

## GENDER GAPS IN HIGHER EDUCATION: A FOCUS ON GROSS ENROLMENT RATIO AND GENDER PARITY INDEX

*R. Ramya*

*Assistant Professor of Economics, Sri C. Achutha Menon Government College, Thrissur, Kerala, India*

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### **ABSTRACT**

*Education is the basic human right. Indian Constitution through the Preamble, Fundamental rights, and Directive Principles of the State policy guarantees equality in different walks of life include different levels of education, but now too complete gender equality in education is not attained. A detailed examination of the gender gaps in higher education system is examined in this paper through two indicators: the Gross Enrolment Ratio and Gender Parity Index. The recent All India survey on Higher Education is taken as a basis for examining gender gaps over the years and across disciplines in the field of higher education.*

**KEY WORDS:** *Higher Education, Gender disparity, Gender Parity Index, Gross Enrolment Ratio*

### **INTRODUCTION**

Gender and gender related issues gained momentum mainly after the publication of the report of the committee on the status of woman in 1974 and the declaration of International women's year by UN in 1975. The 1995 Human Development Report stressed the significance of a move towards gender equity. *"The relentless struggle for gender equity will change most of today's premises for social, economic and political life....."* With more and more social, economic and political awareness in the minds of people, gender issues became significant. Whether developed or under developed the nation, gender disparity exists there, but the severity of gender disparity is found more in developing nations. It is clearly visible that the real root of gender disparity starts from the household itself. Both sex and gender is often used as synonyms, but sex is a biological difference between members of the same species, and gender refers to the social as well as cultural division insisted upon men and woman in the society.

Gender can also be defined as a socially constructed perception of an individual based on expected behaviour and specific role they performed in the societies. But now gender is considered more as a fluid term, which needs thorough attention. One of the main factor that clearly shows the extent of gender variations or gap is the education, especially that of higher education. A close examination of the courses selected by males and females at the higher education level including Gender parity Index is examined in this paper on the basis of the latest report of All India Survey on Higher Education (AISHE), 2016-17.

*"Quality must pass the test of equity: an education system characterized by discrimination against any particular group is not fulfilling its mission"* (UNESCO, 2004) As per Article 39 men and women are given equal chances of livelihood and can pursue their own life, but often gender discrimination is found in all walks of life.

Article 45 of Indian constitution demand all state government to provide free and compulsory education to all children up to 14 years of age and thus provides equal opportunities for both girls and boys to secure better education, and thus secure a better standard of life. In spite of all guarantees, many are denied of better education „*If you educate a boy, you educate an individual, but if you educate a girl you are educating the whole nation*”. There comes the role of education, women empowerment and socio- economic development of a nation.

### Education and Woman Empowerment

The concept of woman empowerment became a reality only when she gain better educational status mainly at the higher education level and thus it is possible for her to gain better employment and financial autonomy. There exist a robust, positive relationship between mothers’ employment and children’s schooling in India results in a lower gender gap in household investments. It is also clear that both father’s and mother’s education is associated with greater educational attainment of daughters relative to sons. However, raising mother’s education is associated with a significantly greater reduction in the gender gap in schooling than an increase in father’s attainment (*Farzana Afridi, 2010*). Thus parents’ education, especially that of mothers’ education had a significant influence upon their children’s’ education. Not only this but also mothers’ education and employment often produce great influence upon decision making with in the family.

Gender equality and woman empowerment has given significant attention by our policy framers during the last few years as is clear from the following steps: to achieve gender equality and woman empowerment is an important aim in the National Population Policy 2000, the third and fourth Millennium Development Goals (UN Millennium Summit, 2000) which aims to achieve woman empowerment and remove gender disparity in education, and it is one of the main goals of fourth National Family Health

Survey (NFHS 4, 2015-16). The new survey will reflect the features of the populations as well as health indicators and the report are released on March 1st, 2017 by the Ministry of health and family welfare. Before going to examine the gender variations in the higher education level, a close look at the literacy level, both at the centre as well as Kerala state is carried out in Table 1

**Table 1: Male-Female Literacy Rate 1991-2011**

	Literacy rate(1991)	Literacy rate (2001)	Literacy rate (2011)	Literacy rate (2011)
Male	64.13	75.85	82.14	96.11
Female	39.29	54.16	65.46	92.07
Total	52.61	65.38	79.04	94.00

**Source:** Census Reports

The data set revealed that gender disparity can be witness even in the case with literacy too, but a welcoming trend that can be found is that the levels of female literacy along with males shows an increasing trend over years. The gender gap in terms of literacy has shown a declining trend throughout the years. The gap is found to be very low in the case with Kerala, the male female literacy gap is 21 percent in 1951, and it reduced to mere 4 per cent in 2011. Thus we can witness a more favorable trend in favor of female education throughout the last few years. Apart from literacy level enrolments to schools and higher education system too produce a significant impact upon all human beings across gender.

**Students' Enrolment to Higher Education is Influenced by So Many Factors like**

- Familial factors include gender stereotyping
- Child labour and household work
- Economic factors include poverty, occupation etc
- Socio-Cultural factors
- Govt policies
- Physical factors include traveling
- Problem of accessibility
- Agricultural and related works
- Time poverty

**How to Measure Gender Equality in Education?**

United Nations Millennium Summit (September, 2000) adopt a Historic document "Millennium declaration" and introduce Millennium Development Goals (8 goals, 18 targets, 48 indicators) and also The Sustainable Development Goals which consists of a collection of 17 global goals set by the United Nations General Assembly in 2015 for the year 2030 focused the role of education and reduction in gender disparity as one of the primary concern for every nation. Education often makes a complete social change by improving the entire family welfare. Thus not only education at the primary level is significant, but also the higher education promotes better employment and attitude change in the minds of people. Even though everybody knows the significance of education as it helps in complete socialization, now too gender disparity occurs at the level of primary, secondary as well as at the higher education levels.

It is noticeable that educated parents and their settlement in urban areas produce a profound influence upon their children's education and they are ready to provide their boy and girl child all sorts of development through education. Capability Poverty Measure and Gender Development Index of UNDP (UNDP, 1996) include female literacy as a significant component because it is well known that women's education improve not only their own living standards but also it improves their children's' as well as the overall family welfare. A close examination of The World Economics Forum's Global Gender Gap Report 2018 revealed that India is on 108th position and has been ranked 142nd in the economic opportunity and participation sub index out of total 149 countries.

**Mainly used Measures to Check Gender Equality in Education**

- Gross enrolment ratio
- Net enrolment ratio
- Gender related EFA(Education for All) index (GEI) Developed by UNESCO, it indicate whether boys and girls are equally present in different levels of education, If its value is 1 indicated complete equality between boys and girls but still there have low rates of access, retention and achievement for boys and girls.

- Gender Parity Index
- Education Development Index
- Gender Equality in Education Index

Even though there are many measures to check gender equality and inequality in education, this paper mainly focus two measures like Gross Enrolment Ratio and Gender Parity Index to examine how far women enjoy equality with men in the scheme of higher education..

### Gender Parity Index (GPI)

Gender Parity Index (GPI) is the commonly used tool to check gender equity and it is the ratio of females to male rates for a given indicator. Gender Parity Index (GPI), a ratio of proportional representation of female and male, has improved during the last seven years (table 2). Improvements in female education level often produce significant influence in narrowing down gender gap in the labour market. Gender Parity Index in education measures gender equity in education and if its value is equal to one it implies that there is no gender disparity at that level of education and if the value is greater than one it shows a more favorable situation in favor of females. The table 2 shows a comparison of gender parity index of India and Kerala, where a more welcoming trend in favour of female education can be noticed in Kerala.

**Table 2: Gender Parity Index During the Last 7 Years**

Year	Gender Parity Index India	Gender Parity Index Kerala
2010-11	0.86	1.34
2011-12	0.88	1.44
2012-13	0.89	1.39
2013-14	0.92	1.36
2014-15	0.92	1.38
2015-16	0.92	1.32
2016-17	0.94	1.41

**Source:** All India Survey on Higher Education 2016-17

### Gross Enrolment Ratio in Higher Education

Gross enrolment ratio (statistical measure used in the education sector to determine the number of students enrolled in school at different grade level and to analyze the ratio of number of students who live in that country to those who qualify for a particular grade level) and Net enrolment ratio (enrolment of the official age group for a given level of education expressed as percentage of the corresponding population) are also used to measure the extend of gender disparity in education. Gross Enrolment Ratio (GER), one of the key metrics that determines growth of higher education in the country has grown from 19.4 per cent in 2010-11 to 25.2 per cent in 2016-17, according to HRD ministry's latest All India Survey on Higher Education (AISHE). The government plans to achieve a GER of 30 per cent by 2022. Gross Enrolment Ratio is the ratio of enrolment in higher education to population in the age group of 18-23 years.

The publication of Central Statistical Organisation „*Women and Men in India, 2010*“ reveals that enrolment to primary and secondary increased over decades but the gender gap in enrolment now too persists. But the gap

widens as we move from secondary to higher levels of education. India is now getting close to gender parity in the classroom as in recent cases, women have outnumbered men in education in states like Kerala. This is the silver lining in the latest education trend in the country after the narrowing of gender gap with more girls now opting for college according to The Indian Express daily.

The All India Survey on Higher Education (AISHE) has shown that India has now registered its best performance on the Gender Parity Index (GPI) in the last seven years - from 0.86 in 2010-11 to 0.94 in 2016-17. In Goa, Himachal Pradesh, Meghalaya, J&K, Nagaland, Sikkim and Kerala; more women are educated than men. GER is a statistical measure for determining the number of students enrolled in undergraduate, postgraduate and research-level studies within the country and expressed as a percentage of the population. While Tamil Nadu has the highest GER at 46.9%, Bihar ranks the lowest with 14.4 percent. Meanwhile, almost 80 per cent of the enrolment, or 2.83 crore, were studying at the undergraduate level. About 40 lakh, or 11.2 per cent students, were studying at the postgraduate level.

Six states namely Himachal Pradesh, Kerala, Punjab, Tamil Nadu, Andhra Pradesh and Haryana registered GER higher than the national average (25.2%), with their share of students entering higher education growing twice as fast as the overall rate. As per the recent All India Higher Education Survey 2016-17, the number of universities have also gone up from 799 to 864 universities. The total number of students in higher education was about 3.57 crore, of which 1.9 crore were boys and 1.67 crore girls. Also it has been found earlier that states in south India have higher college density, which is defined as the number of colleges per lakh eligible population. Puducherry has, on average, 549 students enrolled in each college, followed by Telangana with 483 and Karnataka with 381. Bihar, Jharkhand and West Bengal are at the bottom of the pile with seven, eight and 11 colleges, respectively, for every one lakh students. Here a detailed focus on Gross Enrolment Ratio is made. India has the third largest higher education system in the world, next to China and United States. Higher education scenario is much wider include graduation and post graduation in different fields like arts, science, mathematics, cultural and social sciences, it also includes technical, medical, agricultural and other applied fields of education.

**Table 3: Gross Enrolment Ratio In The Scheme of Higher education During The Last 7 Years**

Year	India			Kerala		
	Male	Female	Total	Male	Female	Total
2010-11	20.8	17.9	19.4	18.8	25.1	21.9
2011-12	22.1	19.4	20.8	17.8	25.6	21.8
2012-13	22.7	20.1	21.5	18.5	25.8	22.1
2013-14	23.9	22.0	23.0	21.1	28.7	24.9
2014-15	25.3	23.2	24.3	24.1	33.3	28.7
2015-16	25.4	23.5	24.5	26.6	35.0	30.8
2106-17	26.0	24.5	25.2	28.3	40.1	34.2

**Source:** All India Survey on Higher Education (AISHE), 2016-17

The latest report of AISHE revealed that the enrolment of both boys as well as girls has increased during the last seven years. A comparative analysis with that of Kerala state revealed that there is a steady increase in the enrolment rate of females in the concerned state, which is a good sign for future development. If these educated human capitals are absorbed to the labour force it will surely improve the productive capacity of a nation.

### Gender Disparity in Subject Preference at the Higher Education Level

A close watch at the higher education level reveals that the number of central and state universities increased rapidly, while examining the gender disparity in the preference of subjects' gender gap is widely noticed in terms of professional courses, and it is lowest in terms post graduate courses especially post graduate courses in social sciences (table 4)

**Table 4: Females Per 100 Males in Ug/Pg Level in Regular Mode of Education**

Courses	2012-13	2013-14	2014-15	2015-16	2016-17
M.A	124	147	154	165	169
M.Sc	123	138	147	157	167
M.Com	122	136	145	148	158
MBBS	86	93	95	97	99
B.Sc Nursing	92	95	93	93	384
Bachelor of Education	169	180	188	197	203
B.A	108	115	118	118	121
B.Com	79	83	86	90	93

**Source:** All India Survey on Higher Education (AISHE), 2016-17

Even in post graduate courses of science, commerce and humanities, females outnumber males (table 4), but in professional courses the enrolment now too is skewed in favour of males and the courses with biggest gender gap is given in table 5

**Table 5: Biggest Gender Gap (Females Per 100 Males)**

Courses	2015-16	2016-17
Bachelor of Computer Application	76	66
BBA	38	39
B.Tech	44	47
MBA	61	62
M.Tech	64	67

**Source:** All India Survey on Higher Education (AISHE), 2016-

### CONCLUSIONS

A quality higher education is really an asset for every nation. If efforts were made to promote the values of higher education across gender, it will work wonders in the economy. Gender mainstreaming which is often accepted as a main strategy to promote gender equality by creating awareness in the minds of public. A reduction in gender disparity in different fields, especially at the higher education level will create a better environment for the society to live in. A highly educated society is a boon for every nation and if the economy is able to absorb all these talented personalities to the labour force, it will surely improve the national income and productive capacity of the concerned nation.

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