



CORRELATION BETWEEN FEMALE LITERACY & CHILD SEX RATIO IN HARYANA (2011): A GEORAPHICAL ANALYSIS

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Abstract: *Female literacy and child sex ratio are two important demographic characteristics of population. Female literacy plays a very important role in upliftment of the sex ratio. Therefore, the present paper is aimed 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. The sex ratio has been found to be highest in districts, which have low female literacy. Mewat most back word region of the state, has registered female literacy of (37.38%). but it has the highest child sex ratio of 903, only district above the 900 mark. While in Jhajjar, literacy rate among women has gone from 59 to 71 percent and the child sex ratio comes down 801 to 774. It requires stringent action from the state authorities and mass movement to change the mindset and equal order of the patriarchal society.*

Keywords: *sex ratio, female Literacy, regional disparities, spatial pattern, Correlation*

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INTRODUCTION:

Female literacy and child sex ratio are two important demographic characteristics of population. Female literacy plays a very important role in upliftment of the sex ratio. (Keshwa, 2013). Literacy is considered as one of the most important social aspects of any society's development, especially of rural areas and it denotes essential criterion of human development. It indicates the socio-cultural status of any society in any geographical unit and the change in literacy reflects the socio-cultural and economic transformation of the society. Literacy is essential for eradicating poverty and mental isolation for cultivating peaceful and friendly international relations and for permitting the play of demographic processes (Chandna, 1980 & Krishan, 1978).). The Population Commission of United Nations considers ability to both read and write with understanding in any language. A person who can merely read but cannot write is not classified as literate. Any formal education or minimum standard is not necessary to be considered literate. In 1981 census, all children of age of 4 years or less was treated as illiterate even if many among them might be going to school and might have learnt few words. In census 1991 and 2001, a person, and aged 7 and above, was considered as literate who can both read and write with the understanding of any language (PCA of Census, 1981 and 2001)

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. It is a useful measure for providing evidence of the inequalities that exist between the sexes in terms of access to school. The construction of gender roles in any society is influenced by several factors, most of which are largely independent of the sources of poverty or growth. Indicators frequently used to measure gender equality include life expectancy, education, and earnings. India, like other developing contraries, has always been characterized by its sharps inequalities, rooted in centuries by its evolution, of cast, gender and residence. The inequalities in literacy existing among male-female are most drastic in nature. The inequalities in literacy among male-female are result of our countries old discriminatory social order and there natural adaptations (M.B. Singh, 20011). 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 Gurgaon 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 Gurgaon (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:

Haryana state is one of the most prosperous states of India. It's lies between 27°37' north to 30°53' northern latitude and 74°28' east to 77°36' eastern longitude. Haryana was carved out from Punjab in 1966 as a new state of India. On the northern side of it Punjab and Himachal Pradesh, Uttar Pradesh and Rajasthan are on east and south of Haryana and the western boundary is shared by Punjab and Rajasthan. The Total area is 44212sq.km. having 21 districts in 2011. Haryana state has total population of 2, 53, 53,081 persons in 2011, out of which 1, 35, 05, 130 are male and 1,18,47,951 female. The density of population recorded as 573 persons per sq. kilometer which is fifth highest in Indian states. The child sex ratio recorded 830 females per thousand males, which is lowest in India. Haryana state has 76.64 percent literacy rate with differential of 85.38 percent male literacy and 66.77 percent female literacy.

OBJECTIVES:

The present paper has following objectives:

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

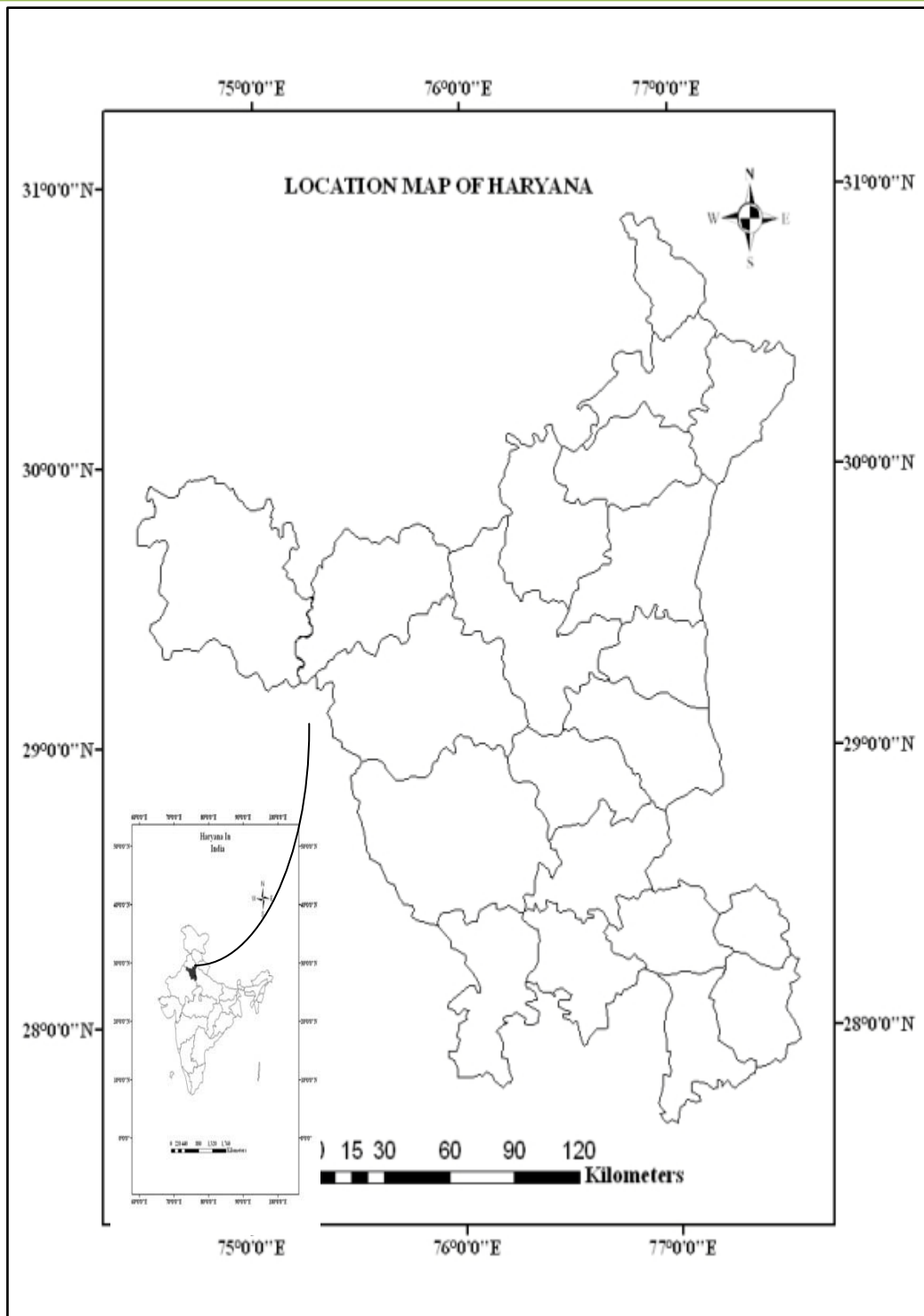


Fig .1

DATABASE AND RESEARCH METHODOLOGY:

Present paper is based on secondary data which obtained by census of India 2011. Arc Gis 9.3 software used for preparing the map and to show the spatial pattern of sex ratio and literacy in Haryana.. Literacy rate has been computed for the population above 6 year. 11.5



SPPS software has been used for analyzes the correlation of female literacy & child ratio and the Spearman's Rank Difference method is used.

Spatial Pattern of Child Sex Ratio:

Table.1 presents an overall picture of child sex ratio (2011) in the state. In 2011 census, Haryana has been recorded improvement in child sex of 11 points from 819(2001) to 830 (2011). 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. Map no. 1 gives a visual impression of inter-districts variations in sex ratio in the state. 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 10 districts have high child sex ratio. The highest child sex ratio that is 903 found in Mewat followed by Palwal (862), Faridabad (842), Sirsa (852), Panchkula (850), and Hissar (849). Due to people are highly matured and discrimination against girl child is not strong in these districts, lesser accessibility and awareness about scanning centers may be the main reasons, which are responsible of high child sex ratio in these districts.

Moderate Child Sex Ratio:

Moderate sex ratio has recorded in the districts of Jind (835), Panipat (833), Ambala(807), Kurukshetra (817), Rohtak(807), Bhiwani (831), Yamunanager (825) and kaithal (821), Karnal (820). It is because of shortage of clinic, low literacy rate and not well transport system are main reasons, which are responsible for moderate child sex ratio in these districts.

Low Child Sex Ratio:

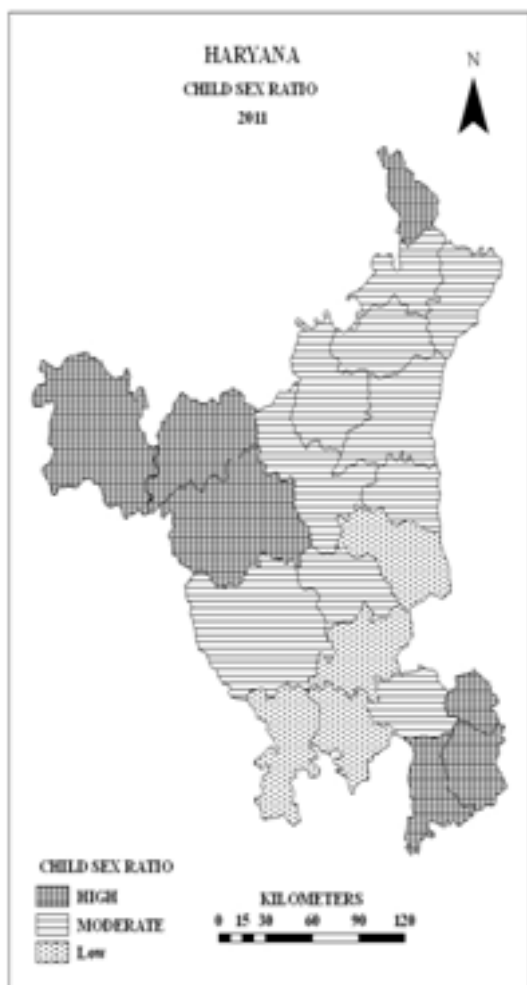
Low child sex ratio is found a contiguous zone consisting of Mahendergrah (778), Rewari(784), Jhajjar (774)and Sonipat (790) districts in southern part of Haryana. Due to the patriarchal system is very strong and the rapid growth of pre-natal diagnostic test center has added to decline of female child.



Table.1: Spatial Pattern of child sex ratio (2011) in Haryana

Sr. No	District	Child Sex Ratio 2011	Sex	Sr. No	District	Child Sex Ratio 2011
1	Panchkula	850		12	Bhiwani	831
2	Ambala	807		13	Rohtak	807
3	Yamunanager	825		14	Jhajjar	774
4	Kurukshetra	817		15	Mahendragrah	778
5	Kaithal	821		16	Rewari	784
6	Karnal	820		17	Gurgoan	826
7	Panipat	833		18	Mewat	903
8	Jind	835		19	Faridabad	842
9	Fatehabad	845		20	Palwal	862
10	Sirsa	852		21	Sonipat	790
11	Hisar	849		22	Haryana	830

Source: Provisional Census of India, 2011



Map No.1



Map No.2



Table.2: Spatial Pattern of Female Literacy Rate (2011) in Haryana

Sr. No	District	Female Literacy Rate	Sr. No	District	Female Literacy Rate
1	Panchkula	77.48	12	Bhiwani	64.60
2	Ambala	77.64	13	Rohtak	71.19
3	Yamunanager	71.99	14	Jhajjar	70.96
4	Kurukshetra	69.18	15	Mahendragrah	67.25
5	Kaithal	60.69	16	Rewari	70.54
6	Karnal	68.29	17	Gurgoan	77.64
7	Panipat	68.23	18	Mewat	37.38
8	Jind	61.58	19	Faridabad	75.17
9	Fatehabad	59.29	20	Palwal	56.40
10	Sirsa	61.16	21	Sonipat	70.88
11	Hisar	62.31	22	Haryana	66.77

Source: Provisional Census of India, 2011

Table.2 shows pattern of female literacy rate (2011) in the state. In 2011 census, Haryana has recorded 66.67 per cent female literacy rate, which varies from highest in Gurgaon (77.64%) to lowest in Mewat (37.58%). Map no.2. gives a visual impression of inter-districts disparity in literacy rate in the state. The range of literacy divided into three categories, that is, (i) high, (ii) moderate, (iii) low. Gurgaon district has highest female literacy rate of (77.64%) followed by Panchkula (77.48), Faridabad (75.17) and Ambala (77.64). It is because of better educational facilities and awareness of peoples towards education. Moderate literacy has recorded in the districts of Yamunanager (71.99), Rohtak (71.19), Jhajjar (70.96), Karnal (68.29), Mahendergrah (67.25), Rewari (70.54), Kurukshetra (69.18), Panipat (68.23), Rewari(70.54) and Jind (61.58), Bhiwani (64.60). In these districts, have well agricultural developed, high urbanization and availability of educational institutes and high degree of development. (Keshwa, 2013). Low literacy is found in 7 districts. The lowest literacy rate i.e (37.38) is found in Mewat followed by Palwal (56.40), Fetahabad (59.29), kaithal (60.69), Sirsa (61.16), Hissar (62.31). Due to pre-dominance of backward population in these districts which give less attention towards education.

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Table.3: shows Correlation between Female Literacy Rate and Child Sex Ratio in Haryana. 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. The sex ratio has been found to be highest in districts, which have low female literacy. Mewat most backward region of the state, has registered female literacy of (37.38%). but it has the highest child sex ratio of 903, only district above the 900 mark. While in Jhajjar, literacy rate among women has gone from 59 to 71 percent and the child sex ratio comes down 801 to 774.

Table.3: Correlation between Female Literacy Rate and Child Sex Ratio
In Haryana

Method	Variables		Female Literacy	Child Sex Ratio
Spearman's rho	Female Literacy Rate	Correlation Coefficient	1.000	-.467(*)
		Sig. (2-tailed)	.	.029
		N	21	21
	Child Sex Ratio	Correlation Coefficient	-.467(*)	1.000
		Sig. (2-tailed)	.029	.
		N	21	21

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

Source: Calculation by Author with help of SPSS 11.5 Software

CONCLUSION:

Present study found that there are regional disparities in distribution of the sex ratio and female literacy. It is noticed that child sex ratio is high in Mewat, Palwal, Fatehabad, Sirsa, and Hissar, due to people are highly matured and discrimination against girl child is not strong in these districts. Jhajjar, Mehandergrah, Rewari have low sex ratio. Haryana has recorded 66.67 per cent female literacy rate, 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. 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. In 2011 census data shows correlation between child sex ratio and female literacy in districts. The sex ratio has been found to be highest in districts, which have low female literacy. Mewat most backward region of the state has registered female literacy of (37.38). However, it has the highest child sex ratio of 903, only district above the 900 mark. While in Jhajjar, literacy rate among women has gone from 59 to 71 percent and the child sex ratio come down 801 to 774. It suggests that decline in child sex ratios are contributed more by female literacy and economically better of segment of population. It requires stringent action from the state authorities and mass movement to change the mindset and equal order of the patriarchal society.

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