of economic support for instance for old age, beyond having sons (Pande *et al*, 2007). Whereas it is possible that son preference is higher in traditional extended households due to a more constrained roles and opportunities for women when compared to those for men (Arnold *et al*, 1998). Overall the northern and western states uniformly show low child sex ratio and high son preference across decades. It may be worth mentioning that child sex ratio (ratio of child population between 0 to 6 years) declined from 927 females per 1000 males in 2001 to 914 in 2011. The national figure masked a more skewed sex ratio in several states especially the Empowered Action Group (EAG) states which witnessed declining fertility but increasing preference for sons. The EAG states comprise 45.9 per cent of India's population (Mayer, 1999). However research on the relationship between son preference and reproductive outcomes is guided by a weak link in both high fertility and low fertility populations. Most of the couples continue to have an additional child regardless of the number of sons and daughters they have in high fertility societies whereas in low fertility societies, couples want to have more than one or two additional children even if they do not achieve their ideal number of sons and daughter (Kumar and Kshatriya, 2013). In a study conducted in India, parity progression driven by desire for sons accounted for 7% births and it was also found from the same study that last born child of women who stopped child bearing was more likely to be a male than female (Chaudhari, 2012). The reduced desired family size was estimated by the fact that women claiming to have no more children after giving birth increased from 59.7 percentage in first sample survey (NFHS-1) to 72.4 percentage in the second survey (NFHS-II) and 84.6 percentage in the last sample survey (NFHS-III).

Current Study

A strong son preference has been found pervasive in Indian society, where the northern and the western states show low child sex ratios across decades and point towards a very high son preference. Smaller families tend to have less proportion of sons than larger families. Most studies on son desire and fertility in India have focused on the relationship between the sex ratio of the living children in a family and the measures of intended fertility. These include studies on the association between the number of sons and variables like contraceptive use and desire for more children. The current study presents an intensive analysis of impact of son desire on parity progression in India by assessing the relationship between sex composition of children and continued child bearing. Keeping this background in view the present study intends to assess the existence of gender preference and its indicators among the tribes of Purbi Singhbhum district, Jharkhand.

Materials and methods

The data for the present study was collected from 1000 ever married Santal and Oraon women (500 each) in the age group of 15-49 years from 15 villages in Golmuri cum Jugsalai and Potka blocks of Purbi Singhbhum District, Jharkhand. The information pertaining to fertility and related socio economic characteristics was collected through in-depth interviews with interview schedules. The key reproductive outcomes of interest are actual proportion of sons and desire to have more children. The extent to which the desire to continue child bearing depends on the current sex composition of couple's living children.

Dependent variable

Respondents were asked about their ideal number of children they would want. Women having no surviving children and women having living children were asked to choose the exact number of children they would want in their entire life if they could start the process afresh. Those who responded to the question were then asked the follow up question: "How many these children would be girls and how many would be boy". Responses were entered as number of boys, number of girls or other response. An ordered categorical variable having three categories was created zero when there was an equal preference for both the sexes, one when a respondent reports to prefer sons and two when the respondent prefers daughters.

Explanatory variable

The study involved eight explanatory variables as age at marriage, woman's education, current age, women's working status, contraceptive use, type of contraceptive method used, last birth interval and conception wait.

The variable last birth interval was coded 1 if the birth interval was less than 20 months and coded 0 when the last birth interval was equal to and more than 24 months. The other explanatory variables of interest were age at marriage of women (less than and equal to 16 years= 0 and more than 16 years=1),current age of respondent (less than and equal to 29 years=1, more than 29 years=1), educational level of woman (Illiterate=0, literate=1) working status (not working=0, working=1), contraceptive use (no=0, yes=1), conception wait, and type of contraceptive method used.

The analysis in the present study examined the existence and indicators of gender preference. In order to examine the factors determining gender preference, a bivariate regression analysis was carried out with proportion of son desired by women as the dependent variables and a set of independent or explanatory variables have been employed. The scale used to assess the socio economic status was Udai Pareek SES scale which consisted of 9 (Caste, occupation, Education, Social Participation, Land, House, Farm Power, Material Possession and Family) main items. These items significantly indicated socio economic status of rural families.

Results

Demographic characteristics of the ever married women included in the analysis are presented in Table 1. It can be seen that 23.8 percentage of Santal women and 24.6 percentage of Oraon women were in the age group of 25-29 years. 54 percentage of Santal and 58.4 percentage of Oraon women were literate. 73.4 percentage of Santal women and 72.6 percentage of Oraon women were married between an age 16 to 20 years. 33.8 percentage and 66.2 percenatge of Santal women resided in joint and nuclear family respectively. While 42.6 percentage and 57.4 percentage of Oraon women resided in joint and nuclear family respectively. 44.6 percentage of Santal women had their last birth interval of less than equal to 20 months. Whereas 77 percentage of Oraon women had their birth interval of less than and equal to 20 months. Further, 16 percentage and 14 percentage of Santal and Oraon women respectively were currently employed. Majority of women, Santal (59.2 percentage) and Oraon (52 percentage) used contraceptive method. Out of which 26.4 and 28 percenatge of women users in Santal and Oraon respectively, used permanent method of contraception. Overall, temporary contraceptive method use was 32.8 percentage and 24 percentage of Santal and Oraon women respectively. 58.4 percentage and 65.8 percentage of Santal and Oraon women spouse were industrial laborers. 16 percentage and 14 percentage of women respectively were currently employed.

The actual sex composition of Santal and Oraon tribe is shown in Table 2 and Table 3. The mean number of children in Santal and Oraon is 2.35 and 1.9 respectively. The mean sex ratio for Santal and Oraon children is 871 girls per 1000 boys and 850 girls per 100 boys respectively. The sex ratio of children

born to Santal women is low for the first and second birth, while for Oraon women, the sex ratio is lowest at the third parity. Santal women at their fourth parity have only 472 girls over 1000 boys, whereas women at their third (1146) and fifth (1158) parity have a highest sex ratio. Oraon women at their fifth parity had the highest sex ratio, which is 1178 boys over 1000 girls.

Another indicator for Gender Bias is the children sex ratio in any population. Figure 1 shows the distribution of mean sex ratio of all children ever born to Santal and Oraon for various parity. The children sex ratio is high for santal women having five children and is low for women having four children, referring to strong gender bias in women with parity of four. Furthermore, children sex ratio is lower than 76 and 81 for first parity in Santal and second parity in Oraon women respectively.

Figure 1: Distribution of mean sex ratio of all children ever born by number of births
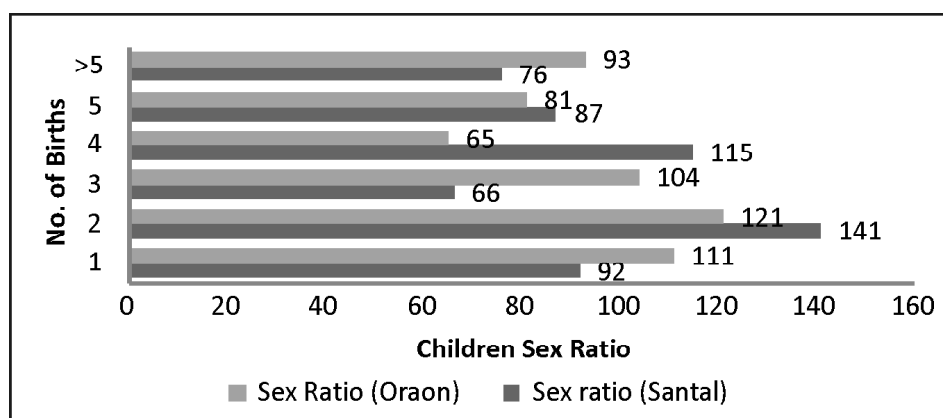
Ideal family size represents what every married couple thinks desirable to have for its own family. When women were asked about the ideal sex composition for their families, it was evident that boys were preferred more over girls. Upon asking about the ideal number of sons they would like, 43.2 percentage of Santal women and 41.20 percentage of Oraon women wanted at least two sons. 19 percentage of Santal women and 26.4 percentage of Oraon women wanted three ideal sons. An overwhelming majority of women (45.60 percentage of Santal women and 42.2 percentage of Oraon women) wanted at least one daughter as well.

Figure 2 shows the overall balance between boys and girls that women would prefer. It indicates that 34 percentage of Santal women and 21.40 percentage of Oraon women wanted an equal number of sons and daughters. While 50.80 percentage of Santal women and 53.60 percentage of Oraon women preferred more boys than girls.

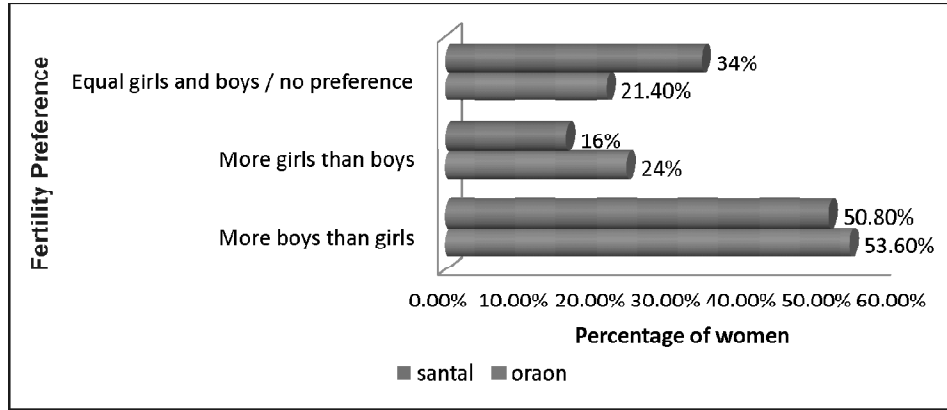**Figure 2: Fertility preference among Santal and Oraon women**

Figure 3 and figure 4 plots a line graph between the actual and the ideal proportion of sons and number of pregnancies among women of Santal and Oraon respectively. The ideal proportion of son is higher than the actual proportion of son for women with one pregnancy. The proportion of son among Santal is highest for women with four pregnancies. The proportion of son tends to increase and is moderate for women with three pregnancies whereas the ideal proportion of son among Oraon increases with an increase in number of pregnancy.

Reasons of Sex preference

Table 5 states the reasons for not preferring daughters. For most of the women (43 %), the main reason is the lack of safety of daughters. Another important reason which follows the discussion is bringing up of daughters (25 %), it is considered as an expensive affair. The reasons like dowry and lack of

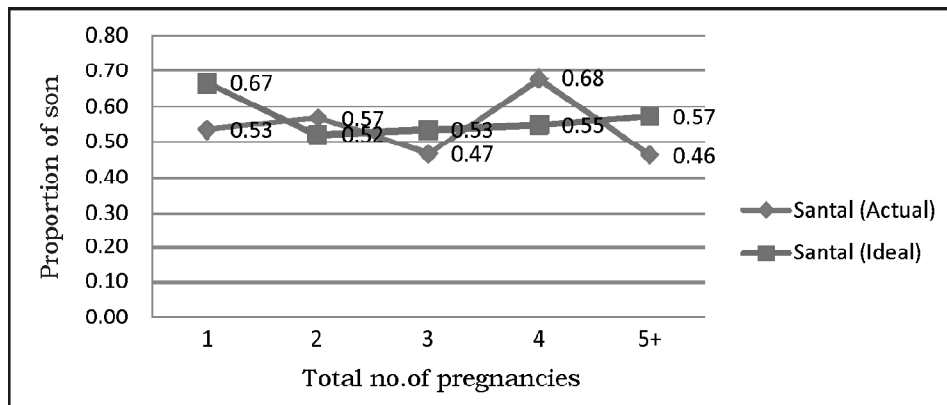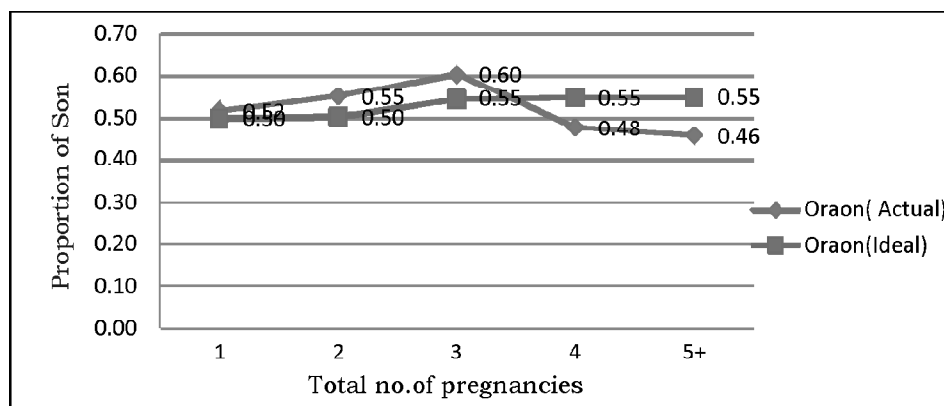**Figure 3: Actual and Ideal proportion of Sons among Santal**

Figure 4: Actual and ideal proportion of sons among Oraon

respect were not considered for preferring daughters because in a tribal society, dowry is replaced by bride price upon marriage.

Table 6 presents the reasons given by women for preferring sons over daughters. A 33 percentage of women preferred sons over daughters because they supplement income to the family followed by 28 percentage of women who perceived son's important role in carrying various religious and familial functions. 16 percentage of women think sons support them during old age. Giving birth to a boy brings respect to a woman in her family and society, thus 11 percentage of women preferred sons over daughters. A few women think that continuation of paternal work (5 %) and paternal clan (7%) lead to preferring sons over daughters.

Indicators of Gender Bias

The sex and birth order of children born to 332 ever married Santal and Oraon women who had stopped child bearing or had been sterilised after having three children was analysed in Table 7. Eight combinations for order of last three births were made, with four combinations where the last sex was male and remaining four combinations where last sex of the child was female. A contrast can be deduced between women with three sons and those with three daughters among Santal (22 percentage and 3 percentage respectively) and Oraon (17 percentage and 8 percentage respectively). The mean total pregnancies by sex composition of last three live births was calculated in table 7. The table highlights women with last three live birth as male tend to have smaller fertility than women whose last three live births were females. As it can be clearly seen the mean number of pregnancies is merely 1.8 for Santal women and 2.1 for Oraon women whose last three births were male. The mean total pregnancies is more for Santal women with the sex composition for their last birth as FFM and FMM. The mean total pregnancies are more for the sex

composition MFF and FFF among Oraon women. A significant difference in mean total pregnancies to the sex composition of the first three children was seen in the table below.

One might expect a family with a better socio economic status to often derail the preference of son and encourage equal preferences for both the sexes. Figure 5 shows the proportion of sons among various socio economic strata. A strong son preference was seen to be prevalent among families of low socio economic status than families in lower middle class and middle class. An equal preference for both the sexes was seen among women belonging to lower middle class families.

Figure 5: Socioeconomic status and proportion of sons
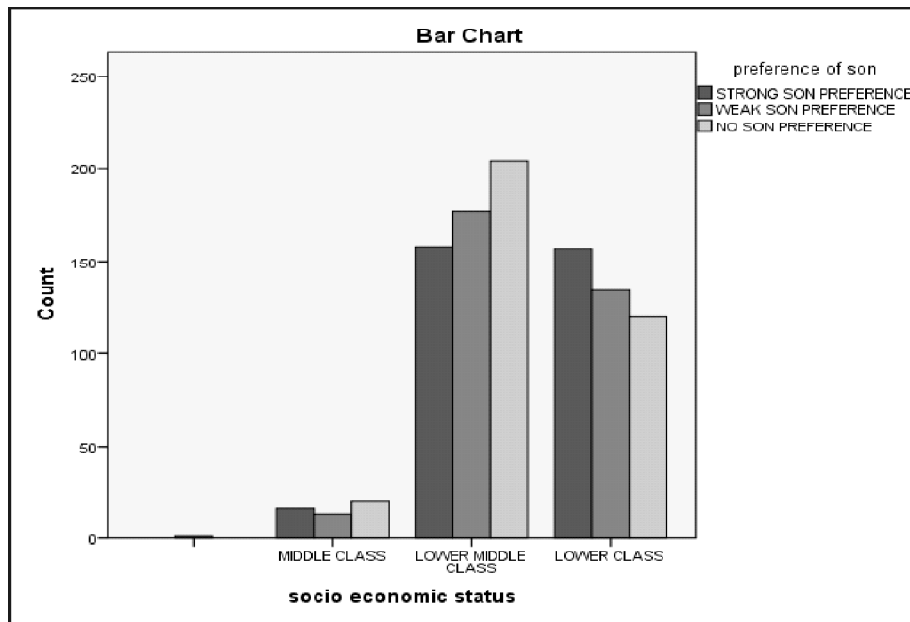
*If proportion of sons desired is: =   0.5 then no son preference
                                        >0.5 but ≤ 0.75, then weak son preference
                                        >0.75 then strong son preference

Table 8 shows the results for binomial logistic regression analysis with one dependent variable (Actual proportion of sons) and eight independent variables among ever married Santal and Oraon women. Findings of the analysis showed that education among women of both the tribes play an important role in determining the son preference. Illiterate Santal women were five times more likely to have a strong preference for son than literate women (O.R.= 5.18***CI=3.09,8.69) whereas among Oraon illiterate women

were twice more likely to prefer for son than literate women(O.R.= 2.4**,CI=2.1,2.8). Women with shorter birth interval were twice more likely to show strong son preference than women with their last birth interval more than 20 months (OR.= 2.53**, CI=2.1,3.2). Majority of women among Oraon had their last birth interval less than and equal to 20 months and were three times more likely to prefer sons than women with their last birth interval of more than 20 months (O.R=2.9* CI= 2.2,3.4). Other predictors responsible for a strong son preference among Santal and Oraon were age at marriage, contraceptive use and type of contraceptive method. Women marrying before 16 years of age were twice more likely to prefer for sons than women marrying after an age of 16 years (O.R.=2.2* CI=1.9,2.8). Santal (O.R.= 2.13***01.8,2.45) and Oraon women (O.R.=3.8***,CI=2.6,4.1) having more proportion of sons were more likely to use sterilization, a permanent family planning method, as compared to women with more daughters.

Discussion and conclusion

The present study explores son preference using family sex composition and various reproductive outcomes among the tribes of Santal and Oraon. More specifically, the paper puts forward fertility choices and family structure to be strongly affected by son preference. Concepts like desired, ideal and actual number of children provides an in-depth understanding about the population dynamics. The findings of the current study are important as they clearly highlight the existence of son preference among Santal and Oraon of Purbi Singhbhum district, Jharkhand. Changes in the child sex ratio Index reflects socio-economic and cultural patterns of the society, especially attitude towards girl child(Mindel,1963). In the present study the child sex ratio was seen high for Santal women having five children and Oraon women having two children. Referring to a strong gender bias among Santal and Oraon women at parity 4 and parity 2 respectively. Family sex composition was found to be associated with women's desire for children. Conversely, with a mean number of children born to Santal (2.35) and Oraon(1.9) , the child sex ratio corresponded to 870 girls per 100 boys and 855 girls per 1000 boys in Santal and Oraon respectively. A large difference could be seen between women with three sons and those with three daughters among Santal women. Women whose first three live births were males tend to have a smaller fertility than those women whose first three live births were females. On asking about the desired number of sons, majority of women from both the tribes, ideally wanted atleast two sons. Despite the evidence of son preference among the two studied tribes, the study also reflected that women may desire a family sex composition that included both sons and daughters, encouraging an equal preference for both the sexes. Also a majority of Santal and Oraon women also wanted atleast one daughter. Preference for sons was found to be linked with social customs and perceived needs of the family, like sons were considered as an important source in supplementing family income. While lack of safety and social

insecurity were among the leading reasons for not preferring daughters among women of both the tribes. Women with daughters as their earlier born children were more likely to continue child bearing and have a shorter last birth interval. Educational attainment was seen to have a stronger effect on the actual sex composition. Stronger effects of gender preference in the population had more access to contraception and higher levels of contraceptive use (Bongaarts, 2001; Porath *et al.*; 1976, Rahman *et al.*;1993). There is a reduction in son preference effect with an increasing level of women's education and household economic conditions. Women with high socio-economic status have few children, driven by fewer girls (Pande *et al*, 2006). It is important to emphasize that these results do not suggest that socio-economic status leads to gender preference. It is assumed that women with more education have an equal preference for both sons and daughters while illiterate women were five times more likely to have a strong preference for sons. The result of the analysis showed clear implications of family planning methods, women practicing contraception particularly female sterilization were more likely to finish their child bearing with a boy. The independent variables like working status, current age and conception wait had no significant effect in determining son preference among Santal women. The desire for son appeared to be an important motivation for parity progression in the studied population. Population policies reducing family size and those reducing the desire for sons by challenging the patriarchal norms and values can be termed essential for a traditional rural setup.

Table 1
Percentage distribution of maternal and household characteristics

Characteristics	Santal women N= 500	%	Oraon women N=500	%
Mother's Age				
<20	36	7.2	38	7.6
20-24	115	23	106	21.2
25-29	119	23.8	123	24.6
30-34	59	11.8	68	13.6
35-39	81	16.2	68	13.6
40-44	46	9.2	51	10.2
45-49	43	8.6	45	9
Education				
Illiterate	230	46	208	41.6
Literate	270	54	292	58.4
Age at marriage				
>15	70	14	74	14.8
16-20	367	73.4	363	72.6
>21	63	12.6	64	12.8
Family type				
Joint	169	33.8	213	42.6
Nuclear	331	66.2	287	57.4
Last Birth Interval				
≤ 20 months	223	44.6	354	70.8
≥ 21 months	277	55.4	146	29.2
Contraceptive use				
No	204	40.8	240	48
Yes	296	59.2	260	52
Type of Contraceptive use				
Temporary	164	32.8	120	24
Permanent	132	26.4	140	28
Occupation of Spouse				
Industrial Labourer	292	58.4	329	65.8
Agicultural labourer	55	11	75	15
Business	68	13.6	60	12
Private service	34	6.8	15	3
Government service	51	10.2	21	4.2
Working Status				
Not Working	420	84	430	86
Working	80	16	70	14

Table 2
Actual Sex composition of Santal

Total no. of pregnancies	No.of women	No.of boys	No.of Girls	Total no. of children	Sex ratio of children born
1	122	70	61	131	871
2	164	170	130	300	764
3	115	157	180	337	1146
4	58	129	61	190	472
5+	41	101	117	218	1158

Table 3
Actual Sex Composition of Oraon

Total no. of pregnancies	No. of women	No. of boys	No. of Girls	Total no. of Children	Sex ratio of Children born
1	222	143	133	276	930
2	150	170	138	308	811
3	85	139	91	230	654
4	28	47	51	98	1085
5+	15	28	33	61	1178

Table 4
Ideal sex composition of Santal and Oraon women

Ideal Number	Santal		Oraon	
	Boys	Girls	Boys	Girls
0	0.60%	2%	0	0
1	32.60%	45.20%	26.40%	42.20%
2	43.20%	43%	41.20%	42%
3+	19%	9.20%	26.40%	15.80%

Table 5
Reasons for not preferring daughter

S.no	Reasons for not preferring daughters	Number (n=1000)	%
1	Women not respected if they give birth to a girl	100	10
2	lack of Safety	430	43
3	Dowry	100	10
4	bringing up is an expensive affair	250	25
5	Social Insecurity	120	12

Table 6
Reasons for Preferring Son

S.no	Reasons for preferring Son	Number (n = 1000)	%
1	Supplement Family Income	330	33
2	Support in Old Age	160	16
3	Continuation of Parental work	50	5
4	Continuation in Paternal Clan	70	7
5	Religious functions	280	28
6	Regarded respectful in Society	110	11

Table 7
Mean total pregnancies by sex composition of last three live births among Santal and Oraon women

Order of last three birth	Santal			Oraon		
	N	%	Mean Number of Pregnancies	N	%	Mean Number of Pregnancies
MMM	36	22%	1.8	29	17%	2.1
MFM	26	16%	2.1	25	15%	2.1
FFM	24	15%	3	21	13%	1.8
FMM	30	18%	3	27	16%	1.9
MFF	12	8%	2.6	23	14%	2.3
MMF	14	7%	2.8	17	10%	1.9
FMF	14	9%	2.4	12	7%	2.1
FFF	8	5%	2.8	14	8%	2.4
Total	164	100%	2.7	168	100%	1.9

Table 8
Predictor variables for Dependent variable (Actual Proportion of sons) in Binomial Logistic Regression Analysis for Santal and Oraon women in the age group (15-49) years

Independent Variables	Santal		Oraon	
	Odds	C.I.	Odds	C.I.
Age	1.0	0.8,1.6	1.8	1.4,2.3
Age at Marriage	2.2*	1.9,2.8	3*	1.7,2.5
Last birth Interval	2.53**	2.1,3.2	2.9*	2.2,3.4
Education	5.18***	3.09,8.69	2.4**	2.1,2.8
Working status	0.82	0.7,1.2	0.64	0.2,0.8
Contraceptive use	2.12**	1.6,4.11	1.45	0.91,2.29
Conception wait	0.9	1.2,2.2	1.2	1.6,2.7
Type of Contraceptive use.	2.13**	01.8,2.45	3.8**	2.6,4.1

N=1000
***p<0.001
** p<0.01
* p<0.05

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