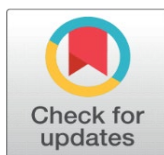


A QUANTITATIVE STUDY ON ANALYSING THE DETERMINANTS OF OUT-OF-SCHOOL IN URBAN INDIA

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ABSTRACT

This study attempts in investigating the reasons for out-of-school in urban India and analyse the factors that are responsible for children aged 5-18 years to discontinue education. For this, the study employs secondary data by pooling the 71st and 75th NSSO rounds (Education survey). The study finds that majority of girl students drop out to take care of household duties while boys dropout to take jobs to supplement household earnings. Other reasons include school being far off, lack of infrastructural amenities and disinterest in education. By using Logit regression this study presents evidence on likelihood of being out-of-school affected by social background and household characteristics. Muslim children and those belonging to lower caste face higher chance of being out of school. Children belonging to poor families drop out sooner and girls face a larger exclusion from continuing education in comparison to boys. Households that have more members also witness more dropouts while educated head of the household creates positive spill over in reducing dropout by motivating younger generation to continue education. Against this backdrop, the study suggests target specific programmes have to be laid so that awareness about the significance of continuing education can reach the disadvantaged and financially deprived sections of society. To address rising dropout rate, a proper strategy has to be undertaken by the government to promote human capital accumulation through encouraging female education.

Keywords: Out-of-School, Urban India, Logit Model, Dropout Rate

1. INTRODUCTION

Education is a crucial element that is important for the development of an individual's personality. This element was put forward by the 86th amendment to the constitution of India by announcing the "Right to Education" in Article 21 A. This Act mandated that the state would provide free and compulsory education to all children in the age group 6-14 years so that students' school enrolment, attendance, and completion till at least elementary education can be ensured. However, the execution of the Right to Education Act along with other education policies has been found to be shallow leading to the discontinuation of education by many students.

Regardless of the increase in public investment in the education sector for universalizing elementary education, school dropouts are increasing amidst rising school enrolment. According to [Doll et al. \(2013\)](#), school dropout is defined as the proportion of students who drop out from a certain level of education or grade in a given year for some reason other than death and do not get transferred to another school too. As per the recent estimates released by the Ministry of Education, in the year 2021-22 the dropout rate of children in grade I-VIII almost increased by 50% in comparison to the previous year, 2020-21. Among the various levels of education, the school dropout has been found to be highest in the upper primary level. At the same time, the dropout rate has been high for girls in comparison to boys. [Sharma \(2022\)](#).

In India, there is wide variation in the estimates of out-of-school children given by different sources. For instance, as per the report of the Ministry of Human Resource Development (MHRD) in the year 2014, around 6.5 million children were out-of-school in the age group 6-13 years. While the study of [Pankaj and Mitra \(2019\)](#) based on 71st round of NSSO in 2014, found there were 15.5 million children who were reported to be out-of-school in the age group 6-14 years. The reason for this variation as per [Bhatty et al. \(2017\)](#) was the discrepancy in the way the question was posed. While MHRD asked the number of children who were not attending school, NSS asked the number of children who were not enrolled in school. Therefore, in India there prevails immense variation in attending school and being enrolled in school.

As per the conceptual framework, there prevail many factors that deter children from continuing education in India and thus result in drop out before completing a certain grade or level. Gender discrimination is one such reason that leads to less investment in girl child education and compels them to discontinue education at the behest of taking care of siblings in the household, engagement in household duties, and marriage [Marphatia et al. \(2019\)](#). Another barrier to education is undoubtedly poverty and financial constraints, which increase the opportunity cost of the household in sending children to school. As per [Mitra \(2020\)](#), an important reason for boys to discontinue education is to be engaged in economic activities. Moreover, social discrimination and caste also plays an important part in school dropout rate. Discrimination against deprived religious groups and social groups push students out of school ecosystem and lead to the vicious cycle of deprivation [Pankaj et al. \(2018\)](#).

Over the last few years, the case of dropout students from a school in India has become a growing concern and the case of urban India is far from being better. As per the findings of [Gyanesh \(2018\)](#), in the year 2017, schools in Bengaluru urban witnessed the largest dropouts in Karnataka. As per the article published by [The Times of India. \(2020\)](#), majority of the dropouts in urban India in the year 2014, were in the age group 16-24 years, amongst which 57.4% were females and 53.6% were males. The prominent reason for dropping out for males was an engagement in economic activities while for females engagement in domestic activities led them to discontinue education. Undoubtedly, the school dropout rate in urban areas is less in comparison to that in rural areas, yet it is still very pervasive and deserves a closer look. Nonetheless, very less attention has been paid to issues concerning the school dropout rate, especially in urban India. Thus, the current study seeks to address this ground reality of school dropout in urban India and assess its determinants using the latest dataset of the education round of NSSO.

Moreover, in the attempt to attain the Sustainable Development Goal (SDGs) by 2030, which highlights the need for universal primary education, it is crucial to pay

attention to the reasons that result in school dropouts in urban India. The rationale to dwell on this study seems pertinent given the fact RTE mandates the provision of free and compulsory education until the completion of elementary education laying down rules for infrastructural development in schools, teacher working hours, pupil-teacher ratios, the appointment of training teachers, and the like. Undoubtedly, the policy measures of the government have increased the school enrolment ratios but have drastically failed to retain children in schools leading to immense school dropouts. This signals the failure of the welfare schemes initiated by the government and thus a greater need to look closer at the reasons behind school dropout and the factors that determine school dropout in urban India.

2. AIM AND OBJECTIVES

Against this backdrop, the aim of this study is to investigate the determinants of school dropout among children in urban India. Through this research, the idea is to understand the mindset of the students and their parents in discontinuing education before completing the given class or grade despite all facilities having been provided to them by the government. To accomplish the aforementioned aim, the study has formulated the following objectives:

- To examine the reasons for discontinuing education by school children in urban India
- To estimate the socioeconomic factors that result in school dropout.

The remaining study is organized as follows: Section 3 illustrates the methodology adopted by the researcher to fulfil the objectives of the study. Section 4 presents the analysis on the collected data and engages in a useful interpretation of the findings. Lastly, section 5 provides the concluding remarks of the study along with policy implications.

3. METHODOLOGY

The current study employs quantitative research methodology and uses secondary data collection technique to fulfill the objectives. For that purpose, the study has collected data from two rounds of the National Sample Survey Office (NSSO); the 71st NSSO Education round (2014-15) and the 75th NSSO Education round (2017-18) using a pooled cross-sectional framework. These two rounds have been particularly chosen, as they are the latest education rounds that can clearly depict the status of out-of-school children. Since the study focuses on urban India, so only urban households have been covered for the purpose of analysis and unit-level data of children belonging to 5-18 years of age has been collected from the concerned urban households. The reason for choosing this age group is because 5-18 years is actually the schooling-going population in India and the National Education Policy (NEP) 2020 has also proclaimed to universalize education for this particular age group [MHRD. \(2020\)](#).

The empirical framework of this study uses a logistic regression model where the dependent variable, 'out-of-school' is a binary variable and takes the value 0 if the child goes to school and takes the value 1 if the child is out-of-school. Logistic regression model is defined as that model where the dependent variable is binary, and takes only two values, 1 and 0. In this model, the relationship between binary dependent variable and multiple independent variables is quantified in terms of odds ratio [Wooldridge \(2015\)](#). Thus, logit model is the natural logarithm of odds ratio.

Under independent variables, the study uses four major aspects; gender, economic class, social group, and religious group; all of which are used as dummy variables. Gender is taken as a dummy variable, with 1 for girls and 0 for boys; economic class is denoted by income quintiles using the data of monthly per capita consumption expenditure¹. This way five-income quintiles are created (1 being poorest and 5 being richest) and to avoid dummy variable trap, richest category is taken as base group. Social group denotes ST, SC, OBC and general category, with 'general' being the base group. Similarly religious group denotes Hindu, Muslim, and others with 'others' being the base category. To form a complete model, the study has also used control variables, i.e., size of the household and education of the household head (1 being literate and 0 being not literate).

The empirical logit model of this study is estimated as follows:

$$\ln(\text{Out_of_school}) = \alpha + \beta_{i1} * \text{Gender}_i + \beta_{i2} * \text{Economic Class} + \beta_{i3} * \text{Social Group}_i + \beta_{i4} * \text{Religious Group}_i + \beta_{i5} * \text{Household size}_i + \beta_{i6} * \text{Education_head}_i + \epsilon_i$$

Additionally, to explore the reasons for discontinuing education by school children, the study analyses the major reasons for being out of school by finding the percentage distribution of children aged 5-18 years for both boys and girls.

Using the above-mentioned variables and based on existing literature the following alternate hypothesis are constructed:

H1: Girls have a higher probability of out-of-school than boys do.

H2: Likelihood of being out-of-school falls as economic class rises.

H3: The likelihood of being out-of-school is higher for deprived class children than for general category.

H4: The likelihood of being out of school is higher for Muslim children.

4. RESULTS AND DISCUSSION

This section presents the results of the collected dataset and engages in a useful discussion of the findings in the context of existing literature.

4.1. REASONS OF SCHOOL DROP-OUT

Figure 1 depicts the reasons of school dropout in urban India for both boys and girls. It is clear from the figure that major reasons of dropout include students' disinterest in education (boys – 33%, girls – 22%), financial constraints (boys – 28%, girls – 27%), and engagement of students in domestic (boys – 3%, girls – 14%) as well as economic activities (boys – 14%, girls – 3%). It is evident from the findings that majority of girl students drop out to take care of household duties while boys' dropout to take jobs and supplement the earnings of the family. Other reasons for girls to dropout include school being far off (4%), marriage (4.8%), completed desired level (4.7%), non-availability of girl's toilet (3%) and non-availability of female teachers (2%). The reasons that result in high dropout for boys include inadequate number of teachers (1.5%), unfriendly atmosphere in schools (1.75%) and inability to cope with studies (2.8%) among others.

¹ NSSO does not give data on household income, so monthly consumption expenditure is taken as the proxy for household income. Using monthly consumption expenditure, monthly per capita consumption expenditure is calculated.

These results seem to resonate with the findings of previous scholars, who have observed that poverty is the major obstacle that deters many students to continue education. According to [Hati and Majumder \(2012\)](#), opportunity cost of sending the students, especially for those belonging to low-income families, is very high along with other costs like uniforms and school fees, which force the children to drop out of school. [Dubey et al. \(2018\)](#) states that the most important reason for girls to drop out of school in India is to take care of household chores while, for boys, it is the compulsion to be involved in economic activities. Few previous studies have also observed that there exist demand side factors like social exclusion, poverty, and gender and supply-side factors like far off schools, lack of trained teachers and toilet facilities that contribute to high dropout rate among students [Azam and Kingdon \(2013\)](#), [Sarkar \(2018\)](#). **Figure 1**

Figure 1

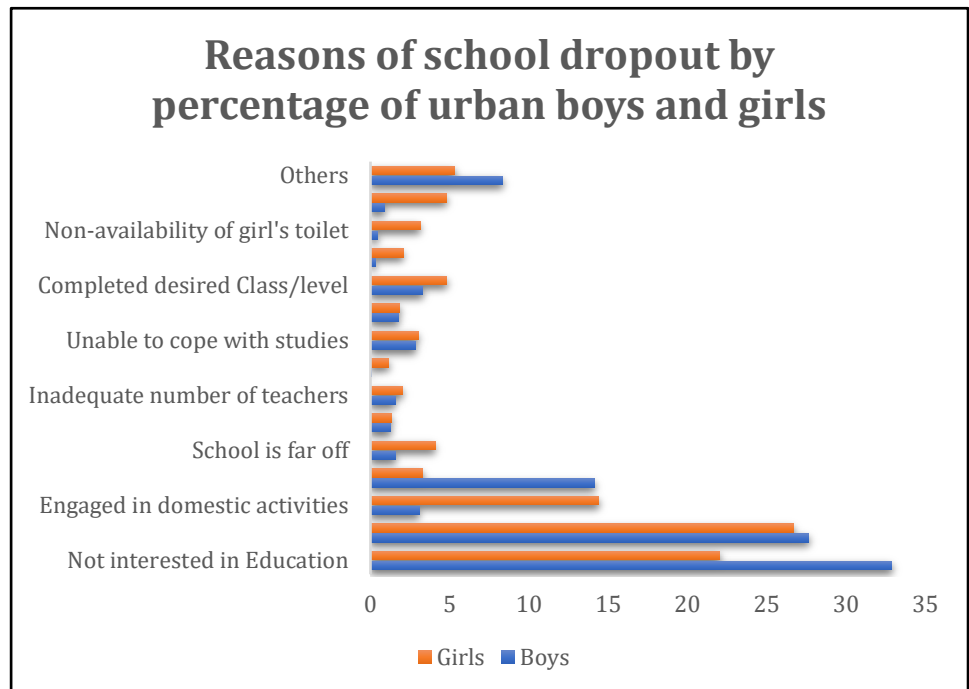


Figure 1 Reasons of School Dropout of Boys and Girls in Urban India

Source Author's Calculation Based on Pooled Dataset of 71st And 75th NSSO Rounds

4.2. FACTORS IMPACTING SCHOOL DROP-OUT

The results of marginal effects of logit model are presented in Table 1. As expected, the probability of out-of-school is found to be higher for girls on an average by 6.7% in comparison to boys. This means, gender is an important significant factor determining out-of-school children in urban India. This seems to be in line with the arguments of [Azam and Kingdon \(2013\)](#) and [Kaul \(2018\)](#) which states there exist gendered division of work in Indian households which forces girl child to do household work and thus drop out of school. Next, it is also revealed by the results that poverty is a crucial factor behind the school dropout of children and the probability of children dropping out-of-school declines as one moves from poorest household to richest household. While for the poorest child, the probability of being out of school is 25% higher in comparison to the richest child, the likelihood of being out of school is only 4.3% higher for child belonging to rich income household. This result is well supported by previous literature, which postulates

similar findings [Hati and Majumder \(2012\)](#). In case of social groups, in comparison to upper caste, the probability of being out-of-school is higher for children belonging to ST, SC, and OBC households. Whereas, within the lower caste households, the likelihood of being out-of-school is the highest for ST (11%) households, followed by SC (6.2%) and OBC (2.4%) groups. This result corroborates with the fact that discrimination prevails against the deprived sections of society, which forces their children to be out of school in comparison to children belonging to the upper caste (Pankaj et al., 2018). Additionally, the results reveal that in comparison to other religious communities, children belonging to Muslim religion face 19.1% higher chance of being out-of-school. This finding corroborates the study of [Gouda and Sekher \(2014\)](#) which states that Muslim children are more likely to drop out of school in comparison to children of other communities. Among the control variables, household size and the education of the household head both seem to have a significant impact on children’s school dropouts. As the size of the household rises, the probability of being out-of-school is seen to increase while having an education head is seen to lower the likelihood of children being out-of-school by 18%. Thus, it can be inferred from the results that gender, social group, religious group, poverty, size of the household and an educated household head seem to be vital determinants of out-of-school in urban India. [Table 1](#)

Table 1

Table 1 Marginal Effects Results of Logit Regression	
Dependent Variable = Out of School	
Gender dummy (Base category = Male)	
Girls	0.06647*** (0.00427)
Economic class (Base category = Richest)	
Poorest	0.250*** (0.0144)
Poorer	0.164*** (0.0166)
Middle	0.112*** (0.0133)
Richer	0.0430*** (0.0082)
Religious group (Base category = others)	
Hindu	0.0198*** (0.00865)
Muslim	0.191*** (0.0264)
Social group (Base category = General)	
ST	0.110*** (0.0116)
SC	0.0624*** (0.0128)
OBC	0.0239***

	(0.00438)
<i>Control variables</i>	
Household size	0.0169***
	(0.000783)
Education head	-0.181**
	(0.0893)
Observations	35,551
Wald chi2 (12)	1542.85
Prob > chi2	0.000
Pseudo R2	0.2264
Robust standard errors in parentheses	
*** p<0.01, ** p<0.05, * p<0.1	

5. CONCLUSION

School dropout is seen to be a serious problem in the Indian economy and urban India is far from being better. No doubt, with the implementation of Right to Education Act, Indian economy is moving towards universalization of education yet large number of students are dropping out of school without completing a certain grade or level. Dropout leads to wastage of education system making it ineffective and inefficient. Therefore, identifying the reasons for occurrence of such situation is the first step toward decision-making and policy implementation. Against this backdrop, this study has attempted to explore the reasons for school dropout in urban India and identify the factors that are significant in determining it. For this purpose, the current study has used secondary data by pooling the NSSO rounds of the 71st and 75th Education surveys. It is clear from the findings of the study that lack of interest in education by both boys and girls is the most prominent reason for dropping out of school. The next most crucial reason that results in the discontinuation of education is poverty and financial constraints faced by the urban households of the Indian economy. Among other reasons distance from school, absence of infrastructural amenities in school and lack of trained teachers are also identified. This point towards the failure of government in providing conducive facilities to the school-going children that can retain them in school. It is high time for the government authorities to channelize their investment to build an effective education ecosystem and proper infrastructure that can sustain increased retention of students along with enhanced enrolments. There is a need to set up schools within accessible reach of students. Additionally, apart from common reasons for school dropout, this study has also identified reasons of school dropout specific to girls and boys separately. Girls were expected to contribute towards household chores, look after the siblings, be married, and settled as major reasons for dropout. Whereas for boys, looking after the household income opportunities rather than continuing education was seen to be a vital factor to dropout from school.

Among the factors that contribute to the likelihood of being out-of-school gender seems to be a significant determinant as probability of being out-of-school is seen to be higher for girls over boys. This is not surprising as many Indian households consider girls as “*paraya dhan*” and investing in girl child education as “*watering the plant in somebody else’s courtyard*”. Moreover, coming from

disadvantaged caste and religion is another stumbling block to continue education. Children belonging to Muslim, SC, ST and OBC households face larger exclusion and high likelihood of being out-of-school than those belonging to upper caste. The disparity faced by deprived sections of society in completing education gets manifested extensively if the household belongs to low-income class. That is to say, the findings of study have usefully accepted all the proposed alternate hypothesis, i.e. the probability of being out-of school is higher for girls than boys, larger for Muslim and deprived sections of society and tends to fall as economic class of household rises.

Another determinant of out-of-school is size of the household, meaning, an additional member in the household creates burden on the financial condition of the household and therefore deters the schooling of their children. Whereas, if the head of the household is educated, positive spill over is created on the probability of its children to continue schooling and thus lowers the dropout rate. The study enables in shedding light on the fact that continued and equitable access to education demands provision of amenities to guarantee the prospect of being educated. Undoubtedly, immense policies and measures by the government have attempted to safeguard the accessibility of opportunities to pursue and continue education but a lot more effort is needed. To reduce the school dropout's identification of the probable dropout students, carefully and systematically designed policies, and effective execution of these policies is required. Enhanced enrolments are the key but only a necessary condition to ensure increased opportunities of equitable access to schooling. To lower the dropout rates, target specific programmes have to be laid so that awareness about the significance of continuing education can reach the disadvantaged and financially deprived sections of society. To address rising dropout rate, a proper strategy has to be undertaken by the government to promote human capital accumulation through promoting female education. This way, curbing dropouts is a sufficient condition to ensure achievement of the education system in urban India.

CONFLICT OF INTERESTS

None.

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