

EFFECT OF LEARNING ANXIETY ON EFFORT IN LEARNING OF HIGHER SECONDARY STUDENTS

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Abstract : The present study was constructed to inquire the effect of learning anxiety on effort in learning of higher secondary schools students in West Bengal. The study population consists of all higher secondary schools in West Bengal. The sample for the present investigation is made by selecting almost 743 higher secondary school students using the random sampling method from the target population. Vishal Sood and Arti Anand's 'Educational Anxiety Inventory' and self made effort in learning scale for students are used to collect the data. Mean, standard deviation, t-test, analysis of variance have been used by the researchers for analysing and interpretation of data. The study showed that, significant effect exist on any level of learning anxiety (viz. low, moderate and high) exists on the means of students' effort in learning. The study also shows that rural students are significantly different from urban students in respect to learning anxiety and effort in learning.

IndexTerms – Effort in Learning, Learning Anxiety

1: Introduction:

Anxiety means tension, nervousness or uneasiness considered by uncertainty, fear or dread about something which is basically unidentified or unrecognized by the human being; it may consist in unrelenting apprehensions of upcoming events as well as in comprehensive emotional reactions to any decision (Good, 1973). According to Breuer (1999) anxiety is one of the most extensively experienced emotion and one of the most important constructs of all human behaviour. Researchers in general have the same opinion that learning anxiety is not always awful. A middling level of anxiety is valuable in maintenance people motivated and also useful for people in having a more sustainable life (Kahan, 2008, Daghighi, & Bahrami, 2010 and Donnelly, 2009). With no anxiety the majority of the people would lack of motivation to do anything in life. So, the moderate level of learning anxiety is crucial to encourage students to study for enhanced achievements. Effort is an internal and unstable factor over which the learner can exercise a great deal of control. Studies of student effort also propose that effort is connected with the possibility of doing healthy on a task. Thus, students capacity expected to figure out what they necessitate to study, study it, and be doing well—if they have the ability to do the assigned task, confidence in this ability, and no anxiety about the task. Effort is a multi-dimensional conception, and a excellent indicator of effort should consist of measures of a broad range of tasks and expectations. The researchers have been observed that a high level of anxiety affect with concentration power and memory. In this purpose we can say that high learning anxiety may be one of the barriers to educational achievement. Mattoo, & Nabi, (2012) concluded that if we are concerned about students' performance, learning anxiety cannot be ignored at any cost. Hutchinson (2007) indicated that cognitive anxiety may not be the major determinant of the effort and performance changes observed. At last, the results recommended that other individual difference variables may play a significant part in determining the degree to which individuals may be capable to make use of anxiety-induced effort. Huberty (2009) proposed that the consequences of chronic test anxiety such as low level self- esteem may lead to reducing effort and motivation for school tasks. McMahan (1973) concluded that anxiety is the significant cause to reducing effort.

1.1: Objectives of the study:

- To find out the effect of learning anxiety on effort in learning of higher secondary school students.
- To differentiate students learning anxiety according to location of school (urban and rural).
- To differentiate the students effort in learning according to location of school (urban and rural).

1.2: Hypotheses of the study:

H₀₁: There is no significant effect of learning anxiety on effort in learning of higher secondary students.

H₀₂: There is no significant difference between learning anxiety of urban and rural higher secondary students.

H₀₃: There will be no significant difference between effort in learning of urban and rural higher secondary students.

2. Methodology of the study:

2.1. Variables

2.1.1: Major variables: learning anxiety and Effort in learning.

2.1.2: Categorical variables: location of school (urban and rural).

2.2. Population

All the Higher secondary school students in West Bengal under West Bengal Board of Higher Secondary Education (W.B.C.H.S.E) are the population in the study.

2.3. Sample and sampling procedure

For the present study the researcher was used random sampling method for data collection. Data for this preliminary analysis were collected from 743 high school students attending four different high schools in West Bengal. Of these 743 students 426 (57.3%) students are choosing from urban schools and 317 (42.7%) students are choosing from rural schools

2.4. Tools of the study

In this study, the researchers had used two types of tools i.e.-

- To measure the student's learning anxiety the researcher has been using Vishal Sood and Arti Anand's 'Educational Anxiety Inventory'. In the present study researcher developed Bengali version learning anxiety scale (BLAS) and the reliability of the scores was computed by using Cronbach's Alpha and was found to be 0.788.
- In this study to measure students' effort in learning, the researcher developed an effort in learning scale for students. This scale has 26 items; these items were in five dimensions of students' efforts in learning i.e. learning strategies, student's awareness, learning activities, motivation and students engagement. Reliability of the scale was computed by Cronbach's Alpha through SPSS 22.0 version and the reliability was found 0.72.

3. Analysis and Interpretation

3.1: Testing H_0

H_0 : There is no significant effect of learning anxiety on efforts in learning of higher secondary students.

Table: 3.1: BLAS level wise descriptive statistics of SEL

Variable	Level of BLAS	N	Mean	Std. Deviation	Std. Error
Effort in Learning	Low	254	92.44	9.189	0.576
	Moderate	254	95.57	9.726	0.610
	High	235	95.70	8.647	0.564
	Total	743	94.54	9.323	0.342

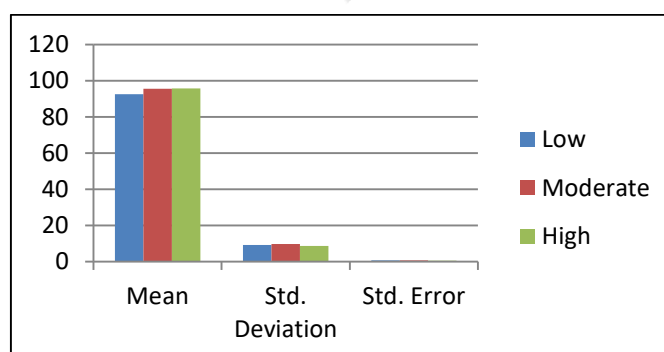


Figure: 3.1: BLAS wise multiple comparison of SEL

Table: 3.2: Effect of BLAS on SEL

		Sum of Squares	df	Mean Square	F	Sig.
Effort in Learning	Between Groups	1706.601	2	853.300	10.055	0.000
	Within Groups	62797.548	740	84.862		
	Total	64504.148	742			

Table 3.2: depicts that the computed value of $F_{(2,740)} = 0.532$ and $p = 0.000$ which is less than 0.01 ($p < 0.01$). Hence, it should be taken as significant at 0.01% level of significance. Consequently we have to rejecting the null hypothesis and concluded that significant effect of any level of learning anxiety (viz. low, moderate and high) exists on the means of students' effort in learning. Let us further test to find out where this difference exists. Table 3.1 also shows that the mean of low level of learning anxiety (92.44) is less than and the mean of moderate level of learning anxiety (95.57) and mean of high level learning anxiety (95.70). The table also shows that the mean of high level learning anxiety (95.70) is slightly higher than mean of moderate level of learning anxiety (95.57). The mean difference of learning anxiety level according effort in learning is presenting in figure: 4.6.

Table 3.3: Multiple comparison of BLAS level_SEL

Dependent Variable				Mean Difference (I-J)	Std. Error	Sig.
Effort in Learning	LSD	Low	Moderate	-3.13*	0.817	0.000
		Low	High	-3.26*	0.833	0.000
		Moderate	High	-0.13	0.833	0.875

*significant at 0.01 level of significance

- The **Post Hoc Tests** shows that the difference in the scores of effort in learning according the mean of low level learning anxiety (92.44) and mean of moderate level of learning anxiety (95.57) is -3.13 which is found significant at 0.01 level since the $p = 0.000$ which is less than 0.01 ($p < 0.01$).
- The **Post Hoc Tests** shows that the difference in the scores of effort in learning according the mean of low level learning anxiety (92.44) and mean of high level learning anxiety (95.70) is -3.26 which is found significant at 0.01 level since the $p = 0.000$ which is less than 0.01 ($p < 0.01$).
- The **Post Hoc Tests** shows that the difference in the scores of effort in learning according the mean of moderate level of learning anxiety (95.57) and mean of high level learning anxiety (95.70) is -1.13 which is found not significant at 0.05 level since the $p = 0.000$ which is higher than 0.05 ($p < 0.05$).

3.2: Testing $H_{03.2}$

$H_{03.2}$: There is no significant difference between learning anxiety of urban and rural higher secondary students.

Table: 3.4: Descriptive Statistics of BLAS _ Location of school

Variable	Location of school	N	Mean	Std. Deviation	Std. Error Mean
Learning Anxiety	Urban	426	136.305	15.1634	0.7347
	Rural	317	131.893	13.3441	0.7495

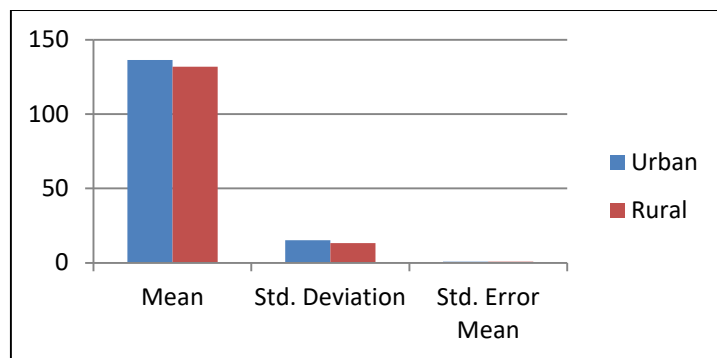


Figure: 3.2: Multiple comparison of BLAS _ Location of school

Table: 3.5: Independent sample test of BLAS _ Location of school

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Learning Anxiety	Equal variances assumed	5.423	0.020	4.126	741	0.000	4.412	1.0693
	Equal variances not assumed			4.204	720.45	0.000	4.412	1.0495

While to compare the rural and urban students learning anxiety, it is seen from the analysis of table 3.5 that in case of Levene's test for equality of variances the p value is 0.020, which is less than 0.05 ($p < 0.05$) so, homogeneous variance cannot be assumed. Table 3.5 also shows that in case of learning anxiety between rural and urban secondary school students the calculated $t_{(720.45)}$ value is 4.204 and 'p' value is 0.000, which is less than 0.01 ($p < 0.01$). Hence, 't' is significant at 0.01 level and $H_03.2$ is rejected. So, it can be said that rural students are significantly different from urban students in respect to learning anxiety. In that context of mean scores (table 3.4 and figure 3.2), it was found that the mean scores of rural students learning anxiety (131.893) is lower than the urban students learning anxiety (136.305). It is concluded that urban students have higher learning anxiety than the rural students.

3.3: Testing $H_03.3$

$H_03.3$: There is no significant difference between efforts in learning of urban and rural higher secondary students.

Table: 3.6: Descriptive Statistics of SEL _ Location of school

Variable	Location of school	N	Mean	Std. Deviation	Std. Error Mean
Effort in Learning	Urban	426	95.305	8.944	0.433
	Rural	317	93.526	9.731	0.546

Figure: 3.3: Multiple comparison of SEL _ Location of school

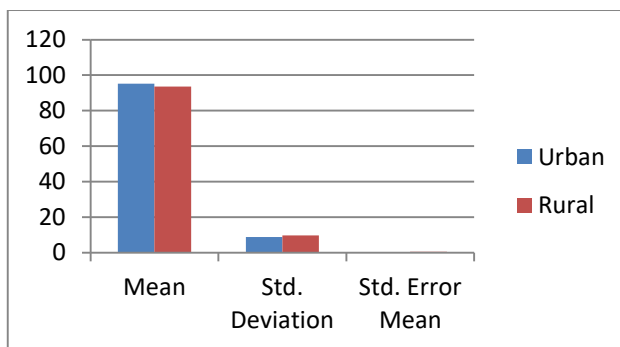


Figure: 3.3: Multiple comparison of SEL _ Location of school

Table: 3.7: Independent sample test of SEL_ Location of school

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Effort in Learning	Equal variances assumed	2.059	0.152	2.581	741	0.010	1.778	0.6889
	Equal variances not assumed			2.549	647.84	0.011	1.778	0.6975

While to compare the rural and urban students effort in learning, it is seen from the analysis of table 3.7 that in case of Levene's test for equality of variances the p value is 0.152, which is higher than 0.05 ($p > 0.05$) so, homogeneous variance can be assumed. Table 3.7 also shows that in case of effort in learning between rural and urban secondary school students the calculated $t_{(741)}$ value is 2.581 and 'p' value is 0.010, which is less than 0.05 ($p < 0.05$). Hence, 't' is significant at 0.05 level and H_0 is rejected. So, it can be said that rural students are significantly different from urban students in respect to effort in learning. In that context of mean scores (table 3.6 and figure 3.3), it was found that the mean scores of rural students effort in learning (93.526) is lower than the urban students effort in learning (95.305). It is concluded that urban students have higher effort in learning than the rural students.

4. Major Findings:

- The study indicated that significant effect of any level of learning anxiety (viz. low, moderate and high) exists on the means of student's effort in learning. The study also shows that the mean of low level of learning anxiety (92.44) is less than and the mean of moderate level of learning anxiety (95.57) and mean of high level learning anxiety (95.70) but the mean of high level learning anxiety (95.70) is slightly higher than mean of moderate level of learning anxiety (95.57). The Post Hoc Tests shows that the difference in the scores of effort in learning according the mean of low level of learning anxiety (92.44) and mean of moderate level of learning anxiety (95.57) is -3.13 which is found significant at 0.01 level since the $p = 0.000$ which is less than 0.01 ($p < 0.01$). The difference in the scores of effort in learning according the mean of low level learning anxiety (92.44) and mean of high level learning anxiety (95.70) is -3.26 which is found significant at 0.01 level since the $p = 0.000$ which is less than 0.01 ($p < 0.01$). The difference in the scores of effort in learning according the mean of moderate level of learning anxiety (95.57) and mean of high level learning anxiety (95.70) is -1.13 which is found not significant at 0.05 level since the $p = 0.000$ which is higher than 0.05 ($p > 0.05$).
- According to locality rural students are significantly different from urban students in respect to learning anxiety. In that context of mean scores, it was found that the mean scores of rural students learning anxiety (131.893) is lower than the urban students learning anxiety (136.305). It is concluded that urban students have higher learning anxiety than the rural students.
- The rural students are significantly different from urban students in respect to effort in learning. In that context of mean scores it was found that the mean scores of rural student's effort in learning (93.526) is lower than the urban student's effort in learning (95.305). It is concluded that urban students have higher effort in learning than the rural students.

5. Conclusion:

Anxiety is one of the most extensively experienced emotion and one of the most important constructs of all human behavior. The present study shows that learning anxiety has significant effect on the effort in learning. This study also supported by the findings of McMahan (1973), Shui-fong, Pui-shan and Yee-lam (2008), Huberty (2009). Effort generally refers to whether a student tries hard and participates in the class. Studies on student's effort suggest that the more difficult a task appears—in the sense of the task's difficulty and the likelihood that the student can complete it successfully the less likely it is that the student will be motivated to take the task on. On the other hand, studies on student's effort also suggest that effort is associated with the possibility of doing a task well. Thus, students might be expected to figure out what they need to study. Anxiety has no significant effect on the students who are intrinsically motivated and put their best efforts in their learning and other activities. So, here, the responsibility of teachers is to motivate and guide students' effort towards the right path of success.

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