Children's performance in reading and writing Bangla: A comparison between BRAC and formal school

Abstract: This report aims to compare the performance of the learners of non-formal schools of BRAC and formal schools in reading and writing Bangla. Data were collected from five areas where a surveillance system was in operation. A sample of 480 children, equally distributed by study groups and sex, were randomly selected. This study reveals that NFPE graduates were more likely to have better skills in writing and overall test compared to their peers in formal schools. However, in reading both the groups performed equally well. Measures such as proper training of teachers, regular parent-teacher meeting, and intensive supervision and monitoring of teaching learning activities may be a key to improve the overall education situation in Bangladesh.

Introduction

Complementary to the formal education provision in Bangladesh, BRAC launched its non-formal primary education (NFPE) programme in 1985. It is a three-year programme for the children aged 8-10 years. NFPE aims to provide quality education at the grassroots level and to contribute towards strengthening the universal primary education programme of the government. At present, BRAC operates nearly 35 thousands schools in more than one quarter of the rural Bangladeshi villages (BRAC, 1995). Over 1.2 million children are currently enrolled in these schools, of which 70% are girls.

Although the curriculum of NFPE is broadly based on the curriculum of the formal schools, but it is very much related to rural lives in Bangladesh. However, there are some distinct differences between NFPE and formal schools. Small class size, regular

parent-teacher meeting, very little home tasks and regular supervision of the schools are the significant characteristics of BRAC schools. It was observed that BRAC learners attain a higher level of basic education compared to the formal school students (Nath, 1997). Studies also show that learners of BRAC schools enrol in formal schools after completing BRAC curriculum (Nath, 1996). This Watch report compares the performance of BRAC graduates and formal school learners in reading and writing Bangla.

Methods

Secondary data are analysed in this report which were obtained from another study (Nath, 1997). Data from the reading and writing sections of the said study were used for this report, which contains a total of 19 items; 10 in reading and 9 in writing. The reading test contains items such as,

reading 5 words, a sentence, and a comprehension passage with 4 questions. Whereas the writing test contains writing own and village name, 3 words, a sentence, and a communication letter to father or any relative.

The subjects of the study were the BRAC school graduates of five of the 10 Watch areas and the formal school learners with at least three years of education from the same areas. A sample of 480 children, equally distributed by school type and sex, were randomly selected. It should be mentioned that these BRAC learners were graduated during 1995 and 1996 and the age of all the study children were from 10 to 16 years. The mean years of schooling of the formal school students were higher compared to that of BRAC graduates (Nath, 1997).

Table 1. Percentage of children correctly answered different items of reading test

Items	School type	
	Formal	BRAC
Words		
Mother ǂ	96.3	99.6
Pond *	92.5	98.3
Co-operation	85.4	90.8
Freedom	84.6	90.0
Savings †	75.4	85.4
Sentence	88.8	93.3
Comprehension		
Q. # 1 †	90.8	96.7
Q. # 2 *	90.8	96.7
Q. # 3	79.2	85.4
Q. # 4	67.5	59.6

ǂ p<0.05   † p<0.01

Results

Percentage of children correctly answered different items in reading

and writing tests are presented in Tables 1 & 2. Among the 19 items, no statistically significant differences between BRAC and formal school were found in five items of reading and two items of writing test. Compared to the formal school learners BRAC school graduates were more likely to do better in reading three words and answering two questions of reading comprehension. On the other hand, in writing test, BRAC graduates did significantly better in writing their own and village names; writing a word and a sentence; and all the three parts of a communication letter.

Table 2. Percentage of children correctly answered different items of writing test

Items	School type	
	Formal	BRAC
Own name ǂ	97.5	100.0
Village name ǂ	87.5	94.2
Words		
Water †	87.9	97.5
Bangladesh	91.3	94.6
Education	78.3	84.6
Sentence †	75.4	85.0
Communication letter		
Salutation*	69.6	84.2
Message*	66.7	81.7
Finishing*	65.8	85.4

ǂ p<0.05   † p<0.01   * p<0.001

The mean number of items correctly answered was also higher among BRAC graduates compared to that of formal school learners. This finding is true for both the tests separately as well as all the items together (Table 3). However, statistically significant difference was not found when data were analysed separately for boys and girls in reading test.

Table 3. Mean and standard deviation of number of correct items by school type and sex

Sex	Formal		BRAC	
	Mean	SD	Mean	SD
Reading				
Boy	8.6	2.7	9.0	1.4
Girl	8.5	2.6	8.9	1.9
Both ‡	8.5	2.6	9.0.	1.7
Writing				
Boy †	7.3	2.6	8.1	1.7
Girl †	7.1	2.7	8.0	1.9
Both †	7.2	2.6	8.1	1.8
Both tests				
Boy ‡	15.9	5.1	17.2	2.9
Girl ‡	15.6	5.1	16.9	3.5
Both †	15.7	5.1	17.0	3.2

‡ p<0.05   † p<0.01

Table 4. Mean and standard deviation of number of correct items by school type and age

Age	Formal		BRAC	
	Mean	SD	Mean	SD
Reading				
10-11 *	7.2	3.5	9.1	1.6
12-13	8.6	2.3	8.9	1.6
14-16	9.3	1.7	8.8	1.9
Level of sig.	p<0.001		ns	
Writing				
10-11 *	5.9	3.2	8.3	1.6
12-13 ‡	7.3	2.5	8.1	1.7
14-16	7.9	2.0	7.9	2.0
Level of sig.	p<0.001		ns	

‡ p<0.05   * p<0.001

Table 4 presents the mean and standard deviation of number of correct items by age of the children. It was observed that the performance of the formal school students increased significantly with the increase of their age. However, no such pattern was observed in case of BRAC graduates. A probable reason for this might be the standardised teaching-learning provision in BRAC schools. The younger graduates of BRAC schools showed significantly better performance than their peers in formal schools (p<0.001). Whereas, the elders of both the educational provision performed equally well.

Higher mean and lower standard deviation of the number of correct items of BRAC graduates indicate a smaller coefficient of variation in their performance. This means that BRAC graduates are more homogeneous in their performance in these two tests compared to their peers in formal

To find a minimum level of 'better performance' 75th percentile points were identified for both the tests separately as well as together. Children correctly answered at least nine items in reading, seven items in writing and 16 items in both the tests were considered to have 'better performance'. Table 5 presents percentages of children having 'better performance' by sex and school category. In reading, no significant difference was found between these two types of schools in this regard. Whereas, in writing BRAC graduates performed significantly well than the formal school learners. No significant difference was found between the performances of boys and girls. Similar findings were found when data were analysed for both the tests together.

To understand the contribution of BRAC school in the achievement of 'better performance' of the children logistic regression analysis was performed. This was done for both the tests separately as well as for

combined test. Table 6 presents the odds ratios of the regression coefficients of school category. These estimates were calculated by controlling for age, sex, current enrolment status, mothers education, fathers education, yearly food security status, religion and access to electronic communication media. It was observed that BRAC graduates were more likely to do better in writing and combined test than the formal school learners (p<0.001). However, in reading no significant impact of BRAC was found.

Table 5. Percentage of children satisfied the criteria of better performance by sex and school type

School type	Boy	Girl	Both
Reading			
Formal	76.7	69.2	72.9
BRAC	80.0	77.5	78.8
Level of sig.	*ns*	*ns*	*ns*
Writing			
Formal	71.7	65.8	68.8
BRAC	85.8	85.0	85.4
Level of sig.	*p<0.01*	*p<0.05*	*p<0.001*
Both test			
Formal	72.5	66.7	69.6
BRAC	84.2	80.8	82.5
Level of sig.	*p<0.05*	*p<0.05*	*p<0.001*
ns = not significant at 0.05			

Discussion

The findings of this study show that among the children of similar age BRAC school graduates did significantly better in writing as well as overall test. However, they showed equal performance in reading test. Both bi-variate and multivariate analyses showed the same result. This means that a better quality of primary education is provided in BRAC schools compared to the formal schools. There is a need to improve the quality of education in formal schools. The largest proportion of the children is enrolled in the formal schools, but they are getting lesser quality of education than non-formal school learners. Measures such as proper training of the teachers, regular parent-teacher meeting, and intensive supervision and monitoring of the teaching-learning activities may improve the situation in formal schools.

Table 6. Odds ratios of the logistic regression coefficients[1] of school type predicting the performance in different test

School type	Reading	Writing	Both tests
Formal	1.00	1.00	1.00
BRAC	1.32	2.94 *	2.30 *

[1] The estimates were calculated by controlling for age, sex, current enrolment status, mothers education, fathers education, yearly food security status, religion and access to electronic communication media.
* p<0.001

References

BRAC (1995): *BRAC 1995*. Dhaka: BRAC.

Nath SR (1997): *The impact of BRAC's education programme on raising basic education levels for the children of rural Bangladesh.* An unpublished dissertation submitted to the University of Oxford, UK.

Nath SR (1996): *Level, pattern and socio-economic determinants of enrolment in formal schools of the graduates of BRAC's education programme.* Dhaka: BRAC.