

IRONY OF FEMALE LITERACY: A DISTRICT-WISE STUDY OF HARYANA

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Abstract

This study is conducted to evaluate the influence of female literacy on child sex ratios in districts of Haryana because it is presumed that the female literates can easily understand the consequences of descending sex ratio. Study is primarily based on Indian census data of 2011. Data is processed with simple statistical techniques such as percentage, graphical method and Spearman's correlation method with the help of SPSS software. This paper revealed that Son preference has resulted in a lopsided child sex ratio in Haryana and there is also an interregional variation in the child sex ratios among districts of Haryana. There is negative correlation between female literacy rates and child sex ratio in districts of Haryana.

Keywords- Female literacy, Sex ratio, Indian census

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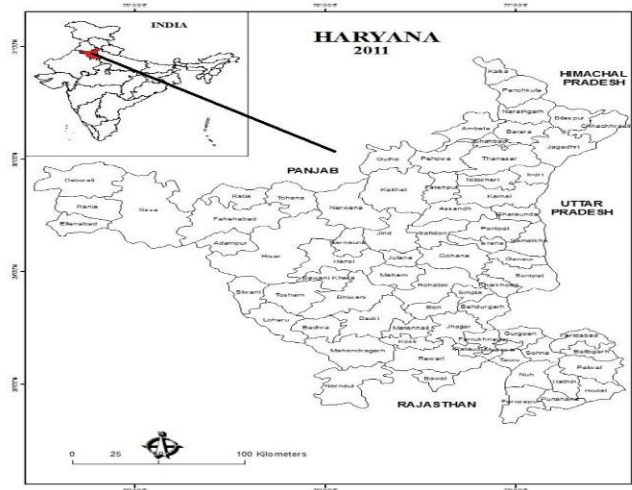
Introduction

Female literacy and child sex ratio are two important demographic characteristics of a Population, where Literacy is refers to the ability to read for knowledge, write coherently and think critically about the written word. According to census of India "a person aged more than 6 years and who can both read and write with understanding in any language has taken as a literate". The gap between male and female literacy is a sensitive indicator of social discrimination. The gender gap in education occurs when there are systematic differences in schooling levels between men and women. According to the census 2011, in Haryana, the literacy rate has increased 67.91% (2001) to 76.64%. Although there is significant improvement in literacy, but there are regional disparity in the level of literacy. Literacy in Haryana differs from 87.91 percent in Gurugram to 61.18 percent in Mewat and male & female populations in a country display a wide disparity in respect of literacy rate. Male literacy is 85.38% whereas female is 66.77, which varies from highest in Gurugram (77.64%) to lowest in Mewat (37.58%).

Child Sex Ratio is important indicator of development. It also describes the present situation with respect to status of girl child, gender discrimination, infanticides and feticides. Present sex composition of child population determines the future vital events such as marriage rate, labour force, age structure, birth and death, migration, etc. In 2011 census, Haryana has been recorded improvement in child sex of 11 points from 819(2001) to 830 (2011). However, it is still low when compared to national average of 914. Sex ratio also reveals a wide disparity across districts. The lowest sex ratio is found in Jhajjar district where there were only 774 girls for every 1000 boys in the age group 0-6 years while highest child sex ratio is reported in Mewat district (903) girls per 1000 boys.

Study Area

Present study pertain Haryana state which is located between 27°39'N to 30°55'N latitudes and 74°28'E to 77°36'E longitudes in the north-western part of India (Fig. 1). As per 2011 census, the total population of Haryana is 2.53 crore (1.35 crore males and 1.18 crore females) which accounts 2 percent of the total population of India. Haryana is the 16th largest state of India and is cover an area of 44,212 sq. km with a population density of 573 persons.



Review of Literature:

Godase, Lingade(2014) analyzed the correlation between literacy and sex ratio in Satara district. To analyze he used Spearman's Rank order method is used for analyzes the correlation of literacy & sex ratio. The correlation between literacy and sex ratio in Satara district is $r = -0.14$. It is low and negative correlation.

Kumar(2013) aimed the study to analyze the Correlation between female Literacy and child Sex Ratio in Haryana using data collected by the 2011 census. Spearman's Rank Difference method is used for analyzes the correlation of literacy & sex ratio. The study reveals that correlation between child sex ratio and female literacy is $r = -.46$. It is a moderate negative correlation. The child sex ratio and female literacy have moved opposite direction in Haryana.

Shetty(2014) conducted the study to evaluate the influence of female literacy on sex ratios through three decades from 1981 to 2011 in 24 states of India. Female literacy in India improved from 29.85% in 1981 to 65.45 in 2011. In the same period the sex ratio improved from 934 to 943. The change in sex ratio and female literacy rates in individual states however is not uniform and there is significant regional variation. Female literacy has a positive bearing on the sex ratio and states which have a higher literacy rate show faster movement towards gender parity. Therefore higher the female literacy rate in a state more is the improvement in sex ratio for every percent further rise in female literacy.

Jangra, Kaushik (2016)'s study reveals the tehsil-wise trend of female literacy rate in Haryana. So, the purpose of the paper is to describe and interpret the regional aspects of the urban-rural differentials in female literacy during 1991, 2001 and 2011. It is primarily based on census data. Data is processed with simple statistical techniques such as percentage and multiple correlations. Attempt has been made to identify the correlates of female literacy in an agro-based economy. It is noted that the total female literacy rate has increased significantly during the study period. However, there are wide gaps in urban-rural female literacy. Comparatively, the increase is more remarkable in rural areas and gap is narrowing down.

Yadav (2015) attempts to analysis the correlation between literacy and sex ratio in Rajasthan. Literacy affected on migration and sex ratio. The knowledge of literacy and sex ratio is essential for the understanding the condition of women in society. A decline sex ratio is suggestive of the neglect of girl children, sex selective abortions and traditional attributes of the society. Thus, the analysis of literacy and sex ratio is immense significant. This paper revealed that there is negative correlation between literacy and sex ratio in Rajasthan.

Boorah, Iyer proposes a new explanation for religious differences in fertility in India by incorporating the issue of gender bias into the debate. It reports the results from an econometric investigation of the factors influencing the sex ratio at birth and among currently living children, by religion and by caste, for a sample of over 10,000 women in India. The investigation paid particular attention to religion and caste by subdividing the sample into Hindu, Muslim and Dalit women who had all terminated their fertility. It enquired whether the effect of different variables on the sex ratio varied according to the religion and caste of the women. The econometric analysis found that a husband being literate served to raise the sex ratio - both at birth and of currently living children - but that the effect of husbands' literacy was stronger for Muslims and Dalits than it was for Hindus. In other words, while the illiteracy of husbands exacerbated 'son preference' (and its obverse, 'daughter aversion') the preference for sons (and the aversion to daughters) exercised a stronger hold on Hindu families than it did on Muslim and Dalit families.

Objectives of the Study:

1. To trace the spatial pattern of female literacy rate in Haryana.

2. To examine the spatial pattern of child sex ratio in Haryana.
3. To analyze the correlation between spatial pattern of female literacy and child sex ratio in the study region.

Research Methodology

Present paper is based on secondary data which obtained by census of India 2011. Literacy rate has been computed for the population above 6 year. Graphical method and SPSS software has been used to analyze the correlation between female literacy & child sex ratio.

Major Findings

Spatial Pattern of Child Sex Ratio:

Table.1 presents an overall picture of child sex ratio (2011) in the state. In 2011 census, There is improvement of 11 points in child sex ratio from 819(2001) to 830(2011). There is wide disparity among districts of Haryana when we look at Sex ratio across districts. The Gap between lowest sex (Jhajjar,774) and highest (Mewat,903) is of 129 points. The range of child sex ratio divided into three categories, that is, (i) high, (ii) moderate, (iii) low

High Child Sex Ratio:

Out of 21, only few districts have high child sex ratio. Mewat is standing top of the table with 903 followed by Palwal (862), Faridabad (842), Sirsa (852), Panchkula (850), and Hissar (849).

Moderate Child Sex Ratio:

Jind (835), Panipat(833), Ambala(807), Kurukshetra(817), Rohtak(807), Bhiwani(831), and Yamunanagar(825) fall in the category of moderate child sex ratio category. Reasons behind this moderate child sex ratio are shortage of clinic, low literacy rate and not well transport e.t.c.

Low Child Sex Ratio:

Mahendergrah (778), Rewari(784), Jhajjar (774)and Sonipat (790) districts in southern part of Haryana are low child sex ratio districts. Strong patriarchal system and the rapid growth of pre-natal diagnostic test center are the main reasons which have added to decline of female child.

Table.1: Child sex ratio among districts of Haryana

Sr. No	District	Child Sex Ratio 2011	Sr. No	District	Child Sex Ratio 2011
1	Ambala	807	11	Mahendragrah	778
2	Bhiwani	831	12	Mewat	903
3	Faridabad	842	13	Palwal	862
4	Fatehabad	845	14	Panchkula	850
5	Gurugram	826	15	Panipat	833
6	Hisar	849	16	Rewari	784
7	Jhajjar	774	17	Rohtak	807
8	Jind	835	18	Sirsa	852
9	Kaithal	821	19	Sonipat	790
10	Karnal	820	20	Yamunanager	825
11	Kurukshetra	817			

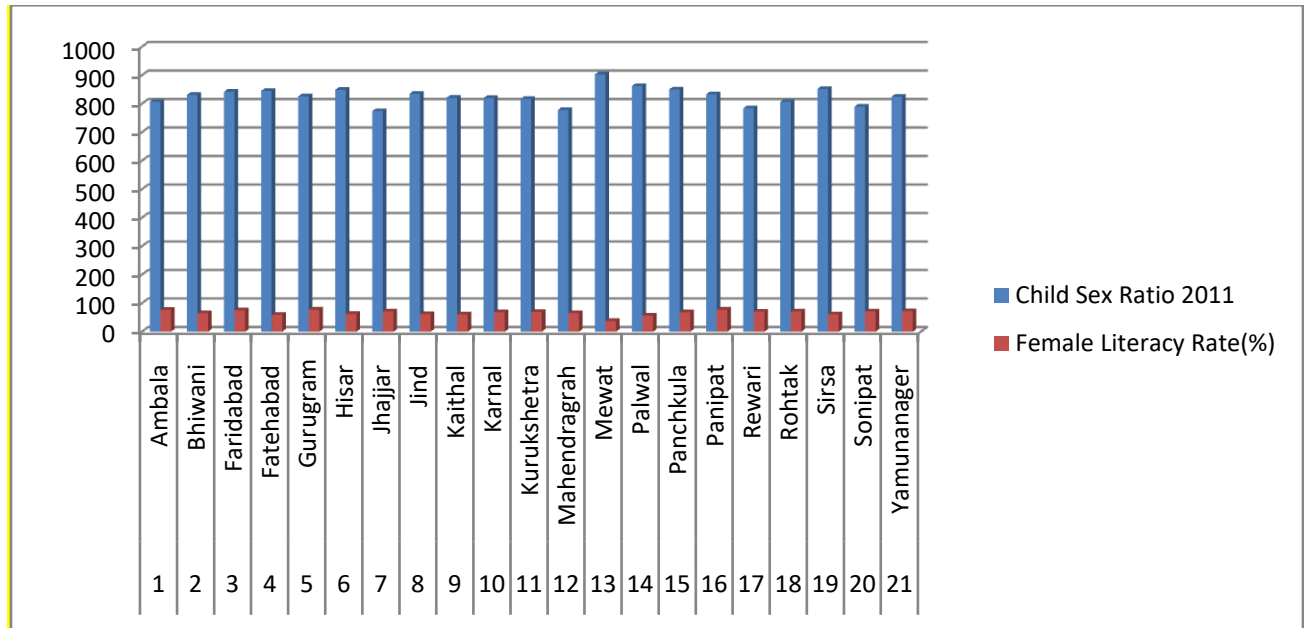
Table.2 shows pattern of female literacy rate (2011) in the Haryana. In 2011 census, Haryana has female literacy rate of 66.67 per cent, which varies from highest in Gurugram (77.64%) to lowest in Mewat (37.58%). The range of female literacy has been divided into (i) high, (ii) moderate, (iii) low. Gurugram is standing on top of table with (77.6) of female literacy followed by Panchkula (77.5), Ambala (76.2) and Faridabad (75.2). Better educational facilities and awareness of peoples towards education is the reason for this. Moderate literate districts are Yamunanager (72), Rohtak (71.2), Jhajjar (71), Karnal (68.3), Mahendergrah (67.25), Rewari (70.5), Kurukshetra (69.2), Panipat (68.2) Bhiwani (64.8), Jind (61.6). These districts, have well agricultural developed, high urbanization and availability of educational institutes and high degree of development. (Keshwa, 2013). Low female literate districts are 7 in numbers. The lowest female literacy is in Mewat (37.6) followed by Palwal (56.40), Fatehabad (59.3), kaithal (60.7), Sirsa (61.2), Hissar (62.3) Less attention towards education by population in these districts is the main reason for this.

Table.2: Female Literacy among districts of Haryana

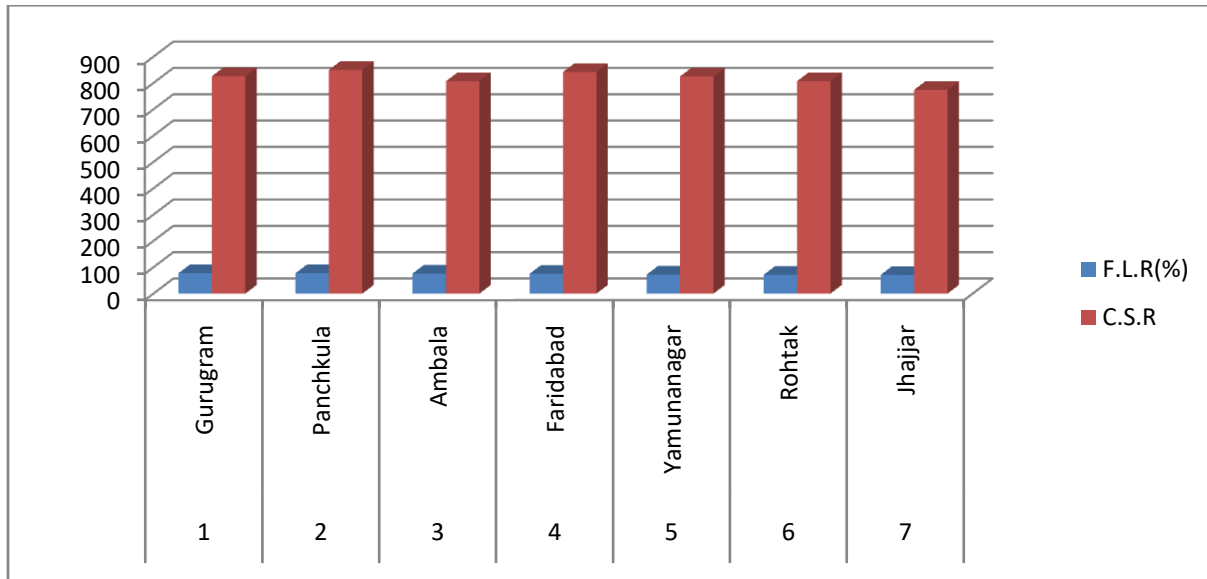
S.No	District	Female Literacy Rate (%)	S.No	District	Female Literacy Rate (%)
1	Ambala	76.6	12	Mewat	37.6
2	Bhiwani	64.8	13	Mahendergarh	65.3
3	Faridabad	75.2	14	Palwal	56.4
4	Fatehabad	59.3	15	Panipat	68.2
5	Gurugram	77.6	16	Panchkula	77.5
6	Hisar	62.3	17	Rewari	70.5
7	Jhajjar	71	18	Rohtak	71.2
8	Jind	61.6	19	Sirsa	61.2
9	Kaithal	60.7	20	Sonipat	70.9
10	Karnal	68.3	21	Yamunanagar	72
11	Kurukshetra	69.2			

Table.3: Child Sex ratio and Female Literacy in Districts of Haryana.

Sr. No	District	Child Sex Ratio 2011	Female Literacy Rate(%)	Sr. No	District	Child Sex Ratio 2011	Female Literacy Rate(%)
1	Ambala	807	76.6	12	Mahendragrah	778	65.3
2	Bhiwani	831	64.8	13	Mewat	903	37.6
3	Faridabad	842	75.2	14	Palwal	862	56.4
4	Fatehabad	845	59.3	15	Panchkula	850	68.2
5	Gurugram	826	77.6	16	Panipat	833	77.5
6	Hisar	849	62.3	17	Rewari	784	70.5
7	Jhajjar	774	71	18	Rohtak	807	71.2
8	Jind	835	61.6	19	Sirsa	852	61.2
9	Kaithal	821	60.7	20	Sonipat	790	70.9
10	Karnal	820	68.3	21	Yamunanager	825	72
11	Kurukshetra	817	69.2				

Figure.1: Female literacy rate and child sex ratio among all districts of Haryana**Correlation between Female literacy and Child sex ratio****1. Graphic Method****Table.4: Districts with Highest Female literacy rate and their child sex ratio**

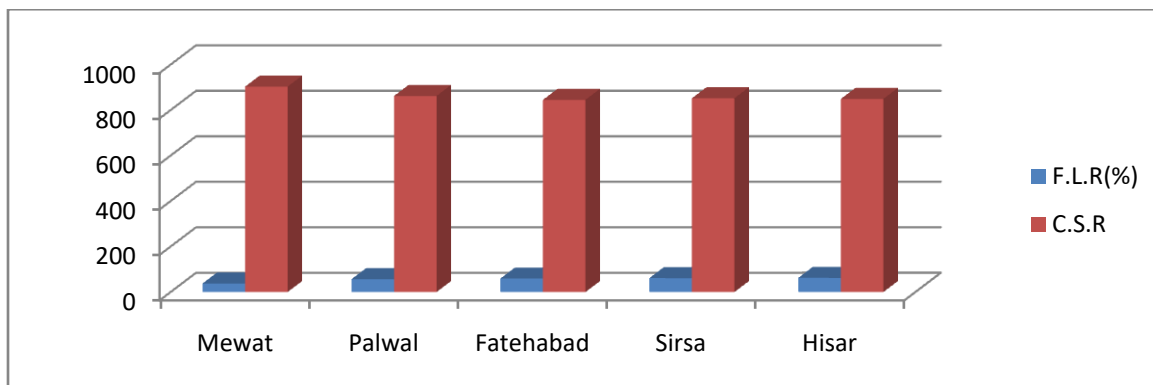
S.No	Districts	F.L.R(%)	C.S.R
1	Gurugram	77.64	826
2	Panchkula	77.5	850
3	Ambala	76.2	807
4	Faridabad	75.2	842
5	Yamunanagar	72	825
6	Rohtak	71.2	807
7	Jhajjar	71	774

Figure.2: Districts with Highest female literacy rate and their child sex ratio

In the above given graph all districts with highest female literacy registered child sex ratio below 850 except Panchkula which too has equal to 850 only and situation in Jhajjar(774) , Ambala(807) and Rohtak(807) is high alarming and child sex ratio for these districts is mostly lowest among all districts of Haryana which is clear indication of negative relationship between female literacy and child sex ratio among districts of Haryana.

Table.5: Districts with Lowest Female literacy and their child Sex ratio

S.no	Districts	F.L.R. (%)	C.S.R
1	Mewat	37.6	903
2	Palwal	56.4	862
3	Fatehabad	59.3	845
4	Sirsa	61.2	852
5	Hisar	62.3	849

Figure.3 Districts with Lowest female literacy and their child sex ratio

In the above given map districts with lowest female literacy rates are given. Except their lowest female literacy these districts have child sex ratio more than 845 each which is much better than the high female literate districts and the average (826.23%) of all districts. Mewat(903), Palwal(862), and Sirsa (852) have very satisfactory results in terms of child sex ratio but not in terms of female literacy rate. Here too negative relation is clearly visible among female literacy and child sex ratio.

2. Spearman's Rank correlation Method

Table.6: shows Correlation between Female Literacy Rate and Child Sex Ratio in Haryana with the help of Spearman's rank correlation method. Spearman's rank correlation is measure of relationship between two variables using the ranking data. The rank correlation between child sex ratio and female literacy is $r = -.46$. It is a moderate negative correlation. The child sex ratio and female literacy have moved opposite direction in Haryana.

Table.6 Correlation between Female Literacy Rate and Child Sex Ratio with Spearman's Correlation Method

Correlations			Child sex ratio	Female literacy rate
Spearman's rho	Child sex ratio	Correlation Coefficient	1.000	-.518*
		Sig. (2-tailed)	.	.016
		N	21	21
Female literacy rate	literacy rate	Correlation Coefficient	-.518*	1.000
		Sig. (2-tailed)	.016	.
		N	21	21

*. Correlation is significant at the 0.05 level (2tailed).

Conclusion

There are regional disparities in distribution of child sex ratio and female literacy rate among districts of Haryana. As per Census 2011 child sex ratio in Haryana is high in districts Mewat ,

Palwal, Fatehabad, Sirsa, and Hissar and Jhajjar, Mehandergrah, Rewari have low sex ratio. 66.67 per cent female's are literate in Haryana, which varies from highest in Gurgaon, Faridabad, Sirsa Panchkula and Ambala to lowest in Mewat, Palwal, Fetahabad, kaithal, Sirsa. It is clear from the pattern of literacy that districts adjoining to NCR have recorded high literacy rate. It is because of better educational facilities and awareness of peoples towards education. As per graphic method top high female literacy districts have child sex ratio almost below 850 and districts with lowest female literacy rate have child sex ratio almost above 850. Mewat with lowest female literacy rate (37.6) and highest child sex ratio (903) only district above 900. While in Jhajjar, literacy rate among women has gone from 59 to 71 percent and the child sex ratio come down 801 to 774. These above figures are telling a lot about Irony of female literacy in Haryana. As per Spearman's rank correlation method study reveals that correlation between child sex ratio and female literacy is $r = -.518$. It is a moderate negative correlation. The child sex ratio and female literacy have moved opposite direction in Haryana. As per our study it is evident that decline in child sex ratios are contributed more by female literacy and economically better of segment of population. Females of state not only to be made literate but also value education should be given in proper manner to them where they also follow those values and a mass movement should also be started by state governments to change the thinking of elder persons of family which makes influence on their daughter-in-laws to abort in case of daughter and at last laws need to be made much more stronger.

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