

**Regional variation and changes in competencies of
BRAC graduates and their enrolment
status in formal schools**

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ABSTRACT

This study aimed at examining the regional variation and changes in basic competency and enrolment rate of BRAC graduates. This is a secondary analysis of Nath's study on assessing the level of basic competencies of BRAC graduates in 1995 and 1997. Significant regional variation and changes in the level of basis competency and enrolment rate were observed. It was evident that in both the years competency level of the graduates of eastern region was significantly more poor than that of the other regions. Competency level of the graduates of southern region has decreased significantly in 1997. Regional variation was the second most significant predictor of enrolment status of BRAC graduates of 1997 but it had no significant effect on enrolment rate in 1995. In 1997, enrolment rate of the graduates of central region was significantly lower than that of the other regions and was higher in the northern region. Enrolment rate of the graduates of central region decreased in 1997. Male enrolment in eastern region was significantly higher than the female in 1997. This study did not have the adequate data to find the reasons lying behind regional variation and changes in competency level of BRAC graduates. Further study is needed to identify the reasons.

Introduction

Bangladesh is a rapidly growing country with one of the highest illiteracy rates in the world. Only 35% of the adult population have basic literacy. Educating all the children of Bangladesh is an immense task but one that is crucial to the development of the country (BRAC: 1994). The constitution of Bangladesh incorporated a basic policy on universal primary education. The policy outlines various social goals: the establishment of a uniform, mass oriented and universal system of education, the provision of free and compulsory education to all children; the relating of education to the needs of the society; and the removal of illiteracy (The Constitution of Bangladesh, Dhaka, 1994,pg.14). To pursue these constitutional goals, the government legislated mandatory primary education in 1990. The government is committed to achieving compulsory universal primary education by the year 2000 (Jalaluddin and Chowdhury, 1997). To enable these unobserved children attain basic education and literacy, BRAC initiated the Non-Formal Primary Education (NFPE) Programme in 1985 with 22 experimental schools. The goal of the programme was to develop a replicable primary education model which would provide basic literacy, numeracy, and social awareness to the poorest rural children who had not yet been reached by the formal school system and women were the main focus of this programme (BRAC, 1994).

In Bangladesh regional variation in literacy and enrolment rate at the national level is a natural phenomena. It can be mentioned here that in the national level the highest literacy rate is in Dhaka (53.89%) and the lowest is in Sherpur (19.49%). The highest enrolment rate is in Feni (50.12 %) and lowest is in Sherpur (25.65%) (BBS, 1997). Expectation was that there would be no variation and change in the competency level of the graduates of BRAC's education programme as it is a package programme and also claims equity in every aspect. Previous studies on Assessment of Basic Competency (ABC) did not highlight this topic. This study aimed to observe whether there existed any regional variation and changes in basic competency, and enrolment rate of the BRAC graduates. The study will also help identify the regions with lower competency level and poor enrolment rate, which will help formulate corrective measures to bring equity among the BRAC graduates in both competency level and enrolment rate.

NFPE

BRAC operates two distinct models of schools for two different age groups. In 1985, the NFPE programme was started as a three-year programme for children aged 8-10 years. BEOC was started as a two-year programme for children aged 11-14 years. It was extended to a three-year programme in 1993.

BRAC has been operating 29,539 schools as of September 1997 (NFPE-21212, Beoc-8, 327) in 61 districts. The number of current students was 11,05,308, of which 9,09,783 in NFPE and 19,5525 in BEOC. The number of students graduated was 8,71,464.

Methodology

This study is a secondary analysis of the data collected for the Assessment of Basic Competencies (ABC) of the graduates of BRAC schools (Nath et al 1996, 1997). The methodology of the current study was exactly similar to the one that was used in the study of ABC in 1995 and 1997. This methodology was developed 1992 in consultation with experts from different universities and organisations at home and abroad. Only nine variables (age, sex, father's education, mother's education, yearly income, watching T.V, current enrolment status and region) will be used in this study for the analysis of regional variation and changes in the basic competencies of BRAC graduates.

Definition of the operational concepts

Basic education

Basic education will refer to education intended to develop basic learning skills (i.e., 3Rs) as well as some basic life skills necessary for children to survive, improve the quality of their lives and continue learning (WCEFA, 1990).

Region of Non-formal primary school

To be effective an education programme needs to have an excellent supervisory process and an efficient management system. To facilitate its multifaceted work, NFPE programme has formed five support units, of which field operation is one of the most important parts. The units of field operation come under the jurisdiction of regional managers. Their duties include supervising the programme, planning new schools, developing the field staff, monitoring the schools, and overseeing finance and all local purchases. Under each region there are several teams and under each team there are several schools. In 1995, NFPE had 10 regions and in 1997 there were 12 regions. As the sample size of this study was small, all the regions were grouped into four broad regions for better estimation. They were as follows:

- a. Eastern (Feni, Habiganj and Comilla)
- b. Southern (Faridpur, Jessore, Madaripur)
- c. Northern (Bogura, Rangpur, Rajshahi)
- d. Central (Dhaka, Mymensingh, Jamalpur, Gazipur)

Enrolment

In this study enrolment meant the students who was going to school at that time. It should be mentioned here that the data were collected after nine months (1995) and ten months (1997) of their graduation from BRAC schools.

The instrument

Four skills: reading, writing, numeracy and life skills were considered as the instruments of assessing basic competency. For each section several questions were set. There were 42 items (questions), some were on the background of the students, their parents, and households.

Minimum level of competency

Children satisfying the following criteria were considered to have basic competency:

- a. Answering correctly at least seven of the ten life skill questions
- b. Answering correctly at least three of the ten reading skill questions
- c. Communicating correctly a given message through writing a letter to his or her father or any other relative, and
- d. Answering correctly at least three of the four mental arithmetic skills

Study population

Two groups of children (NFPE and BEOC) were considered for the study those who were graduated in the beginning of 1995 and 1997. Graduates from both the schools were assessed after nine and ten months of their graduation. In the year of 1995 a total of 3,993 BRAC schools (NFPE 3,008, BEOC 856) their cycles from which 119,790 learners were graduated. In 1997, 11,552 schools (NFPE 9,31, BEOC 2,236) were completed from which 3,78,708 students were graduated.

Sampling

The 30 cluster sampling procedure was used in this study. Considering basic competency as a dichotomous variable it was estimated that a sample size of 196 is necessary to have a single estimate with 95% confidence limit and 7% precision level (Nath et al, 1996 and 1997). However, around 210 children were interviewed from each study group. A two stage of stratified sampling procedure was used. At the first stage 30 teams were selected for each type of school for both the years applying probability proportional to sizes with systematic sampling techniques. From each team two schools were selected, one at random and one adjacent to the first one. Lists of children who graduated from these schools were collected, from which two separate samples of seven boys and seven girls were taken at random. Same process was used in both 1995 and 1997. Thus information of 1,681 children (420 BEOC and 420 BEOC for 1995 cohort and 421 NFPE and 420 BEOC from 1997 cohort) was used in this paper.

Data quality assessment

Random spot checking was done to assure the data quality. Instead of repeating the whole instrument, information on selected items were collected. These were matched with original interviews to find any deviations. The matching operation showed that the data quality was good, as most of the items matched in more than 90% of the cases.

Results

Socio economic characteristics of the graduates

The background information of the graduates of 1995 and 1997 are presented in table 1 and 2 respectively. More number of children of the eastern region of 1995 used to belong to the age

group of 11-12 and 15+, but in 1997 more graduates were from 13-14 age group (Table 1). Most of the graduates of southern, northern, and central region of 1995 were from 11-12 age group. On the other hand, Table 2 shows that more number of children of 1997 from eastern, northern and central regions used to belong to the age group of 13-24, but for the southern region more students were from 11-12 age group. In 1995, the highest enrolment rate was in central region and the lowest in eastern region, but in 1997, highest was in northern and lowest in central region. Father's education rate of the graduates of 1995 was highest in northern region and lowest in eastern region, but it was just the opposite thing in 1997. Both in 1995 and 1997 more number of children used to belong to the occasionally deficit and the balanced group. Highest number of graduates of always deficit group was found in northern region of 1995 and eastern region of 1997 but in both the years, more number of graduates of surplus group was observed in central region. Highest number of children in northern region in 1995 and in central in 1997 watched TV within the preceding 7 days of the interview, but in both the years the rate was low in eastern region.

Table 1. Proportion of children by their socioeconomic characteristics and region, 1995.

Characteristics	Region			
	East	South	North	Central
Age (in year)				
< 10	5.4	9.0	17.5	11.2
11-12	32.4	37.5	36.5	36.3
13-14	29.7	33.9	31.7	29.8
15 +	32.4	19.5	14.3	22.7
Sex				
Boy	49.5	49.5	50.0	50.0
Girl	50.5	50.5	50.0	50.0
Current enrolment status				
Not enrolled	26.1	20.6	20.6	13.6
Currently enrolled	73.9	79.4	79.4	86.4
Mothers education				
No schooling	82.9	75.1	77.8	78.7
Some schooling	17.1	24.0	22.2	21.3
Fathers education				
No schooling	71.2	53.8	54.8	64.5
Some schooling	28.8	46.6	45.2	35.5
Yearly economic status				
Always deficit	21.6	16.4	26.2	21.1
Occasionally deficit	48.6	31.8	38.9	21.7
Balanced	21.6	39.4	27.0	39.4
Surplus	8.1	12.4	7.9	17.7
Watched TV				
No	79.3	58.6	42.9	44.7
Yes	20.7	41.4	57.1	55.3

Table 2: Proportion of children by their socio-economic characteristics and region, 1997.

Characteristics	Region			
	East	South	North	Central
Age (in year)				
< 10	8.8	7.2	6.1	2.6
11-12	28.3	39.8	33.8	39.8
13-14	39.8	29.9	38.4	50.5
15 +	23.0	23.1	21.7	7.1
Sex				
Boy	50.4	49.6	50.0	50.0
Girl	49.6	50.4	50.0	50.0
Current enrolment status				
Not enrolled	17.7	15.8	14.3	26.5
Currently enrolled	82.3	84.2	85.7	73.5
Mothers education				
No schooling	75.2	76.2	75.9	79.1
Some schooling	24.8	23.8	24.1	20.9
Fathers education				
No schooling	57.5	55.6	64.3	56.1
Some schooling	42.5	44.4	35.7	43.9
Yearly economic status				
Always deficit	29.2	16.9	15.0	4.1
Occasionally deficit	26.5	48.9	42.5	34.7
Balanced	31.0	28.6	28.2	36.2
Surplus	13.3	5.6	14.3	25.0
Watched TV				
No	69.9	35.6	48.9	33.2
Yes	30.1	65.5	51.1	66.8

Regional variation and changes in the basic competency of the graduates

The performance of students from Mymensingh, Habiganj and Comilla regions of 1995 was comparatively poorer than the other regions of that year. The level of performance of the graduates in the Jamalpur, Feni, Habiganj, Jessore, Madaripur, Faridpur region in 1997 was poorer than the other regions in the same year. Though the level of performance of Jamalpur, Rangpur, Habiganj, Jessore, Kustia, Faridpur had decreased, but the change was significant only

in Faridpur ($p<0.001$) and Kustia ($p<0.01$) regions. Performance level of the graduates of Kustia region was the best (86.8%) in 1995, year whereas level of performance of the graduates of Dhaka region was the best (90.5%) in 1997. The performance level of Dhaka and Mymensing region increased significantly, ($p<0.05$). Performance of Rajshahi region was good in both the years. On the other hand, competency level of Habiganj was the poorest in both the years.

Table 4. Regional variation and changes in the basic competency of the graduates.

Region	1995	1997	Level of significance
Dhaka	75.0 (112)	90.5 (42)	$p<0.05$
Mymensing	66.7 (84)	81.4 (70)	$p<0.05$
Jamalpur	80.5 (128)	67.9 (56)	ns
Gazipur	-	78.6 (28)	na
Bogura	-	88.6 (88)	na
Rajshahi	83.3 (42)	83.7 (98)	ns
Rangpur	71.4 (84)	70.0 (80)	ns
Feni	-	56.0 (84)	na
Habiganj	45.6 (57)	41.4 (29)	ns
Jessore	74.3 (70)	64.3 (98)	ns
Kustia	86.6 (121)	56.3 (112)	$p<0.001$
Madaripur	-	66.1 (56)	na
Faridpur	80.2 (86)	-	$p<0.01$
Comilla	57.4 (54)	-	na

Note: ns = Not significant at $P<0.05$, na = Not applicable

Level of competency according to different skills and gender variations

A significant regional variation was observed ($p < 0.001$) the basic competency of the graduates of both the years (Table.5). In 1995 female graduates of eastern region performed significantly better than the male graduates ($p < 0.01$). Competency level of the graduates of southern region of 1997 significantly decreased compared to 1995 ($p < 0.001$). Level of competency of the male and the female graduates of southern region decreased significantly ($p < .001$) in the year of 1997.

Competency of eastern region of 1995 was worst and southern region was the best than the other regions ($p < 0.001$). Competency level of the graduates of the eastern region was poor, but the competency of the graduates of the northern region was relatively better than other regions in 1997.

Table 5: Regional variations and changes in the level of basic competency of the graduates of BRAC.

Region	1995			1997		
	Boy	Girl	Both	Boy	Girl	Both
East	38.2	64.3	51.4	50.9	53.6	52.2
South	83.9	79.3	81.6	62.9	59.7	61.3
North	73.0	77.8	75.4	78.9	83.5	81.2
Central	75.9	74.1	75.0	84.7	73.5	79.1
Level of significance	$p < .001$	$p < .05$	$p < .001$	$p < .001$	$p < .001$	$p < .001$

Life skill

There were significant differences in the life skill competency between the regions of both the years ($p < .001$). Table 6 shows that in 1997 competency level of the male graduates of southern region decreased significantly ($p < 0.01$), whereas it has increased

Significantly ($p < 0.05$) among the graduates of central region. Life skill competency of both the graduates of southern region decreased significantly in the year of 1997 ($p < 0.01$).

Eastern region of both the years performed comparatively poor. Performance of northern region in 1995 and central region in 1997 was the best.

Table 6. Regional variation and changes in the level of life skill of graduates BRAC.

Region	1995			1997		
	Boy	Girl	Both	Boy	Girl	Both
East	65.5	78.6	72.1	70.2	69.6	69.9
South	94.9	89.3	92.1	84.8	82.1	83.5
North	95.2	95.2	95.2	88.7	94.7	91.7
Central	85.8	91.4	88.6	94.9	94.9	94.9
Level of significance	p<0.001	p<0.05	p<0.001	p<0.001	p<0.001	p<0.001

Reading skill

Reading skill of the graduates of southern region decreased significantly ($p<0.001$) in 1997. Table 7 presents that the level of reading competency of male ($p<0.05$) and female (0.01) graduates of southern region decreased significantly.

Reading skill of the eastern region of both the years was poor but the competency level of the graduates of southern region in 1995 and northern in 1997 was the best.

Table 7: Regional variation and changes in the level of reading skill of BRAC graduates.

Region	1995			1997		
	Boy	Girl	Both	Boy	Girl	Both
East	72.7	82.1	77.5	75.4	75.0	75.2
South	94.2	95.7	94.9	84.8	85.1	85.0
North	96.8	88.9	92.9	94.0	94.7	94.4
Central	90.7	90.7	90.7	95.9	84.7	90.3
Level of significance	p<0.001	p<0.01	p<0.001	p<0.001	p<0.01	p<0.001

Writing skill

Table 8 shows that the writing skill of the graduates of southern region decreased significantly in 1997($p<0.001$). But competency of the graduates of northern region increased in 1997 compared to competency level of the graduates of 1995. Competency level of female graduates of eastern and northern region of 1995 was significantly better than male graduates ($p<0.05$). Competency

level of the male graduates of southern region decreased significantly ($p < 0.001$). Whereas performance level of female graduates of northern region increased significantly ($p < 0.05$).

At $p < 0.001$ significance level, eastern region of 1997 showed a poor performance, but northern region was the best among the other regions of that year.

Table 8. Regional variation and changes of writing skills of BRAC graduates.

Region	1995			1997		
	Boy	Girl	Both	Boy	Girl	Both
East	60.0	78.6	69.4	77.2	75.0	76.1
South	89.1	86.4	87.7	72.0	70.9	75.9
North	77.8	82.5	80.2	90.2	93.2	91.7
Central	88.3	87.7	88.0	88.8	88.8	88.8
Level of significance	$p < 0.001$	ns	$p < 0.001$	$p < 0.001$	$p < 0.01$	$p < 0.001$

Numeracy skill

Table 9 shows that the Numeracy skill of the graduates of southern region decreased significantly ($p < 0.05$) in 1997. Performance level of the female graduates of southern region decreased significantly in 1997 ($p < 0.05$). Numeracy skill of male graduates of southern region was significantly ($p < 0.01$) better than the females in 1997.

At $p < 0.01$ significance level, southern region had the poorest numeracy skill but northern region was the best among all the regions in 1997.

Table 9. Regional variation and changes in numeracy skill of BRAC graduates.

Region	1995			1997		
	Boy	Girl	Both	Boy	Girl	Both
East	98.2	94.6	96.4	96.5	92.9	94.7
South	97.8	95.0	96.4	97.0	86.6	91.7
North	100.0	96.8	98.4	98.5	96.2	97.4
Central	97.5	95.1	96.3	99.0	94.9	96.9
Level of significance	ns	ns	ns	ns	$p < 0.05$	$p < 0.01$

Sauce- economic characteristics and level of basic competency

Level of basic competency of the graduates in 1995

Though in the previous studies of basic competency no significant difference was observed between the competency level of the male and female graduates, yet Table 10 shows a significant difference in this study. Female graduates did significantly better than their male counterparts in the eastern region ($p < 0.01$). Previous studies on assessment had proved that those who continued schooling did better than who did not, which was found significantly true in eastern and central regions in 1995. In southern, northern and eastern regions, graduates watched TV within the past seven days performed significantly better than those who did not.

Table 10: Level of basic education by socio-economic characteristics, 1995

Characteristics	Region			
	East	South	North	Central
Age (in year)				
< 10	33.3	72.0	68.2	72.2
11-12	41.7	86.5	67.4	71.8
13-14	60.6	80.9	87.5	78.1
15 +	55.6	77.8	77.8	76.7
<i>Level of significance</i>				
Sex				
Boy	38.2	83.9	73.0	75.9
Girl	64.2	79.3	77.8	74.1
<i>Level of significance</i>	(<i>p</i> <0.01)			
Current enrolment status				
Not enrolled	34.5	73.7	73.1	54.5
Currently enrolled	57.3	83.6	76.0	78.2
<i>Level of significance</i>	(<i>p</i> <0.05)			(<i>p</i> <0.001)
Mothers education				
No schooling	50.5	80.8	76.5	75.7
Some schooling	57.9	84.1	71.4	72.5
<i>Level of significance</i>				
Fathers education				
No schooling	45.6	79.7	75.4	72.5
Some schooling	65.6	83.7	75.4	80.0
<i>Level of significance</i>				
Yearly economic status				
Always deficit	45.8	82.2	69.7	67.6
Occasionally deficit	59.3	79.3	69.4	81.4
Balanced	41.7	80.6	88.2	72.4
Surplus	44.4	88.2	80.0	80.7
<i>Level of significance</i>				
Watched TV				
No	50.0	75.6	66.7	68.8
Yes	56.5	91.2	81.9	80.3
<i>Level of significance</i>		(<i>p</i> <0.001)	(<i>p</i> <0.05)	(<i>p</i> <0.02)

Level of basic education of the graduates of 1997

Graduates of southern region who used to belong to comparatively older age group, were going to school and were members of occasionally deficit group did significantly better compared to those who were younger, were not going to school then and were the members of other economic status groups. Competency level of the graduates of central region whose fathers had schooling was significantly better than that of the others.

Table 11: Level of basic education by socio-economic characteristics, 1997

Characteristics	Region			
	East	South	North	Central
Age (in year)				
< 10	30.0	52.6	100.0	60.0
11-12	53.1	56.2	79.8	73.1
13-14	46.7	75.9	76.2	83.8
15 +	69.2	52.5	86.0	85.7
<i>Level of significance</i>		($p < 0.05$)		
Sex				
Boy	50.9	62.9	78.9	84.7
Girl	53.6	59.7	83.5	73.5
<i>Level of significance</i>				
Current enrolment status				
Not enrolled	40.0	42.9	71.1	71.2
Currently enrolled	54.8	64.7	82.9	81.9
<i>Level of significance</i>		($p < 0.01$)		
Mothers education				
No schooling	50.6	60.9	81.2	79.4
Some schooling	57.1	62.5	81.3	78.0
<i>Level of significance</i>				
Fathers education				
No schooling	49.2	58.1	82.5	71.8
Some schooling	56.3	65.3	78.9	88.0
<i>Level of significance</i>				($p < 0.01$)
Yearly economic status				
Always deficit	51.5	57.8	87.5	50.0
Occasionally deficit	56.7	67.7	80.5	73.5
Balanced	48.6	60.5	78.7	84.5
Surplus	53.3	20.0*	81.6	83.7
<i>Level of significance</i>		($p < 0.01$)		
Watched TV				
No	51.9	53.8	79.2	72.3
Yes	52.9	65.3	83.1	82.4
<i>Level of significance</i>				

* Sample size was only 15

Regional variations and changes in the enrolment rate of the BRAC graduates

Table 12 shows that the enrolment rate of BRAC graduates in formal school system decreased significantly ($p < 0.001$) in central region in 1997. Male enrolment rate was significantly ($p < 0.01$) higher than the female of eastern region. Enrolment rate of the male graduates of eastern and southern region increased significantly ($p < 0.05$) in 1997. But the enrolment of the male graduates of central region decreased significantly ($p < 0.001$)

At $p < 0.01$ significance level enrolment rate of the graduates of BRAC in the formal school of northern region was the highest, but in the formal schools of central region it was the lowest.

Table 12. Enrolment rate of BRAC graduates in formal schools.

Region	1995			1997		
	Boy	Girl	Both	Boy	Girl	Both
East	76.4	71.4	73.9	91.2	73.2	82.3
South	75.9	82.9	79.4	87.1	81.3	84.2
North	79.4	79.4	79.4	83.5	88.0	85.7
Central	88.3	84.6	86.4	71.4	75.5	73.5
Level of significance	ns	ns	ns	$p < 0.01$	$p < 0.05$	$p < 0.01$

Regression analysis

Regression analysis of basic competency

Previously bivariate analysis gave some idea about the relationship between region and basic competency. The main drawback of these analysis was that other socio-economic factors, those might influence basic competency were not considered into account. Thus it was necessary to apply multiple logistic regression to examine that despite controlling the socio-economic factors that effect the level of basic competency, whether there is any relationship between region and level of basic competency of BRAC graduates or not.

In regression analysis, basic competency was considered as a dependent variable and nine other variables were taken as explanatory variables. The explanatory variables were child sex, age, father's education, mother's education, and yearly income of the household, current enrolment status, graduation year, and region. These variables were selected by viewing existing literature on basic enrolment achievement of Bangladeshi children as well as BRAC school graduates. Two separate models were estimated for the graduates of 1995 and 1997. In determining the models a stepwise approach was considered and the models were followed selections and backward examination. Out of nine variables used as explanatory variables, four came out as statistically significant predictors of basic competency in both the models. These variables are child age, current enrolment status, watch TV and region.

Looking at the Wald statistics it can be said that the variable 'region' was the most important predictor of basic competency in both the models. This strongly indicates that regional variation exists in the basic educational achievement among the graduate of BRAC schools.

- a. Regression analysis of 1995 shows that the gradates of central region performed 2.24 times, the graduates of northern region performed 2.56 times, and the graduates of southern region did 3.99 times better than the graduates of eastern region.
- b. 1997 regression analysis explains that southern region did 1.31 times better, central region 3.59, and northern region did 3.70 times better than the eastern region.

Table 12: Logistic regression analysis of basic competencies reflecting regional variation.

Socio-economic factors	Model for 1995		Model for 1997	
	Odds ratio	Wald statistic	Odds ratio	Wald statistic
Age (in year)		9.20*		9.60*
≤ 10	1.00		1.00	
11-12	1.55		1.00	
13-14	2.20**		1.61	
15+	2.20**		1.82	
Current enrolment status		17.62***		18.57***
No	1.00		1.00	
Yes	2.41***		2.48***	
Watch TV		15.49***		5.30*
No	1.00		1.00	
Yes	2.01***		1.46*	
Region		29.83***		47.58***
East	1.00		1.00	
South	4.05***		1.31	
Central	2.27**		3.59***	
North	2.57**		3.71***	
-2 Log Likelihood	870.09		936.07	
Model χ^2	77.40		77.37	
(d.f)	(8)		(8)	
Level of significance	p<0.0001		p<0.0001	

Notes: ***p<0.001; **p<0.01; *p<0.1

Regression analysis of enrolment status

In 1995, age and father's education effected significantly on enrolment of graduates to formal schools. But regional variation did not have significant effect on enrolment rate. On the other hand, in 1997, child's age, mother's education, regional variation and yearly income had significant effect on enrolment status of the graduates. Enrolment status of the graduates of northern region was found significantly poor than the eastern region. Wald statistics shows that regional variation is the second most significant predictor of enrolment status of BRAC graduates of 1997. This strongly indicates that regional variation exists in the enrolment rate among the graduate of BRAC schools.

Table 12: Logistic regression analysis of current enrolment status of BRAC graduates in formal schools

Socio-economic factors	Model for 1995		Model for 1997	
	Odds ratio	Wald statistic	Odds ratio	Wald statistic
Age (in year)		48.86***		57.63***
≤ 10	1.00		1.00	
11-12	0.32		0.32	
13-14	0.23		0.11	
15+	0.09		0.04	
Father's Education		11.81***		
No	1.00			
Yes	1.92			
Mother's Education				9.49**
No			1.00	
Yes			2.53	
Region				27.08***
East			1.00	
South			1.14	
Central			1.11	
North			0.32	
Yearly Income				14.51***
Always deficit			1.00	
Occasionally deficit			1.57	
Balanced			2.77	
Surplus		3.11		
-2 Log Likelihood	660.17		817.263	
Model χ^2	117.15		68.06	
(d.f)	(10)		(4)	
Level of significance	p<0.0001		p<0.0001	

Notes: ***p<0.001; **p<0.01; *p<0.1

Discussion

Today, BRAC is recognised as one of the largest N.G.O with several successful developments programmes for the deprived people of Bangladesh. Though BRAC has showed its efficiency in filling up loop wholes of various projects that the government could not do so far, yet in certain aspects some gaps can be observed. Such a gap is regional variation in the competency level and enrolment rate of BRAC graduates. It was expected that beyond socio-economic, gender and regional variations BRAC will be able to provide equal opportunity in education but the differences in competency level of its graduates do not support it. In this study it was observed that age of the graduates, father's education, watching TV and current enrolment rate have significant effect on the competency level of the graduates. BRAC can take steps in enrolling the graduates of the low competency level regions into the formal schools. It may be difficult for BRAC to consider the other factors that are related to graduates competency level. It can be assumed that the quality of teachers (historically backward region by education) or lack of efficient supervisors might be the other causes of low achievement level. Further study may be done on low achievement level regions to find out the actual causes.

Performance level of the BRAC graduates of Mymensingh, Bogra, Rajshahi, Jamalpur, Kustia was better than the national literacy rate of those areas whereas the performance level of Jessore, Comilla, Gazipur, Feni was relatively worse compared to the literacy rate of those areas. On the other hand, performance level of Habiganj, Rangpur, Madaripur was almost similar to the national literacy rate. Competency level of the graduates of 1997 of Dhaka region was similar to the national literacy rate of that area, which was comparatively worse in 1995 compared to the national literacy rate. Another study in Chittagong, Gazipur, Tangail and Rangpur showed that the performance level of the Gazipur area was lower than the other regions, which is similar to the findings of this study (Alam: 19).

The competency level of the graduates of eastern region in 1995 was poorer than other regions. The reasons may be that a large portion of the graduates of that particular region were not going to school at that time, very few students from this group watched TV, and their parents did not

have any schooling. On the other hand, southern region did better than other regions as it had high current enrolment rate and more parents had schooling. In 1997, eastern region performed poor as a large number of graduates belonged to deficit group and a very low portion watched TV. The northern region performed better as had high current enrolment rate than the other regions in that particular year.

It was observed that the competency level of the northern and central region was constantly good in both the years, while the eastern region was the poorest. Though in 1995 southern region performed significantly better than the other regions, yet the level had significantly decreased in 1997.

In both the years in the eastern region current enrolment rate of the graduates and proportion of father's education was poor. More people of this region belonged to in the deficit group. This might be the reason of poor performance of the graduates of this region. On the other hand, this particular region poorly performed in both the years may be programme did not take any action to improve the competency level. Steps can be taken to improve the administration of that region.

Current enrolment rate and proportion of father's education of southern region was high in both the years. Comparatively less number of students used to belong in the always deficit group in 1995, but in 1997 the portion had increased significantly. In 1995, comparatively less number of graduates watched TV within the preceding seven days and the proportion had significantly increased in 1997. Reasons for the decrease in competency level of southern region might be because the economic condition of this region had significantly decreased in 1997. But this might not be the only reason. There may be problem in administration, because in the previous year this region had the highest competency level.

Enrolment was highest in the central region in 1995 and lowest in eastern region. But in 1997 enrolment rate of central region was the lowest among all the regions and highest enrolment rate was in northern region. Alam showed that 40% of the total enrolment rate was distributed at the level of class III and above. In this study the highest figure of enrolment was found in Rangpur, then Gazipur, and Chittagang had the lowest rate. Alam in his another study observed that

enrolment rate was high in Dhaka then Chittagong, Rajshahi, Khulna and Barisal. Our study showed that in the year of 1995 enrolment rate was highest in the southern, followed by northern, central and eastern region respectively and in 1997 the serial was like northern, southern, eastern and western region.

Though in the level of basic competency region was the most significant predictor for both the years, yet in the case of enrolment rate it was the second significant predictor for 1997. On the other hand, watching T.V was one of the significant variables affecting the basic competency level but it had no effect on enrolment rate. In the case of enrolment rate mother's education and yearly income had significant effect in 1997.

Conclusions

As BRAC'S education programme is a package programme and it claims equity in every respect, it was expected that the competency level of the graduates of all the regions would be almost equal. It was observed that there were significant level of variation and changes in the competency level of BRAC graduates. As this study is a secondary analysis, data related to the reasons of variations and changes in the competency level were not available. Further in-depth study is needed to find out the causes of variation and changes in the competency level in different regions.

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