



Educational Inequality between Genders in Rajasthan

Khushi Singh, Ankit Kumar, Chitwaswaroop Kaur, Shivani Soni*

B.A.(Hons) Economics, Ramjas College, Delhi University, India

*Email: ksinghr13@gmail.com

DOI: <https://doi.org/10.55248/gengpi.2022.31221>

ABSTRACT

Rajasthan's females are facing a challenge in reducing the gap between males and females in the field of education. Even after three decades of economic reforms, the country has not been prosperous in fully utilising its females in education to develop the economy. This study aims to know the status of female education in Rajasthan and throw light on female and male present educational trends. The study uses National Statistical Organisation (NSO)'s Periodic Labour Force Survey (PLFS)2020-21 unitlevel data to explain the trends. The study also suggests that there should be solid legislations and regulations on gender balance by central/state government and policymakers in giving females proper opportunities in education to contribute to the economy.

Keywords: Female, education, Gender , Rajasthan

1.Introduction

A person's education is a crucial aspect of their life. It is essential to future success and a wealth of options in our lives. For humans, education offers various benefits. For instance, it enlightens a person's thoughts and mind. It aids students in making plans for employment or further study after completing their undergraduate studies. Education in a subject area enables people to think, feel, and act in a way that supports their success and raises both their level of personal happiness and that of their community. Education also fosters the development of a person's personality, way of thinking, interpersonal skills, and readiness for life's events. It elevates people to a higher social rank both within their own culture and around the world.

In addition to making up approximately half of the human population, women also carry the burden of the everyday battle for existence, especially in developing nations, making their position and role crucial drivers of growth. The role of women in development is a crucial issue for the development of all societies and is strongly tied to the objective of complete socioeconomic advancement. Any development strategy that ignores the necessity of advancing women's roles will fail to achieve full socioeconomic development. Additionally, throughout the modern world, women's contributions to development have been seen as an essential part of social and economic advancement.

The education of women is essential to the overall prosperity of the nation. A woman with a good education can manage both her personal and professional lives. The moral aim of education is the development of the child's body and mind. Giving pupils "complete knowledge" or "more information" is education's real goal.

In stark contrast to Western nations, India has a very distinct position for women. In terms of education, health, work and business prospects, circumstances for a person's livelihood, law, decision-making, media, and communication, women in Indian society have frequently been seen as the weaker and more vulnerable group. However, in recent years, women's issues throughout the globe have received a lot of attention. At the political and social levels, gender equality has emerged as a significant and pressing problem.

With the advent of globalisation and rising levels of international competitiveness, education has emerged as one of the 21st century's defining endeavours and plays a significant role in the building of human capital. By increasing personal productivity and efficiency, it creates a trained workforce capable of guiding the economy along the road of long-term, sustainable economic growth.

The major objective of study is to analyse the trends in education between genders in Rajasthan and see if there is any significant gap between female and male education.

2.Literature Review

There are many shreds in the literature regarding education among females in the Indian economy. Children learn about themselves and the world around them by examining their surroundings. Children pick up behaviour through observing and imitating what they hear and see in others. The first formal setting where children are exposed to new concepts to advance their cognitive, social, and physical skills is believed to be school, which promotes overall development. Being educated gives a woman the abilities, information, and self-assurance she needs to be a better mother, employee, and citizen. A lady with a good education will also work harder and earn more money. In fact, women frequently see larger returns on their educational

investments than do men.

Women's empowerment depends on both their access to economic and financial resources and their level of education, both of which are essential for elevating their social status. The gender gap in education in Rajasthan still exists, despite recent improvements in the state's economy. Despite the fact that women are biologically predisposed to prioritise domestic activities, gender norms restrict women's access to education and force them to contribute to the population in ways that are harmful to a nation's progress.

Women's involvement in education is still lacking, which is a crucial problem from a policy standpoint even if the state is on one hand thriving in its growth. Equally troubling is the fact that women's educational engagement has lagged well behind that of males in both rural and urban regions. Global data show that there are major gender gaps and underrepresentation of women in the educational sector.

One of the most serious concerns facing nearly every Indian state, no matter how big or little, is the lack of education among women. For the state's poor, the subject of female education is extremely urgent. The absence of females in higher education has become a threat to social, political, and economic stability in the majority of the states in our nation.

In Rajasthan, there are a number of obstacles that prevent girls from obtaining an education. These obstacles include physical ones (distance to schools), infrastructure issues, discriminatory social norms, and a lack of incentives for families to send their daughters to school past a certain age.

The variable we will be focusing on will be the average number of years a male or female in Rajasthan receives or attains education.

Both the proportions of the population i.e., females and males, are essential for developing the economy. This study will throw light on the present situation of gender inequality in education and check if there is any significant gap between genders among youth in education in the developing state of Rajasthan.

Objective of the Study

- To examine the gender Educational imbalance among different age group of Rural and Urban area of Rajasthan.
- To examine the gender educational gap in Age group strata in rural and urban area is significant or not.

Data and Methodology

The analysis is based on secondary data. The main source of secondary data is of NSSO household data named Periodic Labour Force Survey (PLFS) 2020-21 is used. To estimate trends of educational attainment we have used the number of year invested in education. All persons are arranged in four group on the basis of age to understand trend in education attainment. The first age group of 10-14 years called as Child in our study. The second group of age 15-29 years and the third group of 30 to 44 years and fourth and last one group is of age 45 and above.

We have used welch t- statistics to examine the significant educational gap among male and female

Welch t-statistic is calculated as follow :

$$t = \frac{m_{female} - m_{male}}{\sqrt{\frac{S_{female}^2}{n_{female}} + \frac{S_{male}^2}{n_{male}}}}$$

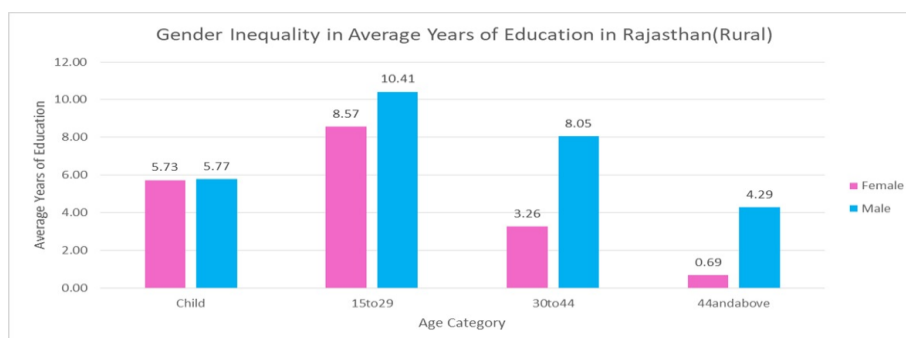
where, m_{female} and m_{male} are average years devoted in education and S_{female} and S_{male} are the standard deviation of the the two groups female and male, respectively.

R Software is used for conducting hypothesis tests and its codes are given in the appendix.

Result

a. Average years of education among female and male in different Age groups

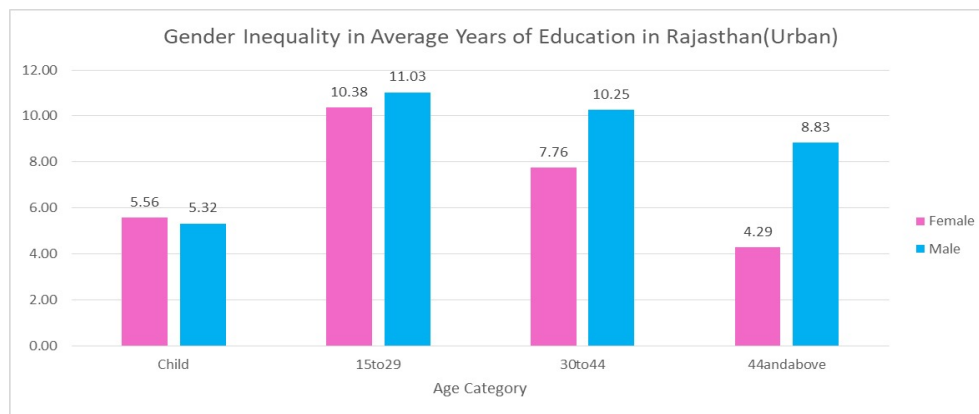
Gender Inequality in Education: Rural Rajasthan



Source: PLFS 2020-21

The above figure depicts the average number of years a male and a female attains education, in four age categories, namely Child (10-14 years); 15-29 years; 30-44 years; and 44-and above years, in Rural areas in the state of Rajasthan. In the figure, we can see that in rural Rajasthan, a male attains more years of education than females, irrespective of the age category. It can be seen that in the fourth age category (44 years and above), there is a huge gap between males and females. On average, where a male attained education for 4.29 years, a female only attained education for 0.69 years. This shows that back in time, there was almost negligible amount of females attaining education. Whereas recent pictures have improved and there is an increase in the number of years a person attains education in Rajasthan. Though the numbers have progressed, the female participation still lags behind the male participation which can be seen in the first and second age category. In 10-14 years, a male attains average of 5.77 years whereas a female attains 5.73 years, which is slightly lower than males and can be considered as a better step in providing education to females in rural Rajasthan. In the second age category, 15-29 years, though there is overall improvement in attaining education, a male receives an average of 10.41 years of education whereas a female attains 8.75 years.

5.2 Gender Inequality in Education: Urban Rajasthan



Source: PLFS 2020-21

The above figure depicts the average number of years a male and a female attains education, in four age categories, namely Child (10-14 years); 15-29 years; 30-44 years; and 44-and above years, in Urban areas in the state of Rajasthan. In the figure, we can see that in urban Rajasthan, a male mostly attains more years of education than females, irrespective of the age category. It can be seen that in the fourth age category (44 years and above), there is a huge gap between males and females. On average, where a male attained education for 8.83 years, a female only attained education for 4.29 years. This shows that back in time, there were lower females than males attaining education. Whereas recent pictures have improved and there is an increase in the number of years a person attains education in Rajasthan. Though the numbers have progressed, the female participation still lags behind the male participation which can be seen in the first and second age category. But, the image is totally contrasting than most results observed. In 10-14 years, a female attains an average of 5.56 years whereas a male attains 5.32 years of education, which proves that women in Urban Rajasthan are slightly flourishing in attaining education and shows progress in achievement of female education. In the second age category, 15-29 years, though there is overall improvement in attaining education, a male receives an average of 11.03 years of education whereas a female attains 10.38 years.

Both these figures depict that as times have changed, people are getting more educated. The picture is slightly better in urban areas than in rural areas of Rajasthan. As the times are changing, so does participation of females in education. In the majority of age categories, where males dominated participation in education, the scenario is slightly contrasting in children from age 10 years to 14 years where females, not majorly but slightly, are above males by an average of 0.24 years.

Analysis of educational difference in female and male of different age group rural and urban area.

By applying Welch t-test, The analysis to know the educational gap in male and female was done by applying Welch t- test on PLFS 2020-21 data of Rajasthan in both the rural and urban area. In the below Table 1, we have explained Average year of education between genders , the difference in average education in male and female. We also have described whether the difference is significant or not on the basis of Welch t-test. Our test value is based on 5 percent level of significance. Estimated t value and its corresponding p value of Welch t-testwritten in the table.

Educational inequality between Genders in various age group in Rajasthan.

Table1. Welch t-test results for understanding educational inequality between genders

Age Category: 15-29 Sector: Rural	Average number of years a Female attains education= 9.74 Average number of years a Male attains education = 10.74 The test suggests that the effect is negative, statistically significant, and there is difference of -1.00 years with ,95% CI [-1.20, -0.79], $t(3458.64) = -9.62$, $p < .001$; Cohen's $d = -0.33$, 95% CI [-0.39, -0.26]
Age Category: 30-44 Sector: Rural	Average number of years a Female attains education= 7.42, Average number of years a Male attains education = 9.69 suggests that the effect is negative, statistically significant, and difference = -2.27, 95% CI [-2.64, -1.89], $t(1080.20) = -11.97$, $p < .001$; Cohen's $d = -0.73$, 95% CI [-0.85, -0.61]
Age Category: 45 and above Sector: Rural	Average number of years a Female attains education= 6.40, Average number of years a Male attains education = 7.96 suggests that the effect is negative, statistically significant, and difference = -1.56, 95% CI [-2.07, -1.05], $t(246.15) = -6.03$, $p < .001$; Cohen's $d = -0.77$, 95% CI [-1.03, -0.51]
Age Category: 10-14 (Child) Sector: Rural	Average number of years a Female attains education= 5.88, Average number of years a Male attains education = 5.83 suggests that the effect is positive, statistically not significant, and very small difference = 0.05, 95% CI [-0.16, 0.26], $t(1286.26) = 0.48$, $p = 0.631$; Cohen's $d = 0.03$, 95% CI [-0.08, 0.14]
Age Category: 15-29 Sector: Urban	Average number of years a Female attains education= 11.13, Average number of years a Male attains education = 11.37 suggests that the effect is negative, statistically not significant, and very small difference = -0.24, 95% CI [-0.52, 0.05], $t(2114.46) = -1.64$, $p = 0.101$; Cohen's $d = -0.07$, 95% CI [-0.16, 0.01]
Age Category: 30-44 Sector: Urban	Average number of years a Female attains education= 10.23, Average number of years a Male attains education = 11.05 suggests that the effect is negative, statistically significant, and small difference = -0.82, 95% CI [-1.27, -0.38], $t(1294.84) = -3.62$, $p < .001$; Cohen's $d = -0.20$, 95% CI [-0.31, -0.09]
Age Category: 45 and above Sector: Urban	Average number of years a Female attains education= 8.91, Average number of years a Male attains education = 10.47 suggests that the effect is negative, statistically significant, and difference = -1.55, 95% CI [-2.02, -1.08], $t(868.56) = -6.49$, $p < .001$; Cohen's $d = -0.44$, 95% CI [-0.57, -0.31]
Age Category: 10-14 Sector: Urban	Average number of years a Female attains education= 5.62, Average number of years a Male attains education = 5.43) suggests that the effect is positive, statistically not significant, and very small difference = 0.19, 95% CI [-0.10, 0.48], $t(656.17) = 1.29$, $p = 0.199$; Cohen's $d = 0.10$, 95% CI [-0.05, 0.25])

In the above table we can see that there is a significant gap between genders in the age category of 15-29 years, 30-44 years and 45 and above years in rural areas of Rajasthan. Whereas, the image in contrasting in the children where there is not much gap between males and females in terms of education attainment in rural areas of Rajasthan.

On the other hand, in urban areas, there is a significant gap in the age group of 30-44 years and 45 and above years. Whereas, in the age group of children and 15-29 years, there is no significant gap between genders in terms of educational attainment.

We could clearly see that there is a significant gap between genders on the basis of education. A male attains more years of education than the females irrespective of the areas. Where overall attainment of education is higher in Urban areas than Rural areas of Rajasthan, the gap between males and females still persists.

Conclusion

Women's engagement in education and access to quality education are critical components of an inclusive and long-term development process. Women continue to confront numerous barriers to entering the educational field. They are disproportionately affected by access to quality education, distance between home and the area of education, schooling conditions, security, discrimination, and balancing work and family responsibilities. Furthermore, women are overrepresented in the informal economy, where they are most vulnerable to exploitation and have the least institutional protection. In light of these findings, policymakers in India and throughout the region should take a comprehensive approach to improve women's participation in education by increasing access to and relevance of education and training programmes, skills development, building safe and near-home educational institutions and the provision of safe and accessible transportation, as well as encouraging a growth pattern that generates education opportunities. Women's engagement should be encouraged and enabled by policy frameworks conscious of the "gender-specific" constraints that most women encounter. Gender-responsive policies must be established in a context. Though in present day scenario, there is a progress in female educational attainment in both sectors, the progress will be significant when rural areas are pushed harder in terms of education. The goal is to boost female participation which will not only help in empowerment of females but also will boost the state's economy.

Acknowledgment

The authors would like to thank Prof.LokendraKumawat, Prof.Alok Das, Prof.Pawan Kumar and other faculty members of Economics Department, Ramjas College, Delhi University for their guidance and suggestions.

Bibliography

Singh, Ajad and Dharan, A. Sunil Dharan, "Youth Employment in Haryana: Evidence from the 2011-12 NSSO Round", *Edu World*, March, 2018

Chowdhury, S., "Employment in India: What Does the Latest Data Show?", *Economic & Political Weekly*, (2011)

Hilker, Lyndsay M., and Erika Fraser. "Youth exclusion, violence, conflict and fragile states." *Social Development Direct* 30 (2009).

Saha, C. (2020). *A Geographical Analysis of the Social and Economic Well-Being of Female Children in Rajasthan*. In *Population Dynamics in Contemporary South Asia* (pp. 359-392). Springer, Singapore.

Singh, Ajad. "A Study Of Human Development In Haryana After Economic Reform 1991." *International Research Journal of Modernization in Engineering Technology and Science (IRJMETS)* vol 4. Issue 10 (2022): 1270-1276.

Singh, Ajad and Bedi J. S.. " Gender Disparities In Lfpr For Working-Age " *International Research Journal of Modernization in Engineering Technology and Science (IRJMETS)* vol 04. Issue 05 (2022): 4031-4038.