

Geographical Appraisal of Gender Disparity and Progress in Literacy of Haryana, India

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Abstract The present research relates to the northern state of Haryana in India and to find out the objective of advancement and the existing gender gap in literacy with identification of responsible factors, the study uses the secondary data obtained from different censuses of India, National Crime Record Bureau and various other related sources. The disparity index is calculated to examine the gender gap in literacy whereas the correlation coefficient is used to ascertain its relationship with major determinants. Though the country and the state have achieved a reputed position with the literacy rate of 74.04 and 75.55 per cent respectively in 2011 yet inequality in the learning of male-female is a matter of concern for both entities. The figure for the district Mewat (which also lies at bottom in overall literacy as per ongoing census data) shows more discrimination in male-female learning, as here the male literacy rate is approximate to the double (69.97 per cent versus 36.60 per cent) of the females. To some extent, in areas like Mewat, Palwal and Fatehabad this discrimination is an outcome of societal stances, religion, fiscal or ethnical determinants and cultural stereotype as these factors of the environs have a direct or indirect association with literacy. So to ensure the equality and quality in education in basic or compulsory education, there is a need for massive investment on resources with communal awareness regarding significance as well as claptrap obstacles in the way of the learning.

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1. Introduction

Education and literacy are two separate but corresponding terms. Like different aspects of the same coin where literacy level is an essentially smallest but the strong decisive factor of educational attainment, education itself enlightens the path of a literate person by offering further opportunities of gaining and imparting knowledge, proficiency and quality. Its significance for mankind has been constantly increasing and in fact, it is a true measure of progress which refers to the communication ability of an individual through reading and writing (Kapur and Murthi, 2009). Education is a fundamental human right and more significantly it is one of the main variables of the Human Development Index (HDI) with per capita income and life expectancy. It is only the knowledge that builds a nation by socially, economically and culturally empowered by raising the potential, awareness, skill and ability of individuals (Sen, 1989; Haq and Haq, 1998; Khan, 2004; Shakir et.al, 2012). It is a medium of transmission of values, knowledge and ideas from one to another which enhance the comprehending and responding capabilities of a person. In human capital theory, education has been considered as an investment of present for capitulating in future for self and civilization. The cultured or educated human mass is the biggest and precious resource for any nation. Surely, education supplies the prospective to emerge an optimistic and constructive track for a person to

upgrade the standard of living with considerable social returns so that one can contribute in the formation of a healthy society (Sengupta and Guha, 2002; Das and Pathak, 2012; Islam et.al, 2016).

The sustainable, serene and prosperous world also aims to equitable and qualitative education along with the promotion of lifelong opportunities. The realistic education is just like the parent rock which always offers a sound base to the development through improvement in perceptions and approaches of the society. On the other hand, illiteracy augments the political instability and economic stagnation with negative impacts on advancement (Roberts, 2000). The term literacy is defined and assessed in various ways across the world. In wider vocabulary, it is not merely passing the examination with good grade; beyond this, it is a continuous generation and application of new ideas excellently and liberally. It also necessitates lively and autonomous involvement of individual along with enrollment (Paynter, 2008). The census of India defined it as the ability of a person to read and write a simple paragraph with understanding in any language. Formal education is not compulsory to be a literate (Census of India, 2011).

Paradoxically, even after being a basic necessity, initial learning or schooling is a victim of societal, sexual, racial and cultural politics universally. Though, women education is

accepted as a single effective way to improve quality of life, indoor as well as social milieu out-door by defeating various social evils and women to be literate is more necessary than their opposite gender for the attainment of superlative social results (Strauss and Thomas, 1995). Moreover, it is saying of Mahatma Gandhi that to educate a woman is like to educate a civilization because men can never be equal to God-gifted spirit of selfless service of women. So it becomes prime responsibility of a society to ensure the equal facilities (special also if necessary) of education for women as men (Prabhu and Rao, 1960). Definitely women education will return more than its expenses and social expectations. Even so, especially in patriarchal rural Indian society, at initial stage economic and intellectual possessions are limited for girls and anyway if they exceed this stage, their mobility is controlled by work segregation and pay discrimination at next level (Talvani, 2001). Moreover, the girls are considered as a social and economic crisis for parents whereas sons are seen as potential breadwinners and real asset as well as medium to run ahead to their generation and this strong son preference not only deprive girls from household resource allocation at the initial stage but also create hindrances in growth and progress in further lives of daughters. On one hand, poor nutrition and health care impound their survival in parental homes while on another side early marriage as a consequence of illiteracy becomes the cause of excess transience of girls in young age (Ghosh, 1995; Phillip and Bagchi, 1995; Nayar, 2000; Rose, 2000; Pande 2003; Oster, 2009; Bose 2011; Sharma and Kavita 2019). It is surprising to hear that till now marriage is considered be-all and end-all for girls. The responsibility of caring their sibling by staying home, the pressure of doing home assignments, claptrap religious barriers, the traditional societal attitude of hardly accepting a woman on work and as an economic contributor in domestic, are some responsible determinants of concision of girl's learning prospects as well as the excess number of school dropout girls. Amazingly, learning is not necessary for a girl but teaching children is considered the profession of only women in houses (Bhatty, 1998; Ramachandran, 2001; Lind, 2007). Secondly, male dominating hierarchy of the families also fears that if a woman knows her rights by learning, she will demand her existence by denying their baloney stress. In another way, traditionally it is an irony that women need not be educated owns but she should be able to prepare the genius.

However in some last decades, the country and state have made a remarkable improvement in the educational field. This success is credited to increase in school enrollment due to wider availabilities and accessibilities of school infrastructures as well as various schemes and provisions related to free books, vehicles and food to students which helped to minimize their dropout figures. In the next, the significant transformation is also observed in social outlook from the past few decades and girls are getting more learning opportunities from family either willingly or unwillingly with a lot of restrictions. However, in most cases, the completion of schooling of girls demands additional struggle with relatives as well as the public and sometimes they have to sacrifice their choices also to proceed it. Above all, female literacy, steadily but appreciably, has achieved a progressive figure (10.32 per cent to 1971 to 65.94 per cent in 2011) since the last forty years in the studied site. Yet the aim of universal basic education is far behind particularly for the girls who belong to socio-culturally backward communities and sites.

The present study aspirates to look for the following objectives:

1. To observe the chronological progress of literacy in Haryana with a comparison to India.
2. To check the existing gender-based disparities in literacy at the district level in Haryana from 1991 to 2011 and observe the responsible reasons behind the regional dissimilarity.
3. To examine the relationship of literacy with its determinants.

Haryana is one of the leading states of India located in the north-west of the country and having a geographical extension of 27° 40' to 29° 42' latitudes in North and 74° 54' to 77° 40' longitudes in East. It was formed on 1st of November 1966 covering an area of 44,212 square kilometres (Fig. 1). Like the country, the secular standard and sundry cultural and customary values of the state provide it unique identification among all. The presence of foothills of the great Himalaya in the north and residuals of Arawali hills in the south, semi-desert and desert characteristics in the west and fertile alluvial plain in the east as the blessing of the holy river the Yamuna, make it distinguish to others and enrich in natural beauty.

2. The Methods

While being one among the most progressive states of the nation, the lesser significant records of female literacy provide enough grounds to the studied aspect as well as the site selection. The study exercises the secondary statistics or information obtained mainly from Primary Census Abstract (Census of India), Haryana 1991, 2001 and 2011 to stumble on the stated objectives. Haryana, as being a part of Punjab state before attaining separate identity on November 1st, 1966, lacks to literacy statics of 1901-1961 census. After getting individuality, the first extensive survey of the state was held in 1971. In 1991, 2001 and 2011, the number of administrative units in the state was 16, 19 and 21 in that order, so here the prior statistics lacks with respect to the subsequently designed districts like Mewat and Palwal.

To analyze the literacy status, the percentage of overall, male and female literacy rate is derived from different censuses. The figures relates to crime incidents are obtained from National Crime Records Bureau (NCRB) Ministry of Home Affairs under the Government of India. The source of female marriage below eighteen years is District Level Household and Facility Survey of the fourth round (DLHS-IV) which relates to the year 2012-13. The remaining specifics are draw from the different census proceedings. The Spatio-temporal change in literacy is mapped with three categories namely low (below 50 per cent), medium (50-75 per cent) and high (above 75 per cent) and in the same way, disparity index is also represented in low (below 0.20), medium (0.20 -0.25) and high (above 0.25) groups. The correlation matrix is calculated with the help of variables like overall literacy rate, below poverty line (BPL) population, percentage of scheduled caste (SC) population, level of urbanization, percentage of Hindu and Muslim population, sex ratio, percentage of female marriage below 18 years, the gender gap in literacy, crime against women and number of schools in the study area.

The Gender disparity has been calculated by using modified (Kundu and Rao, 1986) Sopher's disparity index (1980):

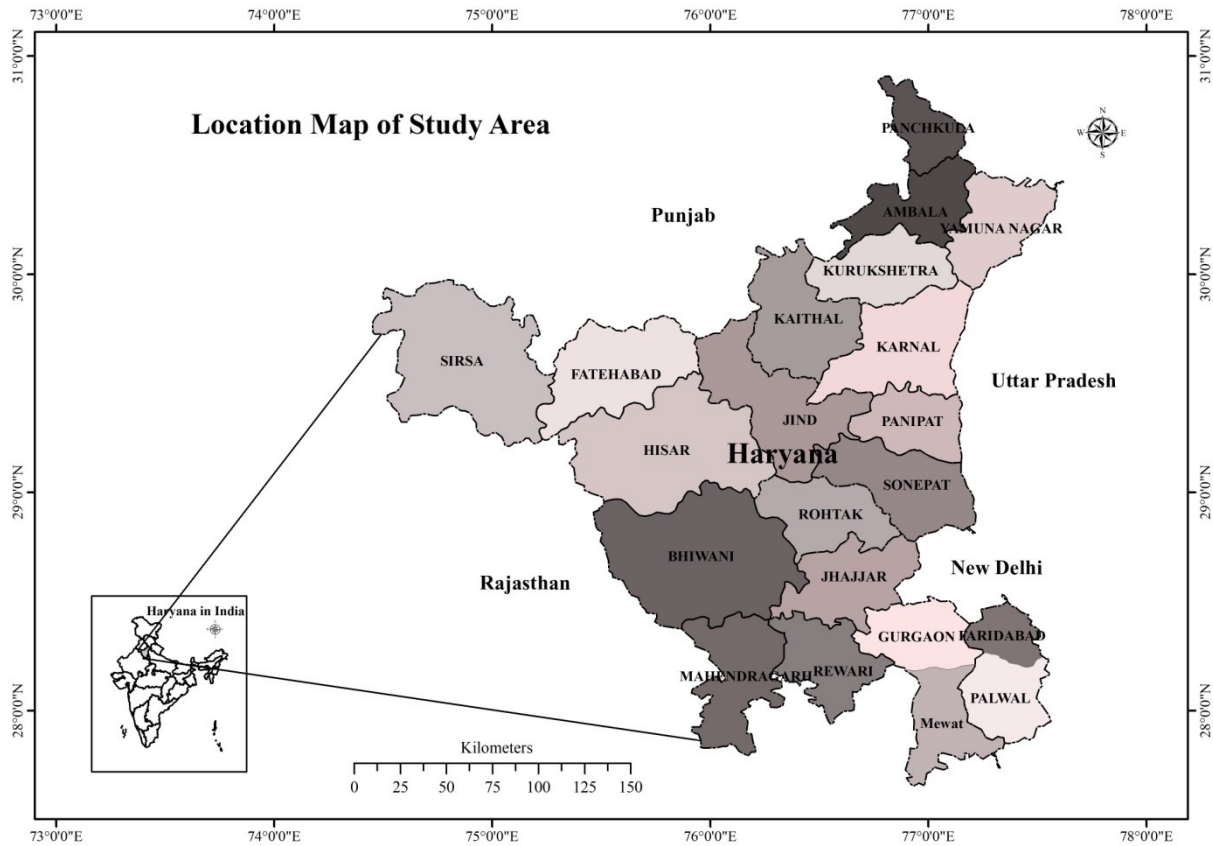


Figure 1. Location Map of Study Area

i)
$$Ds = \log \frac{X_2}{X_1} + \log \frac{100-X_1}{100-X_2}$$

ii)
$$Ds = \log \frac{X_2}{X_1} + \log \frac{200-X_1}{200-X_2}$$

(Here the first formula relates to Sopher's Method and second is Kundu and Rao Method. Ds represents gender disparity index, x_1 indicates the per cent of literate females where x_2 is the percentage of literate males).

Karl Pearson's correlation coefficient has been used to identify the association between literacy and its key determinants.

iii)
$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}}$$

(Where r is Coefficient of correlation (Karl Pearson's) and n = no. of observations, x and y= variables).

3.Result and Discussion

Literacy Progression in India and Haryana

Table 1 shows the improving status of literacy rate in India and Haryana. The condition of total literacy rate is found very miserable in 1901 when overall 5.35 per cent persons with 9.83 per cent males were literate and surprisingly not a single per cent (0.60 per cent) women were literate in the country in same census. The literacy rate has increased with steady growth up to 1951 when it has been

documented 18.33 per cent in overall with a percentage of 27.16 males and 8.86 females in the country. Another side reflects that male-female literacy gap for India was continuously increased and it was the census 1971, when this gap started to fluctuate. The particulars of 1971 census show that only 34.45 per cent of the total population was literate in India whereas in Haryana the literacy rate was traced 25.71 per cent with 38.90 per cent male and 10.32 per cent female literates. In 1991, the overall literacy rate of the country and the state was registered 52.21 and 55.85 per cent with a gender disparity of 24.84 and 28.63 per cent respectively. As compared to previous opinion poll's data, the next census of 2001 also witnessed for a big proportion of literate people with an increase of 12.62 and 12.06 per cent in the country and the study area respectively. The records of census 2011 identify that at the national and state level all categories (total, male and female) have registered a significant addition to the literate people.

It has been also observed that during this enumeration gender disparity has also decreased from 21.59 per cent (2001) to 16.68 per cent (2011) in India and 22.76 per cent (2001) to 18.11 per cent (2011) in Haryana. This survey has confirmed that 74.04 per cent people (82.14 per cent male and 65.46 per cent female) are literate in India whereas the data for the state during the same period is 75.55 per cent (84.05 per cent male and 65.94 per cent female).

The observation clearly shows that since 1971 to 2011 in both, country as well as state, the gender gap has continuously remained against the women but the positive thing is that this disparity has decreased from 28.58 per cent in 1971 to 18.11 per cent in 2011 for the state. Yet the shreds of evidence show that as compared to male, female literacy

Table. 1 Progress of Literacy Rate in India and Haryana

Census Year	India				Haryana			
	Total	Male	Female	Male-Female Literacy Gap	Total	Male	Female	Male-Female Literacy Gap
1901	5.35	9.83	0.60	9.23	---	---	---	---
1911	5.92	10.56	1.05	9.51	---	---	---	---
1921	7.16	12.21	1.81	10.40	---	---	---	---
1931	9.50	15.59	2.93	12.66	---	---	---	---
1941	16.10	24.60	7.30	17.30	---	---	---	---
1951	18.33	27.16	8.86	18.30	---	---	---	---
1961	28.30	40.40	15.35	25.05	---	---	---	---
1971	34.45	45.96	21.79	24.17	25.71	38.90	10.32	28.58
1981	43.57	56.38	29.76	26.62	37.13	51.86	20.04	31.82
1991	52.21	64.13	39.29	24.84	55.85	69.10	40.47	28.63
2001	64.83	75.26	53.67	21.59	67.91	78.49	55.73	22.76
2011	74.04	82.14	65.46	16.68	75.55	84.05	65.94	18.11

Source: Computed from records of Census of India, 1991-2011

has remained less progressive at both levels (Table 1). These inter and intra region differences in literacy may be mainly a result of awareness, availability and affordability to education as well as collective approaches which are ruled by a number of socio-cultural, financial and political interests.

Space-time Scene of District Wise literacy in Haryana (1991-2011)

Haryana is an agriculturally and economically developed mores in present time. In 1991, the overall 55.85 per cent literacy rate was observed in Haryana whereas 69.10 per cent males and 40.47 per cent females were literate. The space-time pattern discloses that there was overall 67.91 per cent of people were literate in 2001 with documentation of 78.49 and 55.73 per cent male and female literacy rate respectively showing a gender gap of 22.76 per cent. The district Gurgaon is at first with highest literacy rate (78.51 per cent) followed by districts Faridabad (76.29 per cent), Ambala (75.31 per cent), Rewari (75.25 per cent) and Panchkula (74.0 per cent) in the overall category. Whereas, lowest literacy in the same period has been traced in Mewat (43.51 per cent) accompanied by Fatehabad (57.98 per cent) and Kaithal (59.02 per cent) districts. In context to the male population for the same enumeration (2001), highest fifteen districts (Panchkula, Ambala, Yamuna Nagar, Kurukshetra, Karnal, Panipat, Sonapat, Rohtak, Jhajjar, Mahendragarh, Rewari, Faridabad, Gurgaon, Bhiwani and Hisar) recorded more than 75 per cent literacy rate. Where male literacy is at the respective stage in all districts, the picture of female literacy is quite opposite to this and except four districts (Gurgaon, Ambala Faridabad and Panchkula) female literacy is below 65 per cent in the entire state. Out of twenty-one, a group of twelve districts (Sirsa, Fatehabad, Jind, Kaithal, Hisar, Bhiwani, Karnal, Panipat, Jhajjar, Mahendragarh, Palwal and Mewat covering western, south-western and north-western Haryana) have rolled with very low literacy rate in 2001 (Table 2).

With some improvement, the statistics of 2011 shows that overall the average literacy of the state has been recorded 75.55 per cent with the highest proportion of 84.70 per cent in Gurgaon district and lowest 54.08 per cent in Mewat district. There is more than 76 per cent literacy rate in districts Panchkula, Ambala, Yamuna Nagar, Kurukshetra, Sonapat, Rohtak, Jhajjar, Mahendragarh, Rewari, Gurgaon and Faridabad whereas eight districts namely, Kaithal, Karnal, Panipat, Jind, Sirsa, Hisar, Bhiwani and Palwal have registered a literacy rate of 68-76 per cent. In case of male literacy, except Mewat district (69.97 per cent) entire Haryana has registered high literacy rate. An improvement has also been noticed concerning female literacy in 2011 as compared to 2001. The highest proportion (77.98 per cent) of the literate female has been observed in district Gurgaon followed by Panchkula (75.99 per cent), Ambala (75.50 per cent) and Faridabad (73.84 per cent) districts. While the lowest proportions of the literate female have seen in Mewat (36.60 per cent) pursued by Palwal (54.23 per cent), Fatehabad (58.87 per cent), and Kaithal (59.24 per cent) districts (Table 2). The spatial pattern reflects that eleven districts of the state out of twenty-one, covering the north-eastern and south-eastern region (except two districts Mewat and Palwal) has been found having high literacy rate which may be attributed to the accessibility of better education facilities. The northwestern region of the agricultural belt has low literacy rate whereas the southernmost region of districts Mewat and Palwal dominated by the Muslim population, the condition of literacy is very poor due to lack of social and economic development and societal resistances (Table 2).

Diagrammatic Prototype of Literacy Statistics in Haryana (1991-2011)

Figure 2 and 3 clearly reveal the inter-district variations as well as the progressive status of literacy in Haryana from 1991 to 2001. It can be seen that in 1991 overall there was the absence of districts in high category of literacy because

Table. 2 Literacy Rate and Gender Disparity in Haryana, 1991-2011

Sr. No.	Districts/State	1991			2001			2011			2011		
		Persons	Male	Female	Persons	Male	Female	Persons	Male	Female	Gender Disparity Index	Gender Disparity Index	Gender Disparity Index
1	Ambala	66.69	77.53	56.93	75.31	82.31	67.39	81.75	87.34	75.50	0.20	0.14	0.11
2	Bhiwani	54.18	70.93	35.10	67.45	80.26	53.00	75.21	85.65	63.54	0.41	0.27	0.21
3	Faridabad	59.77	74.15	42.12	76.29	85.14	65.63	81.70	88.61	73.84	0.34	0.18	0.13
4	Fatehabad	43.12	54.59	30.06	57.98	68.22	46.53	67.92	76.14	58.87	0.33	0.23	0.17
5	Gurgaon	52.61	67.87	34.94	78.51	87.97	67.49	84.70	90.46	77.98	0.38	0.19	0.11
6	Hisar	50.31	64.87	33.20	64.83	76.57	51.08	72.89	82.2	62.25	0.38	0.26	0.19
7	Jhajjar	63.47	78.17	46.27	72.38	83.27	59.65	80.65	89.31	70.73	0.33	0.22	0.17
8	Jind	47.00	61.07	30.12	62.12	73.82	48.51	71.44	80.81	60.76	0.39	0.26	0.19
9	Kaithal	42.59	54.71	28.37	59.02	69.15	47.31	69.15	77.98	59.24	0.36	0.23	0.18
10	Karnal	56.15	67.02	43.54	67.74	76.29	57.97	74.73	81.82	66.82	0.26	0.18	0.14
11	Kurukshetra	58.78	69.23	46.94	69.88	78.06	60.61	76.31	83.02	68.84	0.24	0.17	0.13
12	Mahendragarh	57.87	77.17	36.75	69.89	84.72	54.08	77.72	89.72	64.57	0.45	0.30	0.23
13	Mewat	NA	NA	NA	43.51	61.18	23.89	54.08	69.94	36.60	NA	0.51	0.38
14	Palwal	NA	NA	NA	59.19	75.10	40.76	69.32	82.66	54.23	NA	0.37	0.28
15	Panchkula	65.73	73.99	55.77	74.00	80.87	65.65	81.88	87.04	75.99	0.18	0.14	0.10
16	Panipat	55.17	67.04	41.17	69.17	78.5	57.91	75.94	83.71	67.00	0.29	0.20	0.15
17	Rewari	64.77	82.16	46.18	75.25	88.45	60.83	80.99	91.44	69.57	0.37	0.26	0.20
18	Rohtrak	61.44	74.93	45.40	73.72	83.23	62.59	80.22	87.65	71.72	0.31	0.19	0.14
19	Sirsa	46.32	57.21	34.02	60.55	70.05	49.93	68.82	76.43	60.40	0.29	0.21	0.16
20	Sonipat	64.06	77.20	48.27	72.79	83.06	60.68	79.12	87.18	69.80	0.30	0.21	0.16
21	Yamunanagar	60.53	69.76	50.07	71.63	78.82	63.39	77.99	83.84	71.38	0.21	0.15	0.11
	Haryana	55.85	69.10	40.47	67.91	78.49	55.73	75.55	84.05	65.94	0.32	0.22	0.17

Source: Computed from Census of India, Primary Census Abstract, Haryana 1991, 2001 and 2011.

NA: Data not available.

except four districts namely Sirsa, Fatehabad, Jind and Kaithal of low category, the entire state was falling in group of medium literacy. Whereas in 2001, the low class of literacy is confined only to one district (Mewat) and in districts, Rewari, Gurgaon, Faridabad and Ambala, more than 75 per cent literacy rate was documented. In male literacy, interestingly, not any district documented itself in low category (below 50 per cent literacy rate) while in case of females, the condition was reverse and sixteen districts (except Panchkula, Ambala and Yamunanagar of medium-class) were listed in the lower grouping in 1991.

As compared to the previous census, in 2001, the maximum parts of the state (excluding western and north-western districts) has been shaded with high literacy in males and 15 districts promoted themselves in the medium class with respect to literate females. With a little enthusiastic figure, first time the state average also crossed (40.47 per cent in 1991 to 55.73 per cent in 2001) the half proportion of

females as literate. The condition has improved more in 2011 as shown in figure 4. In overall and male literacy, the low grouping has been observed blank. In general, eight and thirteen districts are listed as a medium and high category of literacy rate in that order whereas apart from Mewat, the whole state has arranged itself in high class regarding male literacy. Yet, the literacy standing of a female is waiting for an impressive and immense shove to cope with males because with the exception of three districts (Panchkula, Ambala and Gurgaon) maximum regions come either in medium or in the low cluster.

The drawing of different census data of the study area clearly reflects the spatial and sequential changes in literacy with significant variation at the district level. As the state has kept the improving nature of literacy in all three faces yet the female literacy has remained less progressive or it can be called lethargic also and second important thing is that some districts are continuously lagging behind. It demands the

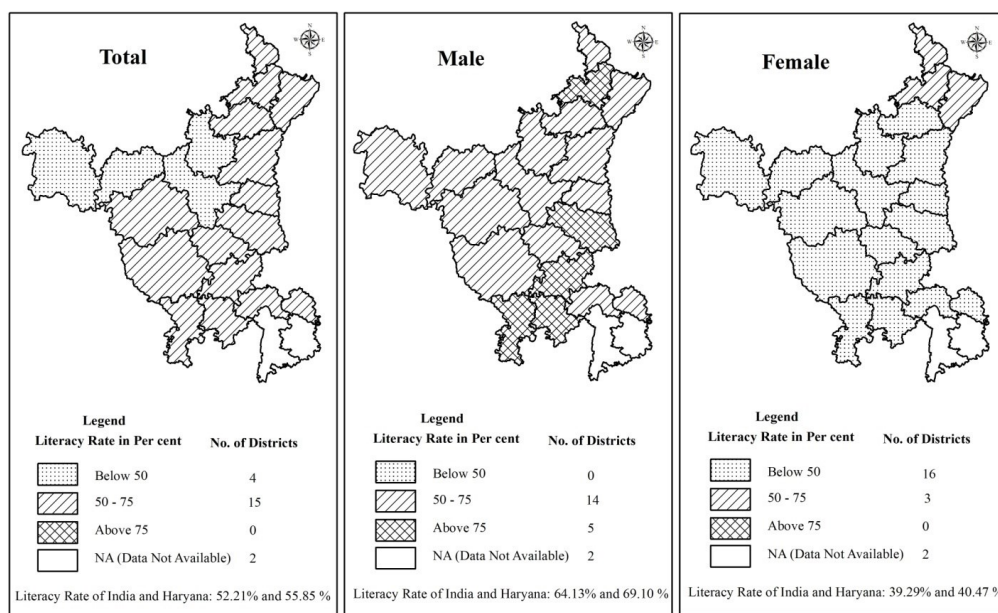


Figure 2.Literacy rate in Haryana, 1991.

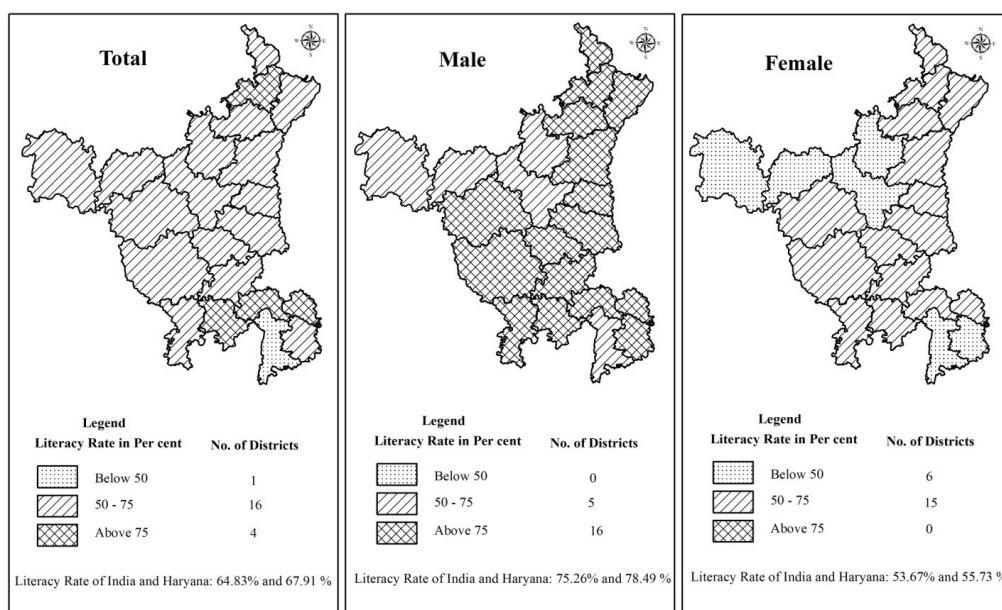


Figure 3.Literacy rate in Haryana, 2001.

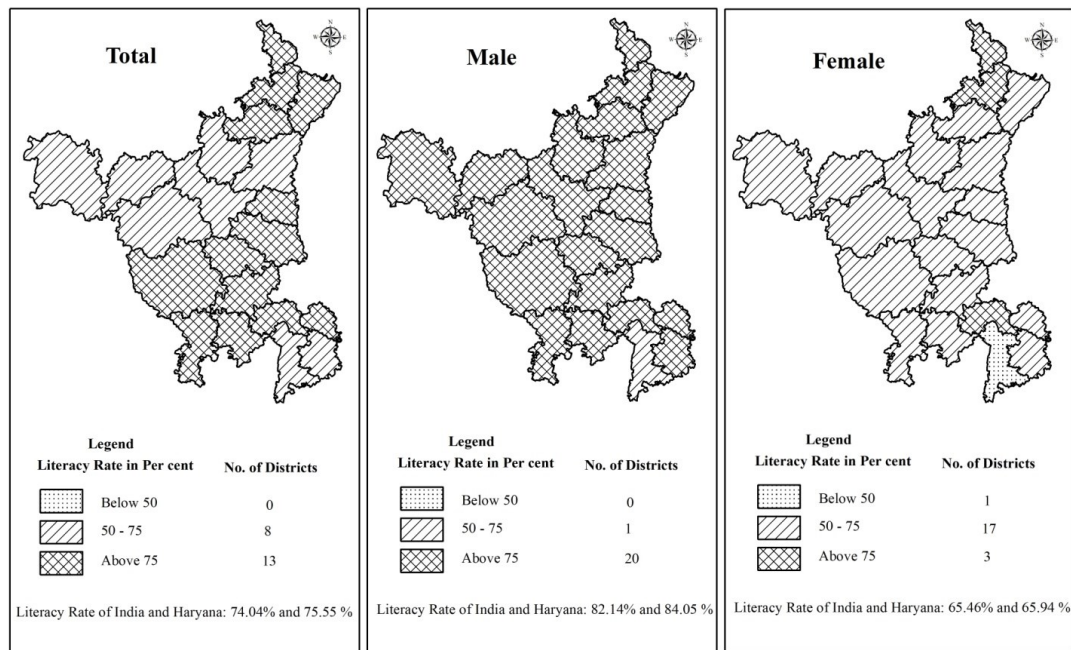


Figure 4. Literacy rate in Haryana, 2011

multidimensional (because at the regional level a number of assorted factors relate to customs, traditions, religion, monetary and responsiveness rules on education especially related to female) task for advancement as well as diffusion of equal prospects of education.

Spatial Analysis of Disparity Index in Education

Long years ago with his second sight, in beautiful wordings, Swami Vivekananda (a great speaker, patriot, social reformer, philosopher and spiritual leader) had mentioned the essentiality of female education. As he said that the ceiling welfare in the world is impossible to achieve without educating the women and it is like to fly a bird with one wing (Barman, 2015). But, the submissive fact is that even in the present time, gender disparity in education is one of the major issues in India. In the developing world, it is the basic assumption that skilled and higher level of edification helps in plummeting the learning discrimination in case of inter and intra gender. But this hypothesis fails on an actual social platform and sometimes education becomes responsible for the continuation and expansion of discrepancy in different social strata. The extremely upper and lower segments of the community have their own choice of education up to such limit that is supportive for them to reinforce their grip over existing possessions. On the contrary, it is the poor and marginal section that suffers all kinds of shorts and snag to access education. After all, the persistence of their erudition helps to change the socio-economic rank of related (Hauser & Featherman, 1976; Bordia, 2000). In Indian agrarian and male-dominated society, the girls specifically in rural areas always face a tricky situation from household to the social platform for their healthier survival and growth prospects like education. They are expected either as a labourer in farms or as a caretaker of their younger siblings at home. It is an optimistic fact to some extent that after independence there is an increase in school enrollment of girls but, the male-female fissure in education still exist (Aggarwal, 1976; Vaid, 2004; White et al., 2016).

In the state, gender discrimination in learning has remained a matter of concern constantly. Table 2 shows that even after improvement in girl's education, equality is far behind to achieve. In 2001, district Mewat ranks first with the highest disparity index of 0.51 tracked by Palwal (0.37), Mahendragarh (0.30), Bhiwani, Hisar, and Jind districts. The lowest disparity has been identified in districts Panchkula (0.14) and Ambala (0.14) for the same period. The census enumeration 2011 unearths a decrease in average disparity (0.22 in 2001 to 0.17 in 2011) as compared to the previous census. It has been found that except Bhiwani, Mahendragarh, Mewat and Palwal district, in all gender disparity index is below 0.20 and Panchkula, Ambala, Yamunanagar, Kurukshetra, Karnal, Rohtak, Gurgaon and Faridabad districts have confirmed low variation in male-female education. The whole examination depicts that even after the reduction in districts Mewat and Palwal, both are still placed at first and second respectively from the bottom in terms of high disparity index in 2011 as the same in 2001. Figure 4 presents that gender differences still exists in the state but enthusiastically the reducing trench between male-female learning is clearly visible and with a significant reduction, it has remained 0.17 in 2011 as compared to high disparity index of 0.32 in 1991. The districts level discrepancy has also reduced in 2011 and high disparity subsists only in two districts that are Mewat and Palwal in place of 15 and 7 districts in 1991 and 2001 correspondingly.

In whole, it is a good sign that gender discrimination in the state is gradually reducing or in a positive way, it can be said that the proportion of female literates is continuously increasing. It credits to the effective implementation of various national and regional level schemes like free study materials and meal in schools, *Kasturba Gandhi Schools* (special facility of schools for girls with free accommodation in low literacy pockets), *Beti Bachao, Beti Padhao* (save and educate the daughters), *Sarva Shiksha Abhiyan* (multidimensional and contemporary education facilities for all) government merit scholarships for higher education, *Annusuchit Jati Chhattra Ucch Shiksha Protsahan Yojana*

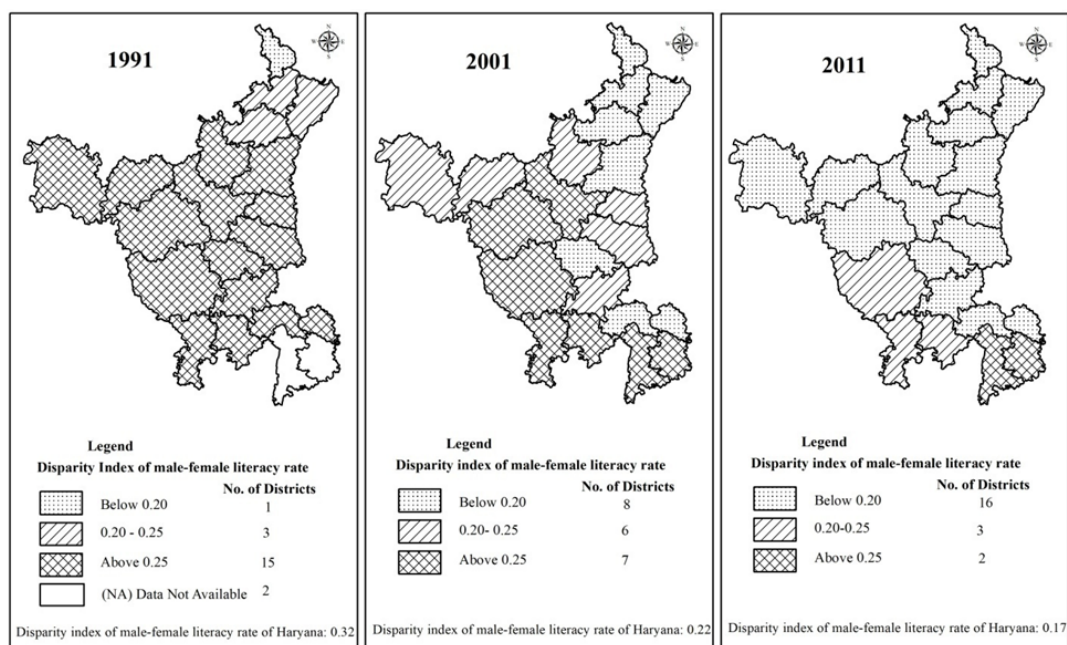


Figure 4. Gender disparity in male-female literacy of Haryana.

motivational scheme for scheduled caste girls student to reduce the school dropout rate), an education loan scheme for female students, etc. since early independence to the present (Government of India, 2015). It has not only helped in bringing the equalization in education but also inspired the lower socio-economic group for admittance and continuation of girls' education.

Association between Literacy and its Determinants

The status of literacy is not only an outcome of availability and accessibility to means of education but also associated with social stance, religion, the order in the social hierarchy, enrollment rates, average schooling duration as well as economic condition of the family. The attitude of individual or community has a significant impact on the education of deprived as well as girls also (Tilak, 1983). Since the ancient time, Indian families have remained the fond of sons as well as the adaptation of double standards for girls about survival, education, progress and many other measures (Shariff, 1999). In *Haryanvi* families, it is a most common saying that "*Betiya to paraya dhan hai koi fayada nhi inhe padane ka*" which means daughters are possessions of others and parents have no profit of their education so expenditure on their schooling is nothing more than wastage and silliness (Sharma and Kavita, 2019). Secondly under the influence of religious postulation, in most of the families, the girl going outside for earning and its use by her parents is considered as a sin. Thirdly, in the fear of any misfortune with daughters in the way to school or college, often the parents prefer to give the adroitness of household responsibilities and marry the girls rather than providing them schooling. In most parts of the state, local wording of "*Kuch uch-nich hogi to padane ka bera pat jyaga*" (means if any type of ill fortune takes place with the girl during studying in the village or outside, the parents will have to pay for this) is used for the families who are promoting their girls for education. All such factors confined the educational prospects of girls, especially in rural areas. In most poor families little girls are treated as workers directly or indirectly whereas boys are let free. This

preference of sons over daughters limits female's opportunities and when these illiterate or poorly educated girls become mothers; they don't bother about the education of their children due to ignorance even after having a lot of affection for them. On another side, educated mothers and fathers are keenly interested in children's schooling and secure their future progress by providing them greater supervision and prospects.

Religion provides an additional axis of segregation in our society and comparatively, Muslims have a niche position characterized by self-employment in petty business and urban residence. Consequently, they have inclined to fall behind Hindus and others in access to recognized segment employment and education (Engineer, 2001; Government of India, 2006). The economic status of the family is the next determinant of literacy.

Note: y_1 = Overall Literacy Rate 2011, x_1 = BPL population, x_2 = Percentage of SC Population, x_3 = level of Urbanization, x_4 = Percentage of Hindus Population, x_5 = Percentage of Muslims population, x_6 = Sex ratio, x_7 = Percentage of female marriage below eighteen years, x_8 = Gender gap in literacy 2011, x_9 = Crime against women 2011, x_{10} = Number of Schools 2011.

It is a sardonic finding of research related to socialist societies that more cultural richness of father enhances the probabilities of higher education of children (Treiman et al., 2003). As being the measurement of degree and direction, correlation helps in explaining the variations in spatial phenomena. In the state of Haryana, it is found that as a result of more availability of educational facilities in cities, literacy has a strong positive correlation with urbanization as compared to rural areas. The high positive correlation of literacy is also observed with the Hindu population. The proportion of the Muslim population, gender disparity in literacy and sex ratio are negatively associated with literacy to a greater significance level. The education and percentage of female marriage below eighteen years are negatively associated with each other but it is very pessimistic to find that literacy has a positive (not significantly) link with the

Table. 3 Correlations between literacy and its determinants

Variables	y ₁	x ₁	x ₂	x ₃	x ₄	x ₅	x ₆	x ₇	x ₈	x ₉	x ₁₀
y ₁	1	-0.430	0.020	.649**	.752**	-.684**	-.664**	-0.280	-.685**	0.260	0.300
x ₂	-0.430	1	.567**	-.758**	0.090	-0.190	.547*	-0.070	0.290	-0.160	0.130
x ₃	0.020	.567**	1	-0.270	0.310	-.593**	0.240	-.562**	-0.400	-0.080	0.050
x ₄	.649**	-.758**	-0.270	1	0.230	-0.210	-.571**	-0.030	-.658**	.528*	0.200
x ₅	.752**	0.090	0.310	0.230	1	-.915**	-.581**	-0.120	-.452*	0.170	.489*
x ₆	-.684**	-0.190	-.593**	-0.210	-.915**	1	0.390	0.350	.633**	-0.120	-0.380
x ₇	-.664**	.547*	0.240	-.571**	-.581**	0.390	1	-0.140	0.420	-0.370	-0.340
x ₈	-0.280	-0.070	-.562**	-0.030	-0.120	0.350	-0.140	1	.566**	0.180	0.170
x ₉	-.685**	0.290	-0.400	-.658**	-.452*	.633**	0.420	.566**	1	-0.250	-0.100
x ₁₀	0.260	-0.160	-0.080	.528*	0.170	-0.120	-0.370	0.180	-0.250	1	.649**
x ₁₁	0.300	0.130	0.050	0.200	.489*	-0.380	-0.340	0.170	-0.100	.649**	1

Note: ** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

crime against women. As per statistics, there is a negative connection between literacy and BPL population whereas the quantity of schools has a positive relationship with the same in the study area.

4. Conclusion

Though, it is encouraging to the preceding discussion that the gender disparity in the education at the state and the regional level is abridged as a result of temporal awareness of people and various other efforts of the administration yet the sluggish improvement in female’s literacy is a matter of concern. By seeing on the surface, it is pleasing to know that sixteen districts of the state are in low disparity index grouping but the scanning observation unearths that eight districts namely, Fatehabad, Hisar, Jhajjar, Jind, Kaithal, Panipat, Sirsa and Sonapat are very near to the next category. In the districts like Mewat and Palwal, the disparity is very high and districts Rewari, Mahendragarh and Bhiwani are in some satisfactory condition but not better. It is something right in areas either near to the state or national capital or in more urbanized areas like Faridabad, Gurgaon, Panchkula and Ambala. This dejecting situation of woman education in some clusters is directly associated with social unfairness and engagement of girls in household tasks and unskilled agricultural activities as a manual worker where literacy is not mandatory. The getting of less learning opportunities, low enrollment in schools, considerable high proportion of dropout of girl child and religion has also a significant impact on their schooling probabilities. Though after comprehending the importance of girl’s education, the more priority is given to female children in educational plans yet most of them have a partial impact concerning the achieving expected goal of gender equality. Undoubtedly, girls have de jure equality in education yet in actuality the awareness and support about worth and necessity of women literacy are required particularly in backward districts of the state. In this regard, in some areas, the decision of separate buses for girls (from their region to educational institutes) is very inspiring and it has helped to eliminate the fear of parents to some extent. The efforts like *Durga Shakti* provides some relief to the female in any problem from home to workplace and it can also be helpful in maximizing the numbers of females in schools or colleges in socially less aware regions of the state. Secondly, it is true that the state follows its traditions

strongly and it is difficult but not impossible to update their point of view towards the education of the girls. Most importantly, the factual and positive involvement of parents in the learning process can surely enhance the potential of girl’s students and their enthusiasm leads to sustainable development by improving edifying status with the absence of discrimination.

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