



Educational Outcomes of Children in Primary School: A Geo-Social Analysis

KEYWORDS

Educational Outcome, Gender, Religion, Family background

Jhuma Halder

Ph D scholar, Institute for Social and Economic Change (ISEC), Nagarabhabhi, Bangalore

ABSTRACT

Since Independence the focus of government interventions in elementary education has been on increasing access to schools. Even remote areas of India are likely to have a primary school. But still the country is far from achieving universal primary education - a scenario where all children go to school regularly and learn sufficiently. Among all factors, social context plays an extremely important role in learning outcome children even today. Social factors like gender, caste and religion create the most common form of educational inequality in this country. The inequality is very prominent in the geographically and socially backward areas. Using primary and secondary data, a case study has been carried out to explore the learning levels of primary school children and the social factors affecting its outcome. The study finds that social factors significantly influence educational outcome.

Introduction

Since Independence the focus of government interventions in elementary education has been on increasing access to schools. Today the primary school enrolments in India are over ninety percent. Even remote areas of India are likely to have a primary school. But still the country is far from achieving universal primary education - a scenario where all children go to school regularly and learn sufficiently.

All India surveys such as ASER and the Planning Commission Evaluation Report (2010) indicate low learning outcomes in primary schools across India. ASER report revealed that a child who has completed primary school education are unable to write their own names or even recognise the letters of the alphabet or single digit numbers. ASER's estimate of children's learning (2005 onwards) have demonstrated low levels of learning with substantial variation across the states of the nation. ASER, 2014 report also reveals that India's learning levels are very poor on an international absolute scale.

It has been widely acknowledged that a socio-economic condition plays an important role in educational outcome of children. Social inequalities of gender, caste, class and religion have been identified as major causes of educational backwardness in India. Several empirical studies shows that social context is extremely relevant in the field of elementary education in India (Govinda and Varghese (1993), Dreeze and Kindon (2001), Dreeze (2003), Jalan and Panda ,2010) and achievement of Universal Elementary Education (UEE) needs to be viewed in this social context. Unequal social and economic background deeply influences children's access to education and their participation in the learning process.

This paper investigates some social issues associated to school outcomes in South 24 Parganas district of West Bengal with the objective of - understanding the educational outcomes from social perspective in different geographical locations.

Data and Methodology

The study is based on both primary secondary data. The primary data has been collected from South 24 Parganas district of West Bengal. The study involves a comparison

of two regions with different geographical background in the district South 24 Parganas. The district has two distinct geographical areas- forested blocks (13 blocks) and non-forested (16 blocks). With a view to have coverage of different geographical locations four blocks have been selected - two blocks from the forested area and two blocks from non-forested area. These blocks are Diamond Harbour- I (Non-forested), Magrahat- I (Non-forested), Basanti (Forested) and Mathurapur-II (Forested). In these blocks 31 sample schools were visited covering 400 students. The secondary data used in this study are taken from Census Reports, West Bengal Human Development Report, and ASER Report (2014).

The learning outcomes are measured by a test score of class IV students. A test has been developed to evaluate numeracy and Language (Bengali) skills. While the numeracy questions test the ability to count and read numbers, add, subtract, multiply and divide and problem solving skills with units of money, length, weight, area and time, the language test covers reading and answering questions based on it, identifying opposite words, filling the blanks and making a minimum three word sentences with commonly used words. The questions of this test were prepared by some primary school teachers employed in some Government primary schools in West Bengal. The questions were based on third standard syllabus of West Bengal Board of Primary Education. Students were given 45 minutes for the test.

Study Area

The geographical area of South 24 Parganas district of West Bengal consists of 426300 hectares of which Sundarban mangrove forest accounts for about 41.54 percent. Its huge size and large population, the varied topography with urban metropolitan conditions at one end of the district bordering Kolkata, and people's relentless struggle against the uncompromising nature at the other end in Sundarban mangrove forest, makes the district's problems complex and multi-dimensional. According to the West Bengal Human Development Report (2004) the Sundarban region has a high percentage of minorities and disadvantaged social groups, and scheduled caste population in the district account for over 40 percent of the total population. The same report identifies this region as one of the most problematic regions among the three other problem-

atic regions in West Bengal. South 24 Parganas may be divided into two distinct parts- non forested blocks close to Kolkata metropolis influenced by the cosmopolitan culture of Kolkata, and blocks in the rural areas of Sundarban mangrove delta which face regular visitation of natural disaster, and consequent devastation. The abundant natural resources in this region have always attracted people not only from neighbouring tracts but also from the countries abroad. Currently, over 89 percent of population depends on agriculture and 37.21 percent population is Below Poverty Line in the district.

Educational Outcome

In this study an attempt is made to evaluate the learning levels of children in order to find out the factors related to educational outcome. Since Grade IV is the final grade of the lower primary school, a test was administered among them to find out the quality of children who were entering in the upper primary level. Their background information was also collected to find out how social background of a child affects his/her educational outcome. The factors like gender, caste and religion, parental background and role of

private tuition are reviewed for the purpose of the study.

Test Score of the Children

The test score in Mathematics and Language varied from 0 to 100 percent. The test score of a sizeable number of students in mathematics was in the range of 0-30 percent. But, in language test, the number of students in 0-30 range was the low. While 34.27 percent students in mathematics and 54.52 percent students in language scored over 50 percent marks, 23.37 percent in mathematics and 53.90 percent in language scored over 60 percent marks. Overall, Students achievement was better in language than in mathematics.

The mean performance level of students in Mathematics across the geographical regions was 37.78 percent (Standard Deviation 32.11) in the non-forested blocks and 22.54 percent (SD 31.64) in the forested blocks (Table 1). The mean performance level of students in Language across the geographical regions was 60.96 percent (SD 26.48) in the non-forested blocks and 41.38 percent (SD 32.30) in the forested blocks.

Table 1; Pattern of Test Score

Subject	Non-forested Region				Forested Region			
	Minimum Marks	Maximum Marks	Mean	Std. Deviation	Minimum Marks	Maximum Marks	Mean	Std. Deviation
Mathematics	0.00	100.00	37.77	32.11	0.00	100.00	22.54	31.64
Language	0.00	95.00	60.96	26.48	0.00	95.00	41.37	32.29

Source: Author's calculation from Sample Survey, 2014

Factors Affecting Outcome

Gender

The most common form of educational inequality is that based on gender disparity. Several studies have pointed out that girls are vulnerable to enrolment, attendance and outcome (Dewan, 2008; Govinda, 2008; Lazo, 2008). In the recognition of the urgency and importance of providing elementary education, the recently enacted Right to Education Act has included the provision of education to children in 6-14 age groups among the fundamental rights.

Pupil's test scores were analyzed by gender for different geographical area (Table 2). The forested blocks are lagging behind the non-forested blocks in terms of results. The overall scores of mathematics and language in forested block are lower than non-forested blocks. As can be seen, the total mean mathematics and language score in non-forested blocks are 35.50 percent and 58.25 percent respectively, and in forested blocks the scores are 22.36 percent and 41.71 percent respectively. None of students got pass mark in mathematics in the forest area. The boys of the non-forested blocks scored higher marks both in mathematics (46.54 percent) and language (61.20 percent) than girls (25.45 percent in mathematics and 55.56 percent in language). The gender difference in test score in the non-forested blocks is quite high. The difference was 21 percent in mathematics and 6 percent in language. So, these results are generally consistent with the conventional belief that girls do not perform as well as boys. The Standard Deviation (SD) indicates that boy's scores are more variable in mathematics and girl's scores are more variable in language. Students from the forest blocks did not perform well. Boys got 20.88 percent in mathematics and 35.97 percent in language. Girls score a notch higher little higher than boys at 23.63 percent in mathematics and 46.65 percent in language. The SD indicates that girls' scores in both mathematics and language were more variable than

boys. None of boys and girls got the minimum qualifying marks. Such poor performance in mathematics is a serious cause of concern as it points to the lacunae in imparting basic mathematical skills to the students. Language being the mother tongue, students naturally had some grounding in it, and the relatively better score in it is quite understandable.

Table 2; Mean Test Score across Gender

Region	Mathematics			Language	
	Gender	Mean	Std. Deviation	Mean	Std. Deviation
Non-forested	Boy	46.54	31.99	61.20	28.05
	Girl	25.45	29.49	55.56	31.45
	Total	35.50	32.39	58.25	29.93
Forested	Boy	20.88	30.17	35.97	31.00
	Girl	23.63	34.56	46.65	33.51
	Total	22.36	32.56	41.71	32.74

Source: Author's calculation from Sample Survey, 2014

Religion and Caste:

The mean learning achievement level of Hindu students in the non-forested blocks was 61.94 percent and in forested block 66.63 percent. In spite of getting special privileges, like free uniform, monthly stipend etc., Scheduled Caste and Scheduled Tribe children were still lagging behind the general caste children in terms of learning achievements. The scores of SC/ST students in non-forested and forested blocks were 58.38 percent and 43.53 percent respectively. The mean achievement level of Muslim students was 39.81 percent in non-forested blocks and 22.23 percent in the forested blocks. Hence, the lowest achievement was observed among the Muslim students of the forested blocks who constitute the largest share (61.63 percent) of students in the forested blocks as well as in the sample. The score of both categories were below the state-mandated passing grade of 34 percent.

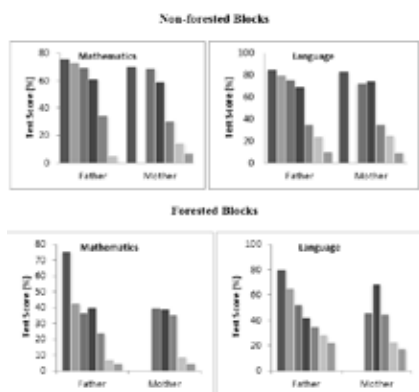
Parental Education

The educational status of both parents is known to have a positive impact on the schooling of children both boys and girls. The overall result points to the comparative advantage – children from households where parents have completed at least primary education, have over others. The test score of the students has a direct correlation with parental educational level; it gradually decreases in line with the level of parental education both in forested and non-forested blocks (Figure 1). Graduate parents' children scored maximum scores in both in forested and non-forested blocks, though the number of Graduate parents was very few in the sample (1.05 percent in non-forested blocks and .95 percent in forested blocks). Both in numeracy and literacy, there is as high as 30 percent difference in scores between students whose parents have at least passed upper primary degree and those without lower level/nil education in the forested blocks in particular. In the forested blocks the overall scores were lower for all excepting children of Graduate parents. These results possibly reflect the support that the pupil gets from parents in schooling, like in homework or other school related activities, as also encouragement.

The learning outcome of children from households with little or no previous educational experience was found to be much below others. The first generation learners got low marks than the non-first generation learners. The difference is nearly 38 percent in mathematics and 35 percent in language.

Educational level of siblings in the family also has some impact on students learning outcome. Educated older siblings create an inherent atmosphere of learning and that affect the other children. Elder siblings assists younger sibling in the possible absence of guidance by parents or private tutor. In the present study- ample, 71 percent children in forested blocks and 52 percent in non-forested blocks had elder sibling/s (14 to 18 years old). The test scores were compared between household where older sibling has completed upper primary education and households where the older sibling has not completed upper primary. It has been observed that the impact of older siblings' education on younger siblings is more in non-forested blocks than forested blocks. However, the students who had a sibling with at least primary level education scored equally better in forested and non-forested blocks. On the other hand, the students whose siblings hadn't completed primary school got poor marks particularly in mathematics in both forested and non-forested blocks.

Figure 1; Test Score of Students and Educational Level of Parents



**Non-forested Blocks
Forested Blocks**

- Graduate
- Secondary
- Primary
- Illiterate
- Higher Secondary
- Upper Primary
- Illiterate or Incomplete Primary

Family Size

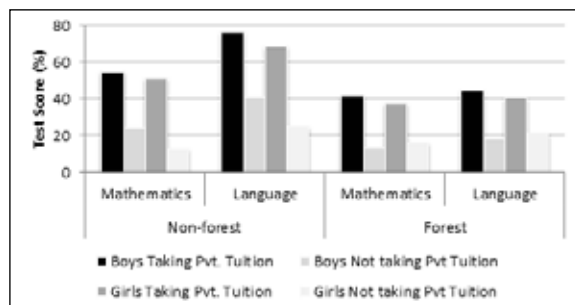
As a part of the survey, we ascertained the number of people who lived in the student's household including the student. The number of people in each family ranged from 3 to 9 in the non-forested blocks and 3-11 in the forested blocks, the average family size being 5 in non-forested and 6 in forested blocks.

An examination of the relationship between family size and pupils' performance was undertaken. Results from this study indicate that pupils with smaller families had higher test scores in both mathematics and language in both types of geographical area. In the non-forested blocks, there is negative and significant correlation between pupils' mathematics score (-0.227; p=.01) and the pupil's family size as well as language score (-0.350; p=.01) and family size. In the forested blocks also the correlation shows negative results. The results are -0.208 (p=0.01) in mathematics and -0.153 (p=0.05) in language. The correlation coefficients for both mathematics and language are low for both types of blocks. It can therefore be surmised that families with large number of members do not provide a favourable environment for pupils to study and score better. Further, large families more likely to be have lower levels of education (findings from household survey), in which case such families could not support their children's academic work. Besides, attention of the parents is likely to be divided among many people.

Private Tuition and Outcome

To improve a child's learning, parents invest money in private tuition. According to Jalan (2010) 'engaging a private tutor for their child is a common investment that parents often make to compensate for inadequate quality of teaching in school'. The West Bengal Education Commission report (Report of the West Bengal Education Commission, chaired by Ashok Mitra, 1992.) found this practice to be rampant and recommended banning it. Still 83.33 percent children in forested blocks and 84.29 percent children in non-forested blocks take private tuition. In Magrahat-I block, 92 percent children attended private tuition and in Basanti block 78 percent children attended private tuition (Figure 2). The result shows that private tuition has a positive effect on test scores i.e. the students who took private tuition got higher score both in forested and non-forested blocks.

Figure 2; Test Score and Private Tuition across Gender



Source: Author's calculation from Sample Survey, 2014

Conclusion

A considerable variation in mathematics and language test scores was observed across geographical boundaries within a district. Geographically forested blocks are lagging behind the non-forested blocks in terms of the test results. The overall scores of mathematics and language in the forested block are lower than that in non-forested blocks. The difference in test score across genders among the non-forested blocks students is quite high. The SC and ST category students underperformed as compared to students of others' category in mathematics and language in both forested and non-forested blocks. Religion wise, the lowest achievement was observed among the Muslim students of the forested blocks. Students' attendance rate is also low in both geographical areas. The result shows that child's learning outcomes are directly related to-

Educational level of Parents: in household where parents have completed at least primary education, test score is comparatively high. The test score of the students gradually decreases with decrease in parental education both in forested and non-forested blocks

Elder sibling's educational participation: there is a positive impact on learning levels of a student if his/her older sibling has completed primary school.

Family Size: Students from larger families tend not to do well in mathematics and language than students from smaller families.

Private Tuition: Students who took private tuition scored better. This factor indirectly suggests that students are not learning much from school, and that given extra care would learn better. This also reveals that either schools are overcrowded or number of teacher is less or the environment of the school is not suitable for learning. This is evidently the reason for a large number of children resorting to private tuition. The obvious conclusion therefore is that given sufficient care, children can score better irrespective of socio-economic background, parent's education level age-group, place of up-bringing (forested or non-forested block), etc.

The above analysis makes it clear that for policy intervention to succeed, the social backgrounds of the children should be kept in mind particularly of underdeveloped region like Sundarban forest area and other similar regions. There has been a lot of effort to reduce the social gap particularly in children's education since independence. But, even after six decades of independence ground reality remains the same, particularly in areas like Sundarbans, and more so for socially and economically backward sections like SCs and STs. Therefore, specific attention needs to be given to children in socially backward and geographically remote regions. The dual effect of social and geographical backwardness makes the region more backward in terms of basic education. Hence region centric policy intervention is required for the entire district.

REFERENCE

- Annual Status of Education Report (ASER), 2014; Pratham; New Delhi
- Drèze, J. and G.A. Kingdon. (2001); School Participation in Rural India; Review of Development Economics, 5(1): 1-33.
- Dreze, Jean. (2003); Patterns of literacy and their social context; In Veena Das (Ed.), Oxford India companion of sociology and social anthropology, New Delhi: Oxford University Press.
- Dewan, S. (2008): 'The gender dimensions of school to work transition for women in the East Asia and Pacific Region', UNGEI EAPRO Paper.
- Govinda, R. and Varghese, N. V. (1993), Quality of primary schooling in India-A Case study of Madhya Pradesh, IIEP, UNESCO
- Govinda R. (2008), School Quality and Phenomenon of Silent exclusion: Access, Equity and Participation, Paper presented in CREATE-RECOUP Seminar, December, in IIC, New
- Govinda, R. (2008): 'Enhancing learning in Indian schools: Experiences and challenges', National University of Educational Planning and Administration, New Delhi.
- Jalan J with Panda J (2010), Low Mean & High Variance: Quality of Primary Education in Rural West Bengal, at <http://www.cssscal.org/pdf/Education%20Report%20CD.pdf>
- Lazo, L. (2008): 'Gender equality in education progress note: East Asia and the Pacific', UNICEF EAPRO
- West Bengal Human Development Report 2004 (WBHDR), published by the Development and Planning Department of the Government of West Bengal.