DROPOUT IN INDIA: AN ANALYSIS OF GENDER AND RURAL-URBAN INEQUALITY BASED ON NATIONAL SAMPLE SURVEY 64th AND 75th ROUNDS

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ABSTRACT

In a globalized economy, it is an undeniable reality that a country's development is greatly reliant on its own residents' education. Although India has made significant successes in raising literacy; the occurrence of dropouts at every stage of education has retained a blemish on an otherwise admirable record. With this backdrop, it is pertinent to examine the rural and urban gap in the dropout rate as well as the gender variation of dropout in the rural-urban region in India between 2007-08 and 2017-2018. This study utilized secondary data from the NSSO survey 64th and 75th round. The major finding of this research revealed that the overall difference between rural and urban dropout rates has been reduced besides the gender difference between male and female dropouts in the rural and urban areas fell during 2007-08 and 2017-18. Further the results show that there was no statistically significant gender difference in dropout rates between male and female students as well as no significant difference in the rural-urban gap from 2007-08 to 2017-18 as evidenced through independent sample t-test. Thus, the results of this study will inspire policymakers and educational institutions to manage the problem of dropout instantly by improving the quality of education and provide free secondary schooling as the dropout rate is highest at this level among all categories. The government must make sure that the entire necessary infrastructure is in place and give some remedial measures to overcome this issue.

Keywords: Dropout, education, rural-urban, gender difference, NSSO survey.

Introduction

Education is currently the most highly regarded, not only for its inherent worth in improving people's lives but also for its practical usefulness in the growth of a nation's human capital. With necessary public investment in human capital, educational growth can optimistically benefit the approach of sustainable and economic development (Ozturk, 2011). Neo- classical growth theories have identified human capital, as one of the important determinants of economic growth and development (Gemmell, 1995). Education's role is to impart knowledge and expertise to the public and developing the personalities of the youth of this country. Education is our country's sole prospect of transitioning from a "developing country" to a "developed country." And we won't be able to achieve this unless we enrolled the 50 million students who are currently out of school get back to schools, as well as assure that all pupils in the school are learning since the "Right to Education" has now become a fundamental right (Kannan, 2018).

Over the years, the nation's literacy level has steadily increased. For example, in rural areas, male literacy has risen from 37.49 % in 1961 to 78.57 % in 2011, while female literacy has enhanced from 11 % to 58.75 %; in urban areas, male literacy has elevated from 70.77 % to 89.67%, while female literacy has improved from 43.75 % to 79.92% during the identical period (Census, 2011). This reveals literacy inequalities between rural and urban locations, as well as between men and women. Dropout happens at all levels of school, among both boys and girls, and across a wide range of social classes, even though the literacy rate rises. This issue is intertwined with student dropout. According to the National sample survey office (NSSO) 75th round "an ever-enrolled person was considered as dropped out if he/ she did not complete the last level of education for which he/she enrolled and currently not attending any educational institution for reasons other than 'completion of the desired level of education" (NSSO,2018).

The economic impact of student dropouts is devastating. Learners who drop out cost them to the economy; a class of pupils who drop out will lose the country over $200 billion in foregone earnings and unrealized tax income throughout their lives (Catterall, 1985). Dropping out of school lowers the country's literacy rate and creates a less inventive environment. Individuals without a high school diploma have a harder time finding work and are more likely to devote their lifetimes unemployed or on government aid (Latif et al, 2015). The COVID-

19   epidemic has produced a new crisis in the education system as shifted towards online education, which results to a loss of learning in the short term due to huge digital divide while also increasing the possibilities of dropping out of school (Khan et al, 2021). Furthermore, the nationwide lockdown has had a significant impact on more than 320 million pupils in India, particularly 130 million secondary school kids (Kamal and Illiyan, 2021).

With this backdrop, it is relevant to know the percentage changes in India's rural and urban dropout rates between 2007 and 2018 and examine the gender difference between male and female dropout rates in India during the same period so that policymakers and educational institutes will design better curriculum for retaining pupils in schools and make some policy to reduce dropout from every stage of education and these students will assist to contribute positively in human capital and economic development of our nation. The remaining part of the paper is laid out as follows: Section 2 covers a review of the literature; a research gap and Section 3 & 4 enclose objectives, hypothesis and section 5 brings research methodology, while Section 6 covers specific results and findings. Section 7 brings the paper to a close and discusses policy implications.

Review of Literature

Sengupta (2002) in their study found that home income has a beneficial effect on females' enrolment. It was also discovered that moms' work participation had a considerable detrimental impact on their daughters' school attendance. Other research said even though dropout growth slowed, they remain sufficient to make us sit up and take attention. Sex disparities have also shrunk. Female rates of dropping out, on the other hand, have consistently outperformed male rates. Based on logistic regression, the investigation demonstrates that familial responsibilities and parental attachment both play a significant effect in predicting dropout behavior (Choudhury, 2006). On the other hand, Jayachandran, (2007) in his study analyzed the main cause of dropping out were in both rural (37%) and urban (37%) locations, and for both male and female students, "children not interested in studies" contributes for the largest rate of dropouts and in both rural (17%) and urban (11%) settings, "parents not interested in studies" has a greater impact on female children based on data of NSSO 52nd round.

Basumatary (2012) study revealed that on average, poverty levels and the proportion of the rural population, both of which were statistically significant, had a bigger impact on school dropout rates from grade (I-VIII). Additionally, as per NSS 64th round, nearly 15% of students in the primary school age group (5-14 years) are not currently enrolled in educational institutions. The problem is even severe at the secondary school level (15-18 years): nearly half of the students in that age category are enrolled but are not presently studying secondary education. Household atmosphere, budgetary restraints, and educational quality are three major factors of dropout in rural settings (Sikdar & Mukherjee, 2012).

Gouda (2014) in their research revealed that dropout rates were four times greater among pupils of illiterate parents than among children of literate parents. According to (MHRD report ,2018), student dropout has significant financial consequences that impact the labor market, economic strength, and social growth of the country. According to the NSSO Report (71st round), high dropout rates are caused not just by monetary restrictions and children's involvement in household and economic duties, but also by a lack of enthusiasm in education.

Thus, several studies (Sikdar, 2012; Basumatary, 2012; Choudhury, 2006; Sengupta, 2002) addressed the problem of dropout in India and explained the causes of dropout based on primary and secondary data while neglecting the analysis of the rural and urban difference in dropout rate as well as the male and female difference among all schools and universities level. The present study would cover the variation in rural-urban dropout rate among the various level of schooling and explains gender difference in dropout among the various levels of education during the period 2007-08 and 2017-18. This represents the research void that the current investigation aims to address.

Research Objectives

1. To analyze the percentage change in rural and urban dropout rate in India between 2007-08 and 2017-2018.
2. To examine the difference between male and female dropout rates in India between 2007- 08 and 2017-2018.

Hypothesis

1. There is no significant difference between rural and urban dropout rates.
2. There is no significant difference between rural-urban male and female dropout rates.

Research Methodology

This research estimated deviation in the rural and urban dropout rate and gender variation during the period from 2007- 2008 to 2017-18. The present study is utilized descriptive as well as analytical and has relied on previously conducted surveys and research. It depends solely on secondary data. The National Sample Survey Organization (NSSO) rounds 64th and 75th were major source of data. NSSO in its 64th round conducted a survey on Education in India during the period of July 2007-June 2008 and the 75th round surveyed Household Social Consumption: Education during the period of July 2017 to June 2018. Table and charts are prepared based on data taken from NSSO 64th and 75th round with the help of SPSS software besides these independent samples T-test was used for checking the difference between mean values of variables. The Independent Samples *t*-Test has been utilized to check test statistical differences between the means of two groups (Kent, 2018).

Results and findings of the Study

1. Percentage Change in Rural and Urban Dropout Rate in India during 2007-08 and 2017-2018

Table I represents the percentage change in dropout of rural and urban persons among ever enrolled persons from 2007-08 to 2017-2018 by the level of the last enrolment. According to NSSO 64th round (2007-2008), "dropout means the percentage of ever enrolled persons (enrolled at some time in the past but currently not attending) of age 5 to 29 years.

Table 1 shows the percentage change in rural-urban people who dropped out between 2007-08 and 2017-2018 at the national level determined by NSSO. At the primary level which refers to class (I-V), the difference between rural and urban dropout was 10% in 2007-08 that declined to 3% in 2017-18.

When we moved from primary to upper primary i.e class (VI-VIII), the marginal difference of dropout was 8% in 2007-08 which reduced to 3% during 2017-18. Although, at the secondary level which refers to class (IX-X) rural-urban dropped out gap increased from 2% to 4% during 2007-08 to 2017-18.

The rural-urban difference remained the same at the diploma level which was 1%. At higher education level rural-urban gap reduced from 9% to 2% in graduation and 3% to 2% at post- graduation level. Thus, we can say that the overall marginal gap between rural-urban dropout rate at every level of education were declined during the period from 2007-08 to 2017-18. Similarly, study from USA also discovered that high school dropout rates are similar across the urban-rural divide (Jordan et al., 2012).

Level of Last Enrolment	Rural (2007-08)	Urban (2007-08)	Rural (2017-2018)	Urban (2017-2018)
Pre-Primary	1.6	1.2	7.2	3.8
Primary	27.3	16.8	10.6	7.8
Upper Primary/Middle	30.6	23	18.2	15.2
Secondary	24.4	26.4	20.8	17.1
Higher Secondary	10.3	13.4	10.3	8.3
Diploma/Certificate (Below Graduate)	1	2.2	13.3	11.7
Graduation	3.9	12.9	6	4.2
Post-Graduation & Above	0.9	4.1	3.4	1.5
Diploma/Certificate (Graduate and Above)			7.8	3.4
All			13.8	9.6

Table 1 Percentage of dropouts among ever enrolled persons for different levels of the last enrolment of the rural and urban area.

Note: Diploma/certificate (graduate and above) & all categories were out of coverage of 64th round, Source: NSSO 64th round, 2007-08 and NSSO 75th round, 2017-2018.
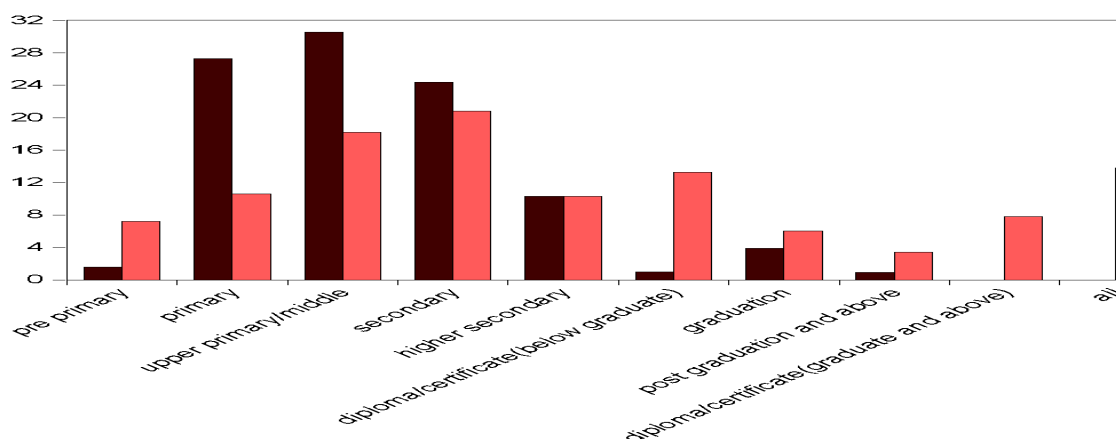
Figure 1 Comparison in Rural Dropout Rate during 2007-08 and 2017-18
Source: calculated by authors using NSSO data

From figure 1 rural dropout rate in 2007-08 and 2017-18 at the primary, upper primary and secondary level of schooling turn down by 16%, 13%, and 4% while at higher secondary level it remained constant at 10%. Nevertheless, the dropout rate escalates by 2% at both graduation and post-graduation levels. Figure 2 depicts that the urban dropout rate during the same period diminished at every stage of schooling and in higher studies such as 9% at primary and secondary compared to 5% at higher secondary level while at graduation and post-graduation level it declined by 9% and 2% respectively. In 2007-08, the rural dropout rate was higher than urban, from pre-primary to upper primary level after that urban dropout rate was higher among all categories. But this perception has changed in 2017-18; rural dropout was greater among all categories in comparison to urban level.
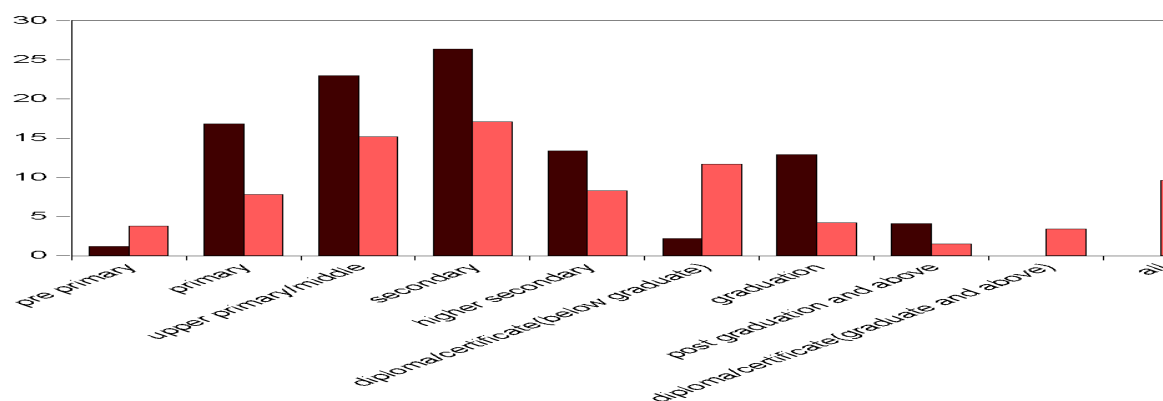

Figure 2 Comparisons in Urban Dropout Rate during 2007-08 and 2017-18
Source: calculated by authors using NSSO data

2. Percentage Change in Male and Female Dropout Rate in India during 2007-08 and 2017-2018
Table II reveals the gender difference for rural male and female drop out among ever enrolled persons for a different level of the last enrolment during 2007-08 and 2017-2018 at all India levels calculated by NSSO. It showed that the rural gender gap reduced at the primary level from 5.5% to 3.2% also at secondary shrunk from 2.7% to 1.2% and at the higher secondary level from 2.1% to 1%. Although at upper primary level it slightly increased and at both graduation and post-graduation level gender gap remained consistent around 1%. Figure 3 shows that rural male dropout rate declined at school level except for pre-primary level and raised at diploma and higher education level during 2007-08 and 2017-18. A similar trend of dropout followed by the rural female during the same period, It can be seen from the table II dropout among rural females was lower than males at secondary, higher secondary, and post-graduation levels during 2007-08 and 2017-18. However, at the national level, the dropout among rural females was greater (14.7 percent) in comparison to rural males (13.2percent).

Level of Last Enrolment	Male (2007-08)	Female (2007-08)	Male (2017-18)	Female (2017-18)
Preprimary	1.6	1.7	5.1	9.6
Primary	24.7	30.2	9.1	12.3
Upper Primary	30.2	30.9	17.5	19.1
Secondary	25.6	22.9	21.4	20.2
Higher Secondary	11.3	9.2	10.7	9.7
Diploma/Certificate	1.3	0.7	10.7	20.2
Graduation	4.5	3.3	5.6	6.7
Post-Graduation	0.9	0.8	3.9	2.8
Diploma/ Certificate			10.1	4
All			13.2	14.7

Table 2 Percentage of Male and Female Dropout among Ever Enrolled Persons for Different Levels of Last Enrolment of Rural Area

Note: Diploma/certificate (graduate and above) & all categories were out of coverage of 64th round, Source: NSSO 64th round, 2007-08and NSSO 75th round, and 2017-2018
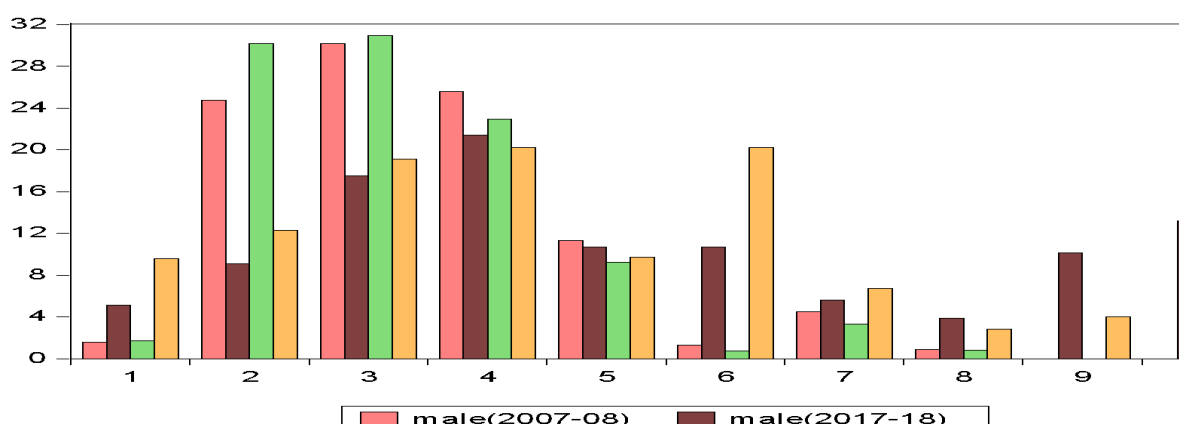

Figure 3 Comparison between Male and Female Dropout during 2007-08 & 2017-18 in Rural Area
Source: calculated by authors using NSSO data

Table III shows that the percentage changes in urban male and female drop out among ever enrolled persons for a different level of the last enrolment during 2007-08 and 2017-2018 at all India level calculated by NSSO. It represented that urban gender differences at the primary level surged from 1% to 2 %. However, there was a slight gender gap at the upper primary and secondary levels of schooling. In higher institutions, gender variation declined from 1.4 % to 0.6% at the graduation level. Figure 4 portrays that the urban male dropout rate reduced at every stage of schooling except pre-primary and at university level during 2007-08 to 2017-18. During the same period, urban females had a similar trend of dropout rate. There was little variation in male and female dropout in the urban sector during 2007-08 and 2017-18.

level of the last enrolment	Male (2007-08)	Female (2007-08)	Male (2017-18)	Female (2017-18)
1.pre primary	1.3	1.1	3.3	4.4
2.primary	17.2	16.4	6.9	9
3.upper primary/middle	23	22.9	14.9	15.5
4.secondary	26.8	26	17.6	16.6
5.higher secondary	13.1	13.8	8.8	7.7
6.diploma/certificate (below	3	1.4	9.7	16.4

graduate)				
7.graduation	12.3	13.7	4.4	3.8
8.post-graduation	3.4	4.8	1.6	1.5
9.diploma/certificate (above graduate)			4.2	1.9
10.all			9.5	9.7

Table 3 Percentage of male and female drop out among ever enrolled persons for different levels of the last enrolment of the urban area.

Note: Diploma/certificate (graduate and above) & all categories were out of coverage of 64th round, Source: NSSO 64th round, 2007-08and NSSO 75th round 2017-201
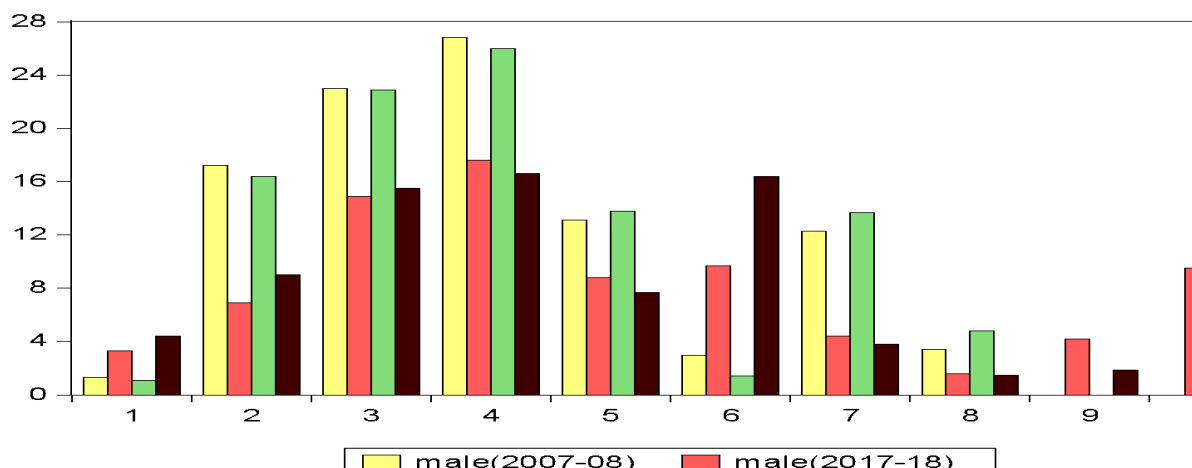

Figure 4 Comparison between Male and Female Dropout during 2007-08 & 2017-18 in Urban Area

Source: calculated by author using NSSO data

3. Independent Sample T-test
The Independent Samples t-Test is used to test statistical differences between the means of two groups (Kent, 2018) i.e.to check the significant difference between the rural-urban gap during 2007-08 to 2017-18. The relation between these groups was insignificant as t value =1.51< 2 with 7.60 degrees of freedom corresponded to p-value higher than 0.05 as given in table IV. It means that there was no significant difference between rural-urban dropout rates irrespective of their level of the last enrolment during 2007-08 and2017-18.

		Confidence interval				
Mean (2007-08)	Mean (2017-18)	Lower	Upper	T value	Df	P-Value
4.625	2.525	-1.1288	5.3288	1.5134	7.6078	0.1706

Table 4 Independent Sample t-Test for percentage change in rural-urban dropout in India during 2007-18 and 2017-18
Source: calculated by author using NSSO data

Table V illustrates independent sample t-test analysis to see the significance of rural and urban gender differences in dropout during 2007-08 and 2017-18. The t- value=- 1.04 < 2 with of 11.64 and p-value >0.05 for rural male-female dropout rate. Similarly for urban gender variation of dropout t value=-1.01 and p-value greater than 0.05. It means that there was no statistically significant gender gap between rural-urban dropout rates during 2007-08 and2017-18.

			Confidence interval				
	Mean (2007-08)	Mean (2017-18)	Lower	Upper	T value	Df	P-Value
rural	1.625	2.9	-3.952	1.4026	-1.0409	11.649	0.319

| urban | 0.875 | 1.662 | -2.5727 | 0.9977 | -1.018 | 7.967 | 0.338 |

Table 5 Independent Sample t-Test for percentage change in rural and urban male-female
Dropout in India during 2007-18 and 2017-18
Source: calculated by author using NSSO data

Conclusion
The current research attempted to examine the differences between rural and urban dropout as well as the gender difference in rural and urban dropout rates in India during 2007-08 and 2017-18 based on data from the NSSO 64th and 75th rounds. The findings of the study show that between 2007-08 and 2017-18, the overall difference between rural and urban dropout rates has narrowed down. It was evidenced by independent sample t Test that there was no statistical difference between rural-urban dropout rates during 2007-08 and 2017-18. Subsequently, the gender difference between male and female dropouts in the rural area declined during this period and there was little gender difference in male and female dropouts in the urban sector also during 2007-08 and 2017-18. This is also confirmed by statistical analysis of independent sample t Test which proves that there are no statically significant gender differences in dropout rates between male and female students from 2007-08 to 2017-18. The policy implications from the study are that the findings may inspire policymakers and educational institutions to manage the problem of dropout instantly by improving the quality of education and provide free secondary schooling as the dropout rate is highest at this level among all categories. The government must make sure that the entire necessary infrastructure is in place and give some remedial measures to overcome this issue. The study's shortcomings include the fact that it only looked at secondary data analysis of dropout of students in India. However, it has not included other social categories and states wise analysis and different reasons for dropout from education. Future research can focus on causes of dropout among different social groups and outcomes of these on the country.

Conflicts of Interest: The authors declare no conflict of interest.

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