

**Assessing the Level of Cognitive Knowledge in English of the
Staff and Teachers of Non-Formal Primary Education
Programme of BRAC**

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ABSTRACT

This paper aimed at identifying job-related background factors of the staff and the teachers of BRAC education programme, determining their level of cognitive knowledge in English and finding relationship between the job-related factors and subject knowledge. BRAC recently has extended its curriculum from three years to four years to cover full five-year cycle of primary education. The main objective of the expansion is to mainstream the BRAC graduates with formal education system. BRAC has introduced the English textbook of class III in its schools, and has develop a teachers guide based on the it. BRAC also started a training programme based on the teachers guide for the teachers as well as supervising staff to develop their teaching and supervisory skills on the new teaching system. The data for this paper were taken from the study of Higher Education Link project for more elaborate analysis, where 13 Programme Organizers, 5 Junior Programme Organizers, and 111 teachers of three NFPE teams were given a test on English. The test instrument was developed on the basis of the textbook and contained 100 marks. The findings show that on average, the Programme Organizers obtained 64.0, the Junior Programme Organiser 76.4 and the teachers 39.0 scores respectively. The job-related factors, year of schooling, number of lessons covered by training sessions and job experience of the respondents were positively correlated with the subject knowledge. Although the achievement levels of the respondents were not satisfactory, they have further scope in learning and practicing English in the classroom while they will be supervising and/or teaching.

INTRODUCTION

BRAC launched two models in its primary education programme. The first model, called NFPE (Non-Formal Primary Education), was introduced in 1985. Initially, it was a three-year course for the children aged 8-10 years old. The second model, BEOC (Basic Education for Older Children) introduced in 1988, was a two-year course for children aged 11-14 years. For both the models, BRAC targets the children of disadvantaged and illiterate families, especially who never been enrolled in school or dropped out before completing the five year cycle of primary education. The number of learners in these schools is kept limited (30 to 33), and around 70% of them are girls. These are the single room schools and each school has one teacher. Most teachers (around 97%) of these schools are women (NFPE, Annual report, 1998).

Currently, BRAC Education Programme (BEP) is in its third phase. The main features of this phase are the expansion of curriculum in all NFPE schools to cover the five-year formal primary education curriculum in four years, and to mainstream the BRAC graduates with formal education. The graduates are expected to enroll in grade six at the secondary level. To achieve this, since 1997 BRAC has decided to introduce gradually the curriculum of grades IV and V in BRAC schools in response to government policy to implement a five-year primary education cycle in all primary schools.

The findings of BRAC research on the former learners of BRAC schools indicated that BRAC graduates were weak in English at the entry level of the formal primary school system (Hossain, Akter and Kalam, 1998, Akter, S. 1996; Khan and Chowdhury, 1992). Thus, to make an effective implementation of the extension to Grade IV and V, the NFPE programme has introduced the government prescribed English textbook of class III in its programme. The book was introduced from the second grade. It contains twenty two lessons, and covers some simple aspects of English language learning, e.g., articles, use of apostrophe, tenses, translations, making sentences, learning different words with its meaning and spelling, etc. The EDU (Education Development Unit) of BRAC has developed a teachers' guidebook and training module, following the textbook, to train and support teachers as well as the supervising staff, particularly in English subject. The

training process is ongoing and continuous. In this process a set of master trainers (MT) has been developed who disseminate this training further among the supervisory staff and teachers following the guidelines developed by the EDU.

The supervisory staff and teachers are directly associated with the programme. The supervisory staff not only supervise schools but also provide necessary guidance to the teachers relating to teaching, and conduct monthly refreshers. Thus they should have adequate knowledge on the subject to make the programme more effective. Some studies (Khan, Hasan and Kalam, 1995, Khan and Chowdhury, 1992) revealed that socioeconomic, job-related and personal factors were the influential determinants for subject knowledge. This paper, however, aims to meet the following objectives;

Objectives of the study

The objective of this study is to determine the level of cognitive knowledge in English of the staff and teachers of BRAC Education Programme. Thus, the study specifically aimed to:

- identify level of job-related factors of both the staff and teachers of BRAC education programme;
- assess their level of cognitive knowledge in English; and
- identify relationship between job related factors and level of knowledge in English.

METHODOLOGY

Background of the data

Data for this study were taken from another study conducted under the Higher Education Link (HE-Link) programme. The link programme was launched in 1997 between BRAC and the School of Education, University of Manchester, UK. The main objective of that project was to evaluate the dissemination process of English training at the field level. The title of the project was “Effectiveness of Teachers Training in English of BRAC Education Programme”.

Wide range of data were collected through observations of training sessions and classrooms, self-administered questionnaire and individual discussions. An achievement test was administered to determine cognitive knowledge in English of the supervising staff and teachers of the education programme. In this analysis, the supervisory staffs have been categorized further and their level of achievement in the subject has been analyzed more specifically as well as more elaborately.

Study area and sampling procedure

Although the HE-Link project covered several team offices in different areas, the data used for this paper were taken from three team offices from Jamalpur area. The team offices were selected purposively, based on higher number staff and teachers received the special training on English subject.

Study population

The supervising staff and teachers of the selected team offices were given the test. A total of 111 teachers and 18 field staff (13 PO and 5 JPO) appeared in the test.

The test instrument

The test items were taken from the English textbook of grade III published by National Curriculum and Textbook Board (NCTB), which also has been introduced in BRAC schools. The test instrument covered most of the lessons of the textbook. The lessons in the test were divided into easy, moderately difficult, and very difficult parts. The draft

instrument was field-tested in two team offices, and was modified further before it finally applied for data collection. The test contained 100 marks.

Data collection and analysis

The main purpose of the test was to measure cognitive knowledge of the staff and teachers in English. The core members of the HE-Link project directly administered the test. The respondents were allowed a period of 30 minutes to complete the test. The scores obtained by the respondents and other related factors were taken and analysed more elaborately using the SPSS computer software programme..

RESULTS

Job-related factors of the staff and teachers of the BRAC education programme

According to the objectives of this study, an attempt was made to determine the nature of job-related factors of the staff and teachers, i.e., job experience, year of schooling, training hour availed and number of lessons covered by training sessions.

Table 1 shows that the mean job experience of the teachers was 4.9 years, which was higher than POs (4.6 years) and JPOs (3.2 years). The mean year of schooling of the POs was 14 years, slightly higher than the JPOs (13.6 years) and much higher than the teachers (10.1 years). It is to be mentioned here that minimum academic qualification for the post of PO was 14 years of schooling (Graduation level), which was 12 years (HSC) for JPOs and nine years for teachers. The data indicate that majority of the JPOs had 14 years of schooling. Result in respect to number of lessons covered through training reveals that most of the POs and almost all the JPOs had been imparted training in English on all the lessons. On the other hand, on average, the teachers were imparted training on the subject up to 10.4 lessons, and they taught up to 10.3 lessons in their respective schools. In the subject based training process, BRAC staffs were given training for a duration of two days that covered all the lessons at a time which was given to the teachers step by step through monthly refresher courses.

Table 1. Mean of some job-related factors of respondents

Job-related factors	PO (n=13)		JPO (n=5)		Teacher (n=111)	
	Mean	SD	Mean	SD	Mean	SD
Job experience (year)	4.6	1.1	3.2	1.5	4.9	2.7
Year of schooling	14.0	1.2	13.6	0.9	10.1	.80
No. of lessons covered by training sessions	21.6	1.4	22.0	0.0	10.4	6.7
No. of lessons taught in school	-	-	-	-	10.3	7.1

Score obtained in the test by the respondents

The following figure (figure 1) presents the mean score obtained in the test by different groups of respondents. Out of 100 marks, the JPOs performed better in the test (76.4) compare to the POs (64.0) and the teachers (39.0). A surprising result was found in this figure that although the JPOs had less education compared to the POs, their score in English was found higher than that of POs. Although the difference of scores between JPOs and POs is not statistically significant, the reasons may lie that year of schooling of JPOs and POs was nearly similar, and the JPOs received training on all the lessons of the text book (Table 1). Besides, the JPOs were responsible only for supervising schools and reporting but, the POs have had to perform other internal and external activities other than their regular duties. The duties include; reporting, attending different meetings organized by local government as well BRAC, etc. Thus, the JPO could give more time than the POs in school supervision where they got further opportunity in learning English. Since, the JPOs visited schools regularly, received training on all the lessons and could give adequate time in classrooms, their subject knowledge was might be higher compared to the POs.

Figure 1: Distribution of score obtained by the study population

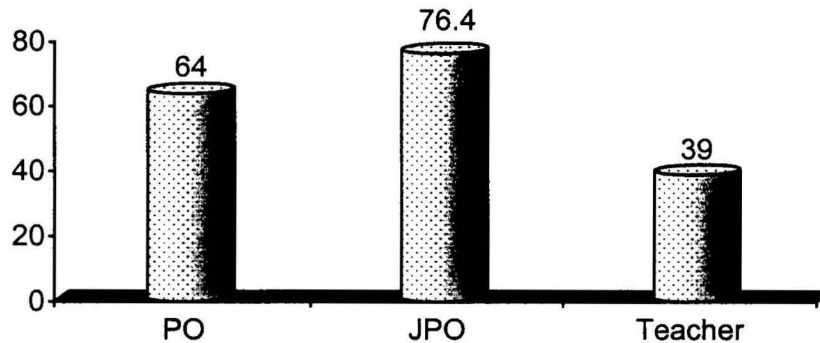


Table 2 presents a distribution of respondents by score band obtained in the English test. Seventy seven percent of the POs, almost all the JPOs, and more than 26.0% of the teachers obtained above 50 score. The Table also shows that more than 38.0% of the POs, 80.0% of the JPOs and less than 4.0% of the teachers obtained above 70.0 score. The Table clearly indicates that the field staff performed better in the test compared to the teachers and among the field staff JPOs performed better than POs.

Table 2. Distribution of respondents by score band.

Score band	PO (n = 13)	JPO (n = 5)	Teacher (n = 111)
0 - 30	1 (7.7 %)	-	42 (37.8 %)
31 - 50	2 (15.3 %)	-	40 (36.0 %)
51 - 70	5 (38.5 %)	1 (20.0 %)	25 (22.5 %)
71 + above	5 (38.5 %)	4 (80.0 %)	4 (3.8 %)
All	13 (100.0 %)	5 (100.0 %)	111 (100.0 %)

Table 3 analyses the mean score of the respondents by number of independent job-related factors, i.e., years of schooling, job experience, number of lessons covered by training and number of lessons the teachers taught in schools in which they were teaching. The Table reveals that in most cases, the mean scores obtained by the respondents increased with increasing year of schooling. The increasing trend was not statistically significant in case of the POs and JPOs, but it was significant in case of the teachers at $p < .01$ level.

The findings on the respondent's mean scores by their job experience indicate that there existed an association of scores obtained by the respondents with their job experience. The mean scores of the respondents increased with increasing their job experience. The increasing trend was statistically significant in case of the POs at $p < .05$ level, but it was not significant in case of the JPOs and teachers (Table 3).

Table 3 and the figure -1 show that the POs obtained 64.0 score which was lower than the score obtained by the JPOs (76.4). The Table also shows that the teachers who received training on 10 lessons obtained 37.8 score, which was 45.3 for the teachers who received training on 11-15 lessons. An unexpected finding was that the teachers who received training on more than 15 lessons obtained 40.3 score, which was lower than the score of the teachers who received training on less than 15 lessons. However, the up and down trend of the scores obtained by the teachers was not statistically significant.

Finally, Table 3 also shows a distribution of scores the teachers obtained in the test by number of lessons they taught in the schools. The majority of the teachers (61 out of 111) taught not more than 10 lessons, 20 teachers taught up to 11-15 lessons, and the remaining 30 teachers taught up to 16 or more lessons. The scores gradually increased with the increase in the number of lessons taught, but the trend was not statistically significant.

The aim of the analysis in the Table - 3, however, was not to show comparison between different group of respondents (staff and teachers), but to examine the influence of different background factors as well as training in obtaining the score. However, it is evident from the analysis that among the factors, years of schooling and job experience were the most influential determinants for achieving higher scores in English.

Table 3. Mean score of the respondents by their job related background.

Job-related factors	Test score in English						
	PO (n=13)	SD.	JPO (n=5)	SD	Teachers (n=111)	SD.	
Year of schooling							
8-9 years	-	-	-	-	23.4 (12)	10.3	
10 years	-	-	-	-	40.1 (86)	18.7	
12 years	56.5 (2)	16.3	81.0 (1)	-	51.2 (12)	18.2	
14+ years	65.4 (11)	29.0	75.3 (4)	11.6	67.0 (1)	-	
Level of significance		ns		ns		p<.01	
Job Experience in year							
1 - 3 years	36.0 (2)	12.3	74.3 (3)	14.0	37.8 (46)	19.6	
4 - 6 years	68.0 (10)	15.9	79.5 (2)	2.1	40.0 (37)	20.6	
7 + years	80.0 (1)	-	-	-	42.6 (28)	16.4	
Level of significance		p<.05		ns		ns	
No. of lessons covered by training							
1 - 10 lessons	-	-	-	-	37.8 (60)	19.9	
11 - 15 lessons	-	-	-	-	45.3 (18)	17.0	
16 - 22 lessons	64.0 (13)	19.2	76.4 (5)	10.4	40.3 (33)	18.4	
Level of significance						ns	
No. of lessons taught in school							
1 - 10 lessons	-	-	-	-	38.4 (61)	20.2	
11 - 15 lessons	-	-	-	-	40.8 (20)	18.9	
16 - 22 lessons	-	-	-	-	41.9 (30)	17.1	
Level of significance		ns					

Notes: Figures in parentheses indicate number of respondents, ns = not significant at p<.05.

To assess writing ability of the respondents, an open-ended writing exercise was given in the test. The respondents were asked to write five English sentences about themselves. Table 4 presents a distribution of respondents by number of sentences they could write. The Table shows that 23.1% of the POs, 40.0% of the JPOs and 11.7% of the teachers were able to write five sentences about themselves. On the other hand, 15.4% of the POs and 36.9% of the teachers had no ability to write at least one sentence about themselves.

Table 4. Proportion of respondents by number of sentences they could write about themselves.

Number of sentences	% of PO (n=13)	% of JPO (n=5)	Teachers (n=111)
00	15.4	-	36.9
1	-	-	3.6
2	15.4	-	18.9
3	7.7	-	9.9
4	38.4	60.0	18.9
5	23.1	40.0	11.7
Total	100.0	100.0	100.0

Correlation matrix between job-related background factors and knowledge in English

The correlation between respondents' knowledge in English as measured by the score obtained in the test with selected independent job-related background factors was examined. A bivariate correlation analysis in Table - 5 shows that among the selected job-related background factors, years of schooling and number of lessons covered by training sessions had a positive correlation to subject knowledge which is statistically significant ($p < .001$). The job experience of the respondents was positively correlated to subject knowledge, but it is not statistically significant. Among the selected factors, designation of the respondents had a negative correlation with their knowledge in English. The findings, however, indicate that training in English given to the staff and teachers help to increase cognitive knowledge of the participants.

Table 5. Correlation matrix between some selected independent variables and subject knowledge.

	DESG	EDUN	JEXP	LSSC	SCORE
DESG	1.000	-.8324 p<.001	.0973 ns	-.5356 p<.001	-.4553 p<.001
EDUN		1.000	-.0607 ns	.4722 p<.001	.5368 p<.001
JEXP			1.000	.1567 p<0.10	ns
LSSC				1.000	.4039 p<.001
SCORE					1.000

Abbreviations of variables

- DESG = designation
- EDUN = years of schooling
- JEXP = job experience
- LSSC = number of lessons covered by training sessions
- SCORE = score obtained by the respondents in the test

DISCUSSIONS AND CONCLUSIONS

This study aimed at assessing the level of cognitive knowledge in English of the staff and teachers of BRAC education programme. This study deals with data taken from secondary source. BRAC has introduced in its schools the textbook of grade III recommended by government. At the same time BRAC started a training programme with a new training module developed based on the text book. This study was an attempt to assess their cognitive knowledge in English after giving them proper training on the subject. For the purpose, a test questionnaire was developed based on the text book, and was given to the sample population. Along with the test, some job-related background factors of both the staff and teachers were also collected.

The main findings, however, of this study show that out of 100, the JPOs obtained 76.4 score in the test which was higher than the score obtained by the POs (64) and teachers (39). The distribution of scores by job-related factors reveals that scores gradually

increased with increased year of schooling, job experience and number of lessons covered by training.

The findings, however, indicate that cognitive knowledge in English of the staff and teachers was originally poor. As because, the test given to them based on the text book of grade III, moreover, they had been given special training on the subject. It was observed that the training obviously was useful for them not only for developing their teaching skills but also for gaining cognitive knowledge on the subject.

The above statement, however, most probably not only true for the BRAC staff and teachers but, it is experienced that, it is true for many literate people in Bangladesh. It is also experienced that every year an alarming extent of students in Bangladesh can not pass the SSC examination due to lack of cognitive knowledge in English subject. Some teachers of different schools of primary and secondary level informed that majority of their students at all level often obtain lower score in English compared to other subjects. The reasons behind this may lie that, as a second language, English is seemed to be difficult for the learners and it is also considered as a technical one. Thus, the students need some one's help in this subject with their homework, but most parents themselves cannot help their children due to lack of adequate knowledge in English or cannot afford high cost of private tutor. Thus, the learners remain weak in English. A study carried out on the BRAC teachers showed similar findings. The study also showed a relationship of test score with the job-related factors (Khan and Chowdhury, 1992).

The findings of this study contain a number of limitations. The sample size was too small, and covered only three team offices under one area of the education programme. Thus, the findings of this study may not be representative. Due to the small sample size, the statistical analysis done in this study also may not be cent percent logical. However, the findings may give some sort of indications to the programme to improve the cognitive knowledge of the concerned staff and teachers through necessary actions.

It will not be fare to think that due to inadequate cognitive knowledge in English, the supervisory staff and teachers will not be able to meet the programme's requirements. As because, the training initiatives in BRAC is an ongoing process, thus the staff and teachers will have further opportunity to learn English from their regular job-related duties, which will be increasing over time. Besides, before teaching a lesson, the teachers have further opportunity to take an in-house preparation on the lessons that will be taught in the class.

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