

Gender Educational Gap: Evidence from India

The gender gap in educational attainment has decreased from 1.46 in 1983 to 1.33 in 2004–05.

SIGNIFICANT EMPIRICAL EVIDENCE exists which show that increase in educational attainment has a positive impact on both economic growth and development. There are positive externalities associated with education of the labour force both in terms of economic and social capital. The economic gain from women's education in general is considered to be at least as high as those from men's education. Further, there is a multiplier effect associated with women's education. However, developing countries experience gender gap in terms of educational attainment as well as enrolment. India is no exception to this.

This article examines whether there is any convergence in educational attainment of men and women in India during the period 1983–2005. This is a significant time frame because it covers the time period both before and after economic liberalisation in 1991. Five quinquennial rounds (1983, 1987–88, 1993–94, 1999–2000 and 2004–05) of National Sample Survey (NSS) data are used, which is a nationally representative survey database. The dataset consists of pooled cross section data collected from both rural and urban India where the age group of the respondents are between 16 and 65.

Educational information is collected for each of the respondent on the basis of highest educational level attained. We have categorised level of educational attainment into five groups following the NSS: illiterate (persons who cannot read or write a simple message with understanding in at least one language), below primary (individuals who are literate by definition through formal schooling, but have yet to complete primary standard education), primary (class 5 passed), middle (class 8 passed) and secondary and above (class 10 passed, class 12 passed, completed graduation, post-graduation, and diploma/certificate courses).¹

In each round, the mean educational level for both males and females for the sample has increased. On an average, majority of men have attended school at primary level while women are either illiterate or dropped out at below primary

level. Men are consistently more educated than females in rural as well as in urban areas. The relative educational gap is calculated as the ratio of the average level of educational attainment of males to females. The gender gap in educational attainment has decreased from 1.46 in 1983 to 1.33 in 2004–05 (Table G.1). It is promising to note that this convergence phenomenon is common in both rural and urban areas. The educational gap has shrunk relatively more rapidly in urban than in rural areas. Further, the reduction in gap has acquired pace after 1993–94.

Table G.1: Relative Gender Educational Gaps, 1983 to 2004–05

Year	All	Rural	Urban
1983	1.46	1.49	1.35
1987–88	1.44	1.49	1.31
1993–94	1.42	1.48	1.27
1999–00	1.38	1.45	1.22
2004–05	1.33	1.4	1.19

Source: Author's calculation based on five rounds of NSS data; 1983, 1987–88, 1993–94, 1999–2000, and 2004–05.

What are the patterns of educational distribution and how does it vary between the female labour force and their male counterparts? It is presented in Table G.2. In 1983, 75 per cent of the total female labour force was either illiterate or had below primary level education, whereas it was 54 per cent for men. Illiteracy decreased to 45 per cent for women and 21 per cent for men by 2004–05. In contrast, the proportion of people with secondary and above education has increased sharply for both men and women between 1983 and 2004–05 in their respective groups. In 1983, only seven per cent of the total female labour force and 16 per cent of the total male labour force fell in this category. By 2004–05, the share of men in the total male labour force with secondary and above education had increased to 32 per cent. For women, the corresponding share was 19 per cent. It was the most significant change in educational attainment among all categories.

The gap in gender educational attainment is examined across different occupational groups

1. Definition of primary and middle may vary across states.

Table G.2: Educational Distribution in the Labour Force (%), 1983 to 2004-05

Gender	Illiterate	Below Primary	Primary	Middle	Secondary and above
Male					
1983	40.05	13.54	16.33	13.79	16.29
Standard error	0.00	0.00	0.00	0.00	0.00
1987-88	34.85	13.43	16.26	14.18	21.29
Standard error	0.00	0.00	0.00	0.00	0.00
1993-94	29.62	12.91	13.94	16.07	27.47
Standard error	0.00	0.00	0.00	0.00	0.00
1999-00	26.32	11.59	12.93	17.75	31.41
Standard error	0.00	0.00	0.00	0.00	0.00
2004-05	21.49	11.48	15.12	19.55	32.36
Standard error	0.00	0.00	0.00	0.00	0.00
Female					
1983	67.41	8.38	10.37	6.96	6.88
Standard error	0.00	0.00	0.00	0.00	0.00
1987-88	61.98	9.11	11.08	7.83	10.00
Standard error	0.00	0.00	0.00	0.00	0.00
1993-94	54.76	9.73	10.97	10.35	14.19
Standard error	0.00	0.00	0.00	0.00	0.00
1999-00	49.14	9.63	10.97	12.38	17.88
Standard error	0.00	0.00	0.00	0.00	0.00
2004-05	43.64	10.33	13.04	14.29	18.70
Standard error	0.00	0.00	0.00	0.00	0.00

Source: Author's calculation based on five rounds of NSS data; 1983, 1987-88, 1993-94, 1999-2000, and 2004-05.

(Table G.3). We use three major classifications of occupations: white-collar jobs, blue-collar jobs and agriculture or agriculture-related work following the National Classification of Occupation (NCO), 2004². The average level of education has increased for all the occupation groups, while the sharpest increase is observed in agriculture or agricultural related jobs (33%) and blue-collar jobs (24%). Men are consistently more educated than women, on average in each occupational category. The convergence in the relative educational gap is the highest in blue-collar jobs during the period of the study. The ratio of male to female average educational attainment remained almost the same in agricultural work. Therefore, the results indicate that educational attainment is converging for males and females in the organised sector (white-collar plus blue-collar jobs).

The transformation in India's economy is significantly marked by the narrowing gap in educational attainment during the past three decades. However, the country has yet to walk a

long way to bridge the educational gender gap. The Global Gender Gap Report published by the World Economic Forum ranked India 101 among 136 countries in 2013³. It remained a low performing country in terms of closing the educational gap. We need to focus on effective strategies to promote girl education in order to fully close the gap. These policies may range from promoting health in schools, flexible school timings, full-time regular teachers and gender sensitive curriculum, teachers, etc.

Table G.3: Gender Educational Gap across Occupations, 1983 to 2004-05

Year	White-collar Jobs	Blue-collar Jobs	Agriculture or Agriculture related work
1983	1.05	1.76	1.58
1987-88	1.04	1.72	1.61
1993-94	1.07	1.63	1.68
1999-00	1.07	1.57	1.58
2004-05	1.04	1.48	1.57

Source: Author's calculation based on five rounds of NSS data; 1983, 1987-88, 1993-94, 1999-2000, and 2004-05.

- White-collar jobs include legislators, senior officers and managers; professionals; technicians and associate professionals; clerks; and service workers and shop & market sales workers. Blue-collar jobs include crafts and related trade workers; plant and machinery operators and assemblers; and elementary occupations. Agriculture and related jobs relates to skilled agricultural and fishery workers. (Directorate General of Employment and Training, Ministry of Labour, Government of India, <http://dget.nic.in/nco/jobdescription/welcome.html>).
- World Economic Forum. 2013. The Global Gender Gap Report 2013. http://www3.weforum.org/docs/WEF_GenderGap_Report_2013.pdf. Geneva, Switzerland. Table 3a, pp. 10.

The convergence in the relative educational gap is the highest in blue-collar jobs during the period of the study.