IMPACT OF EDUCO – CULTURAL STATUS ON READING COMPREHENSION SKILL IN FIRST LANGUAGE

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Abstract: Reading comprehension is the procedure of making meaning from text. The goal, therefore, is to gain an overall understanding of what is described in the text rather than to get meaning from isolated words or sentences. The objectives of the study were to compare the reading comprehension ability among the students with different Educo- Cultural status. It was tested by Educo- cultural Status Scale and two types of comprehension tests. Tests were administered on 684 samples from 16 schools of West Bengal. The collected data were analyzed by statistical procedure ANOVA. The major findings were observed that in M.C.Q. Test high ECS is better than moderate ECS, and moderate ECS is better than low ECS. In the performance of Cloze Test high and moderate ECS are scored better than low ECS whereas moderate and high ECS do not differ with each other. In the performance of both test (MCQ Test & Cloze Test), students with moderate and high ECS are better than students with low ECS, whereas students with moderate and high ECS do not differ from each other. The probable causes behind this type of result were discussed.

Keywords: Reading comprehension, M.C.Q. Test, Cloze Test, Educo- Cultural Status (ECS)

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INTRODUCTION

Reading comprehension is a skill that is critical in the educational success of all individuals. without adequate reading comprehension skills, students can struggles in many subject areas. Reading comprehension is an important skill needed for all areas of school. Subjects, other than reading or literature, where comprehension skills are significantly important including science, social- studies and math. In the area of science, research indicates that many students lack prior knowledge and reading strategies to generate inferences; thus, the students comprehend science text poorly. It is also found that students lack the specific reading strategies to generate inferences that aid in the understanding of science texts (Best, Rowe, Ozura, and Mc Namara, 2005, cited in Baier.J, 2005)

We have seen that a particular sentence comes with different meaning to the different students. In that case the socio-economic status of the learners creates the differences from one another. But it is sometimes happen that students with high socio- economic status always can't achieve high score or can't comprehend properly in different subject, and it happens in reverse also. Hence the question is arise, what are the factors influences to achieve high reading comprehension skill besides socio- economic status of learner. In this situation the educational exposure of a student may be the key factor in reading comprehension. This educational exposure is expressed by the term 'Educo–Cultural Status (ECS)'. This status shows of an individual's exposure to education based on different variables like home and family culture, locality or social culture and school culture.

OBJECTIVES

1. To assess the reading comprehension skill of the Higher Secondary students through

a. Comprehension Test (M. C. Q. Test)

b. Cloze Test

2. To study and compare the reading comprehension skill among the students with different Educo- Cultural status.

DELIMITATION

1. The study was conducted in eight districts of West Bengal.

2. The study was delimited to class XII students only.

3. Only Bengali medium schools were taken for the study.

HYPOTHESES

For this study following null hypotheses are framed:

$H_0$1. There is no significant difference among the students with different Educo- Cultural status in their performance in M.C.Q. Test.

$H_0$2. There is no significant difference among the students with different Educo- Cultural status in their performance in Cloze Test.

$H_0$3. There is no significant difference among the students with different Educo- Cultural status in their performance of both test (M.C.Q. Test & Cloze Test).

SAMPLE AND SAMPLING PROCEDURE

For the study only eight districts were chosen from the state West Bengal on the basis of geographical location. These eight districts touched the geo-diversity of the state in position of east, west, north and south. From each of the district only two higher secondary schools, one from rural area and one from urban area were taken randomly. After fixing the schools the researcher has taken all the standard XII students presented on that day as the sample of the present study. Thus the sample size got a figure of 684.

RESEARCH TOOLS

The investigator constructed three research tools to investigate the problem. The details of the research tools are given below:

EDUCO- CULTURAL STATUS SCALE

The term Educo–Cultural Status (ECS) is a very uncommon word. It determinates of an individual's exposure to education based on different variables like home and family culture, locality or social culture and school culture. The Educo–Cultural Status (ECS) is an important determinant to measure whether the students get the opportunity to expose him/ her through the educational- cultural ambience. The scale is very essential to measure student's educational achievement in relation to socio – economic status.

The Educo- Cultural Status Scale (ECSS) was developed by the researcher to elicit information from class XII students regarding the Educo-cultural component like; educational exposure at home, educational exposure in locality and educational exposure in school of the students. The students have to put a tick mark in front of any one alternative. In the front page of the questionnaire the student have to fill the information with regards to their name, age, sex, class, roll no, school, and community. After they have given their expert opinion and suggestions then the questionnaire was modified accordingly.

M.C.Q. TEST

The researcher selected a short story of great Bengali Author for the test. The test was constructed through a passage of 677 words. It was verified from five Bengali Language teachers of different schools as the passage may applicable or not for the standard XII students and all the teachers suggest to apply it. Then fifty test items from the passage were given to them to check the content validity. All the teachers put their individual opinion about the test items and suggest which items should be appropriate for the students. Thus only 34 items out of 50 were taken to construct the test. After checking the content and item validity of the test, it was administered to the larger sample of the study.

CLOZE TEST

A standard cloze test is a passage with blanks of standard length replacing certain deleted words which students are required to complete by filling in correct words or their equivalents. In traditional 'cloze test', every fifth word is removed from a 250-500 word reading passage. Usually, no word is deleted either in the first or the last sentence of the passage. Students are required to supply either the original word of the author or an appropriate equivalent word in the blank space (Helfeldt et al, 1986:216).

PREPARING OF A STANDARD CLOZE TEST

The researcher selected a passage of a famous Bengali Author for the test. After that he justified from five Bengali Language teachers of different schools (Table 3.6) as the passage may applicable or not for the standard XII students. Then the researcher made the test with the help of his guide following the procedure of a standard cloze test, which was constructed through a

passage of 392 words where 50 words were deleted (every seventh word) except in the first and last sentences.

DATA COLLECTION

The investigator administered the tools upon 684 students of 16 schools over 8 districts of West Bengal. The data were collected and organized in tabular form for analysis.
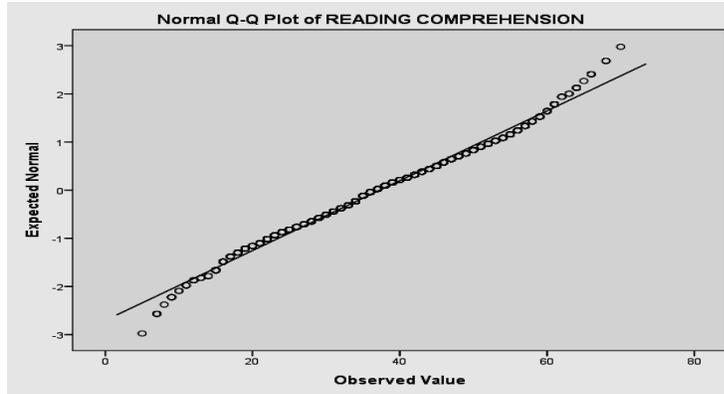
DESCRIPTIVE STATISTICS OF DATA

Table 1: Descriptive Statistics of Reading Comprehension			Statistic	Std. Error
Reading Comprehension	Mean		37.2895	.52734
	95% Confidence Interval for Mean	Lower Bound	36.2541	
		Upper Bound	38.3249	
	Median		37.0000	
	Variance		190.215	
	Std. Deviation		13.79184	
	Skewness		.001	.093
	Kurtosis		-.693	.187

The table 1 shows that that, the total (N= 684) mean score in reading comprehension is 37.2895, Median is 37.000, SD is 13.79184, Skewness is .001 and Kurtosis is -.693. Furthermore data with graphical representation (Normal P-P Plot, Q-Q Plot) are also presented below for visual scanning of the nature of the data.

Figure 1: P- P Plot _ Reading Comprehension

Normal P-P Plot of READING COMPREHENSION
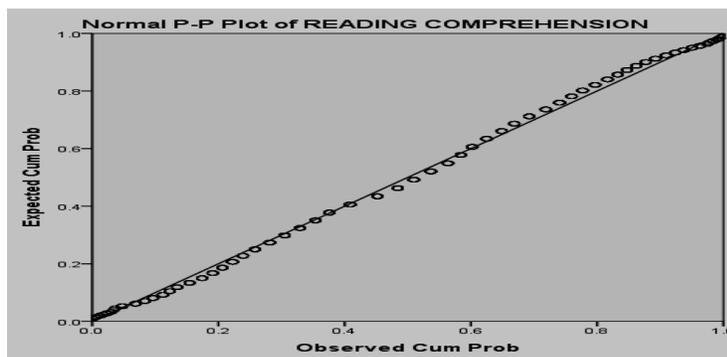
Figure 2: Q- Q Plot _ Reading Comprehension

Normal Q-Q Plot of READING COMPREHENSION

ANALYSIS AND INTERPRETATION

The collected data were analyzed following appropriate statistical procedures (SPSS, Version - 20) as given below:

Descriptive Statistics

Table2: Oneway ANOVA_ Level of Educo – Cultural Status: MCQ Test						95% Confidence Interval for Mean	
		N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound
Reading Comprehension _MCQ Test	Low	151	17.8874	5.40190	.43960	17.0188	18.7560
	Moderate	373	19.3753	5.02934	.26041	18.8633	19.8874
	High	160	20.8000	4.20512	.33244	20.1434	21.4566
	Total	684	19.3801	5.02660	.19220	19.0027	19.7575

The descriptive table 2 provides some very useful descriptive statistics, including the mean, standard deviation and 95% confidence intervals for the dependent variable (Educo-Cultural Status) for each separate group (Low, Moderate, High), as well as when all groups are combined (Total).

$H_0$1. There is no significant difference in reading comprehension skill of first language among the students of different Educo-Cultural Status (ECS) in MCQ Test.

Table 3: ANOVA: Reading Comprehension _ MCQ Test)

		Sum of Squares	df	Mean Square	F	Sig.
Reading Comprehension _ MCQ Test	Between Groups	659.030	2	329.515	13.520	.000*
	Within Groups	16598.139	681	24.373		
	Total	17257.170	683			
* The mean difference is significant at the 0.05 level.						

In case of comparing the reading comprehension skill of higher secondary students in MCQ Test with respect to different group of Educo - Cultural Status (Low, Moderate, High), it is found from table 3 that the calculated f = 13.520, df = 2, 681 and p < 0.01. It means F is statistically significant at 0.05 level. Hence the null hypothesis is rejected and it is concluded that there were significant differences exist among the different group of ECS in their reading comprehension skill in MCQ Test.

Table 4: Multiple Comparisons: Reading Comprehension _ MCQ Test: Post Hoc Test (LSD)

Dependent Variable	(I) Level Of Educo-Cultural Status	(J) Level Of Educo-Cultural Status	Mean Difference (I-J)	Std. Error	Sig.*	95% Confidence Interval Lower Bound	Upper Bound
Reading Comprehension _ MCQ Test	Low	Moderate	-1.48792*	.47619	.002	-2.4229	-.5529
		High	-2.91258*	.56013	.000	-4.0124	-1.8128
	Moderate	Low	1.48792*	.47619	.002	.5529	2.4229
		High	-1.42466*	.46656	.002	-2.3407	-.5086
	High	Low	2.91258*	.56013	.000	1.8128	4.0124
		Moderate	1.42466*	.46656	.002	.5086	2.3407
* The mean difference is significant at the 0.05 level.							

From the results so far, it was found that there were statistically significant differences between the groups as a whole. To determine which group is different from others, Post Hoc Test (LSD) was conducted and it is found from table 4 that mean difference between Low status and

Moderate status is 1.48792 and Low status and high status is 2.91258, Moderate status and High status is 1.42466 the p values are respectively 0.002, 0.000 and 0.002 ($p < 0.05$) which are significant at 0.05 level. So it is concluded that students with Low ECS is significantly different from the students with Moderate and High ECS and also the students with Moderate ECS is significantly different from the students with High ECS in their reading comprehension skill in MCQ Test.

Table 5: Descriptive Table: Oneway ANOVA_ Level of Educo – Cultural Status: Cloze Test							
				Std. Deviation	Std. Error	95% Confidence Interval for Mean	
		N	Mean			Lower Bound	Upper Bound
Reading Comprehension _ Cloze Test	Low	151	15.33	10.625	.865	13.62	17.04
	Moderate	373	18.64	10.563	.547	17.57	19.72
	High	160	18.64	9.123	.721	17.21	20.06
	Total	684	17.91	10.336	.395	17.13	18.69

The descriptive table 5 provides some very useful descriptive statistics, including the mean, standard deviation and 95% confidence intervals for the dependent variable (Educo-Cultural Status) for each separate group (Low, Moderate, High), as well as when all groups are combined (Total).

$H_0$2. There is no difference in reading comprehension skill of first language among the students of different Educo-Cultural Status (ECS) in Cloze Test.

Table 6: ANOVA: Reading Comprehension _ Cloze Test						
		Sum of Squares	df	Mean Square	F	Sig.
Reading Comprehension _Cloze Test	Between Groups	1288.101	2	644.050	6.119	.002*
	Within Groups	71674.279	681	105.249		
	Total	72962.380	683			
* The mean difference is significant at the 0.05 level.						

In case of comparing the reading comprehension skill of higher secondary students in Cloze Test with respect to different group of Educo-Cultural status (Low, Moderate, High), it is found from table 6 that the calculated f = 6.119, df = 2, 681 and p = 0.002 (p < 0.05). It means F is statistically significant at 0.05 level. Hence the null hypothesis is rejected and it is concluded that there are significant differences exist among the different group of ECS in their reading comprehension skill in Cloze Test.

Table 7: Multiple Comparisons: Reading Comprehension _ Cloze Test: Post Hoc Test (LSD)						95% Confidence Interval	
Dependent Variable	(I) Level Of Educo-Cultural Status	(J) Level Of Educo-Cultural Status	Mean Difference (I-J)	Std. Error	Sig.*	Lower Bound	Upper Bound
Reading Comprehension _ Cloze Test	Low	Moderate	-3.310*	.990	.001	-5.25	-1.37
		High	-3.306*	1.164	.005	-5.59	-1.02
	Moderate	Low	3.310*	.990	.001	1.37	5.25
		High	.003	.970	.997	-1.90	1.91
	High	Low	3.306*	1.164	.005	1.02	5.59
		Moderate	-.003	.970	.997	-1.91	1.90
* The mean difference is significant at the 0.05 level.							

From the results so far, it was found that there were statistically significant differences between the groups as a whole. To determine which group is different from others, Post Hoc Test (LSD) was conducted and it is found from table 7 that mean difference between Low status and Moderate status is 3.310 and Low status and high status is 3.306, the p values are 0.001 and 0.005 (p < 0.05) which are significant at 0.05 level. So it is concluded that students with low ECS is significantly different from the students with moderate and high ECS in their reading comprehension skill in Cloze Test.

Table 8: Descriptive Table: One way ANOVA_ Level of Educo –Cultural Status: both test ((MCQ & Cloze Test)

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
Reading Comprehension in both test (MCQ & Cloze Test)	Low	151	33.2185	14.52120	1.18172	30.8836	35.5535
	Moderate	373	38.0161	13.96962	.72332	36.5938	39.4384
	High	160	39.4375	11.83040	.93528	37.5903	41.2847
	Total	684	37.2895	13.79184	.52734	36.2541	38.3249

The descriptive table 8 provides some very useful descriptive statistics, including the mean, standard deviation and 95% confidence intervals for the dependent variable (Educo-Cultural Status) for each separate group (Low, Moderate, High), as well as when all groups are combined (Total).

$H_0$3. There is no significant difference in reading comprehension skill of first language among the students of different Educo-Cultural Status in both test (MCQ Test & Cloze Test).

Table 9: ANOVA: Reading Comprehension _ both test ((MCQ & Cloze Test)

		Sum of Squares	df	Mean Square	F	Sig.
Reading Comprehension in both test (MCQ & Cloze Test)	Between Groups	3437.618	2	1718.809	9.255	.000*
	Within Groups	126479.067	681	185.726		
	Total	129916.684	683			
* The mean difference is significant at the 0.05 level.						

In case of comparing the reading comprehension skill of higher secondary students in both test (MCQ Test & Cloze Test) with respect to different group of Educo-Cultural status (Low, Moderate, High), it is found from table 9 that the calculated f = 9.255, df = 2, 681 and p < 0.01. It means F is statistically significant at 0.05 level. Hence the null hypothesis is rejected and it is

concluded that there are significant differences exist among the different group of ECS in their reading comprehension skill in both test (MCQ Test & Cloze Test).

Table 10: Multiple Comparisons: Reading Comprehension _ both test ((MCQ & Cloze Test): Post Hoc Test (LSD)							
Dependent Variable	(I) Level of Educo-Cultural Status	(J) Level Of Educo-Cultural Status	Mean Difference (I-J)	Std. Error	Sig.*	95% Confidence Interval	
						Lower Bound	Upper Bound
Reading Comprehension in both test (MCQ & Cloze Test)	Low	Moderate	-4.79754*	1.31449	.000	-7.3785	-2.2166
		High	-6.21896*	1.54621	.000	-9.2549	-3.1831
	Moderate	Low	4.79754*	1.31449	.000	2.2166	7.3785
		High	-1.42141	1.28791	.270	-3.9502	1.1073
	High	Low	6.21896*	1.54621	.000	3.1831	9.2549
		Moderate	1.42141	1.28791	.270	-1.1073	3.9502
* The mean difference is significant at the 0.05 level.							

From the results so far, it was found that there were statistically significant differences between the groups as a whole. To determine which group is different from others, Post Hoc Test (LSD) was conducted and it is found from table 10 that mean difference between Low status and Moderate status is 4.79754 and Low status and high status is 6.21896, the p values are < 0.01 which are significant at 0.05 level. So it is concluded that students with low ECS is significantly different from the students with moderate and high ECS in their reading comprehension skill in both test (MCQ Test & Cloze Test).

FINDINGS OF THE STUDY

1. In the performance of reading comprehension in First Language through MCQ Test, students with Low ECS is different from the students with Moderate and High ECS and the mean scores of students with Moderate and High ECS are better than students with Low ECS.

And it is also found that students with Moderate and High ECS differ significantly from each other, and the mean score students with High ECS is better than students with Moderate ECS.

2. In the performance of reading comprehension in First Language through Cloze Test, students with Low ECS is different from the students with Moderate and High ECS and the mean scores of students with Moderate and High ECS are better than students with Low ECS, where as students with Moderate and High ECS do not differ from each other.

3. In the performance of reading comprehension in First Language through both test (MCQ Test & Cloze Test), students with Low ECS is different from the students with Moderate and High ECS and the mean scores of students with Moderate and High ECS are better than students with Low ECS, whereas students with Moderate and High ECS do not differ from each other.

DISCUSSION

The differential analysis shows that the Educo-Cultural Status (ECS) influences the achievement of Reading comprehension. The students of the three different categories with low, moderate and high ECS are compared on the basis of their mean scores. The students with high ECS seem to score higher in Reading comprehension than the other two categories.

Students with high ECS leads to greater availability of reading sources. The exposure of education of their family, locality and school environment give an opportunity to access all the facilities and materials. Self study habit, library using and reading different types of books out of their syllabus, make a vocabulary bank of such kind of students. It is seen that the reading skills of children depended mostly on ECS. When there is high ECS, there may be a possibility of getting more educational oriented appliances such as computer, smart phone, news paper, story books, library access etc. In such families one can expect very good support and motivation for higher studies. Thus it may be concluded that, students from high Educo-cultural status families are found to do better in Reading comprehension.

The population of the study comprises pupils of standard XII studying in government-aided institutions. All such institutions have parallel structure, similar mode of teaching, similar mode of examinations etc. Therefore the expected linguistic differences in the students of different ECS may get nullified because of the ambience of the school from where they get education.

That is why Reading attitude, reading habit may be the same for all. In the same way Cognitive style is also not influenced by ECS of family. Thus it may be concluded, that in the case of different ECS of family may create the differences in reading comprehension in first language.

CONCLUSION

The present study may create awareness among the language experts as well as teachers about the present scenario of reading comprehension skill in first language (Bengali). The findings and discussion may create an consciousness for designing different programmes towards developing the style and techniques of reading, suitable for the students to make it joyful, pleasurable and purposeful work at different levels of education.

REFERENCES

- Baier, Rebecca J. (2005). *Reading Comprehension And Reading Strategies,* Research Paper, University of Wisconsin-Stout.

- Bernstein K. Deena and Tiegerman. (1989). *Language and Communication* Disorders, Second edition, Merrill Publishing Company, United States of America.

- Bernstein, Basil. (2003). *Class, Codes and Control* Volume- I. Routledge, London.
- Helfeldt, J. P., Henk, W. A. & Fotos, A. (1986). *A Test of Alternative Cloze Test Formats at the Six-Grade Level.* Journal of Educational Research. Vol.79.4: 216-221.

- Deepa, P. (2005). *Certain Psychological Variables As Predictors Of Reading Comprehension In English Of Secondary School Pupils Of Kerala*, Ph.D. Thesis, Department of Education, University of Calicut.

- Kaul,Lokesh. (2012). *Methodology of Educational Research*, Fourth Edition. Vikas Publishing   House Pvt. Ltd. New Delhi.

- Sharma, I. S. (Ed.). (1993). *On Language Comprehensibility*, NCERT.

- Shermila, A. Joycilin, *A Study Of Skills Of Reading Comprehension In English Developed By Students Of Standard IX In The Schools In Tuticorin District,* Ph.D. Thesis. Manonmaniam Sundaranar University, Tirunelveli.

- Lamare, Rubynia. *A study of academic achievement in relation to some psycho-social variables of secondary school students in east Khasi hills district, Meghalaya*. Retrieved from http://shodhganga.inflibnet.ac.in:8080/jspui/handle/10603/5323

- Patchara, Wonghiramsombat. *The C-Test and the MC-Test*. (n.d). Retrieved from https://www.tci-thaijo.org/index.php/tureview/article/viewFile/40741/33757

- *Socioeconomic background modulates cognition–achievement relationships in reading.* (n.d). Retrieved from file:///C:/Users/admin/ Downloads/ Socioeconomic_ Background_ Modulates_ Cogni.pdf