SCHOOL ENVIRONMENT FACTORS AFFECTING STUDENTS’ ACHIEVEMENT IN MATHEMATICS IN SECONDARY SCHOOL STUDENTS

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ABSTRACT:
The purpose of this study was to examine School Environment Factors Affecting Students’ Achievement in Mathematics in secondary school students. For this purpose the investigator constructed a 3 point Likert’s scale on “School Environment” containing three dimensions (School library, Teaching Strategy of Teacher, Peers Adjustment) to collect the data. The researcher has selected one secondary school [Model School, Domkol] of class VIII in urban area in Murshidabad district. Stratified random sampling has been collected data from 20 students (10 boys & 10 girls) for the study. School Environment Factors i.e. School library, Teaching Strategy of Teacher, Peers Adjustment are affected on students’ achievement in Mathematics in secondary school students.

KEYWORDS: Achievement Test, Demonstration method, Lecture Method, Rural Areas.

INTRODUCTION:
Environment, according to Webster’s comprehensive dictionary, can be defined as the sum total of all surrounding of a living organism, including natural forces and other living things which provide conditions for development and growth as well as of danger and damage. Natural impact before now has not been considered as one of the variables that influence scholarly execution in optional schools thus it has practically no consideration in instructive talk and thought. In any case, throughout the most recent decade, surprising investigations have shown a connection between the earth and scholarly execution of understudies. As per (Chukwuemeka, 2013) situations assume significant jobs in the life of each individual whether an understudy, educator, manager or worker. The challenge of education today is to offer experiences that provide students with opportunities to develop the understanding, skills, and attitudes necessary to become lifelong learners, capable of identifying and solving problems and dealing with change.

STATEMENT OF THE PROBLEM:
School Environment Factors Affecting Students’ Achievement in Mathematics in secondary school students.

OBJECTIVES:
i) To examine the factor of school environment (School library, Teaching Strategy of Teacher, Peers Adjustment) affecting students’ achievement in Mathematics in secondary school students.

HYPOTHESES:
H01: There is no significant effect of School library on students’ mathematics achievement.
H02: There is no significant effect of Teaching Strategy of Teacher on students’ mathematics achievement.
H03: There is no significant effect of Peers Adjustment on students’ mathematics achievement.

METHODOLOGY:
In this present study, the investigator has followed the Normative Survey design of ex-
post facto type.

**Sample:**

Stratified random sampling has been collected data from 20 students (10 boys & 10 girls) for the study. The researcher has selected one secondary school [Model School, Domkol] of class VIII in urban area in Murshidabad district. The marks of Mathematics of the mention 20 students has collect from office register.

**Tool:**

For this purpose the investigator has constructed a self developed *Questionnaire on School Environment* containing School library, Teaching Strategy of Teacher, Peers Adjustment dimensions.

**Data Analysis:**

**Table-1**

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
</table>

**Interpretation:**

From the above table the t value is 2.459. The p value (Sig.) =0.024 is less than 0.05. And the number zero is not belongs to in the upper and lower limit of 95% confidence interval. And the upper and lower limit are same in sign. They are both positive. From the above discussion, the test is significant at 0.05 levels. Therefore $H_0$ is rejected. So the final hypothesis is

There is significant effect of School library on students’ mathematics achievement.

**Graph-1:** Bar-diagram showing significant effect of School library on students’ mathematics achievement.
Table-2
Paired Samples Correlations

<table>
<thead>
<tr>
<th>Pair 1</th>
<th>N</th>
<th>Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scores of Mathematics &amp; Sc.Library</td>
<td>20</td>
<td>.561*</td>
<td>.010</td>
</tr>
</tbody>
</table>

*Correlation is significant at 0.05 levels.

Table-3
Significant effect of Teaching Strategy of Teachers on students' mathematics achievement.

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>Lower</th>
<th>Upper</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scores of Mathematics &amp; Teaching Strategy of Teachers</td>
<td>1.300</td>
<td>2.577</td>
<td>.576</td>
<td>.094</td>
<td>2.506</td>
<td>2.256</td>
<td>19</td>
<td>.036</td>
<td></td>
</tr>
</tbody>
</table>

Interpretation:
From the above table the t value is 2.256. The p value (Sig.) =0.036 is less than 0.05. And the number zero is not belongs to in the upper and lower limit of 95% confidence interval. And the upper and lower limit are same in sign. They are both positive. From the above discussion, the test is significant at 0.05 levels. Therefore H₀machine learning is rejected. So the final hypothesis is
There is significant effect of Teaching Strategy of Teachers on students' mathematics achievement.

Graph-2:Bar-diagram showing significant effect of Teaching Strategy of Teachers on students' mathematics achievement.
### Table-4
**Paired Samples Correlations**

<table>
<thead>
<tr>
<th>Pair 1</th>
<th>Scores of Mathematics &amp; Teaching Strategy of Teachers</th>
<th>N</th>
<th>Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>20</td>
<td>.585*</td>
<td>.007</td>
</tr>
</tbody>
</table>

*Correlation is significant at 0.05 levels.

### Table-5
**Significant effect of Peers Adjustment on students' mathematics achievement.**

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1 Scores of Mathematics &amp; Peers Adjustment</td>
<td>2.000</td>
<td>2.865</td>
<td>.641</td>
<td>.659</td>
<td>3.341</td>
<td>3.121</td>
<td>19</td>
</tr>
</tbody>
</table>

**Interpretation:**

From the above table the t value is 3.121. The p value (Sig.) = 0.006 is less than 0.05. And the number zero is not belongs to in the upper and lower limit of 95% confidence interval. And the upper and lower limit are same in sign. They are both positive. From the above discussion, the test is significant at 0.05 levels. Therefore H$_{03}$ is rejected. So the final hypothesis is

There is significant effect of Peers Adjustment on students' mathematics achievement.

Graph-3: Bar-diagram showing significant effect of Peers Adjustment on students' mathematics achievement.
Table-6
Paired Samples Correlations

<table>
<thead>
<tr>
<th>Pair 1</th>
<th>N</th>
<th>Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scores of Mathematics &amp; Peers Adjustment</td>
<td>20</td>
<td>.479*</td>
<td>.033</td>
</tr>
</tbody>
</table>

*Correlation is significant at 0.05 levels.

DISCUSSION:
From the above discussion School Environment Factors i.e. School library, Teaching Strategy of Teacher, Peers Adjustment are affected on students' achievement in Mathematics in secondary school students.

FINDING:
- There is significant effect of School library on students' mathematics achievement.
- There is significant effect of Teaching Strategy of Teachers on students' mathematics achievement.
- There is significant effect of Peers Adjustment on students' mathematics achievement.

CONCLUSION:
There are many factor in School Environment Affecting Students' Achievement. But the researcher has taken three factor (School library, Teaching Strategy of Teacher, Peers Adjustment). And the three factor are heavily affected students achievement.

REFERENCES:
- www.researchgate.net/publication/315767454_Factors_Affecting_Students'_Academic_Achievement_in_Zimbabwe's_Rural_Secondary_Schools_A_Case_Study_of_Marimasimbe_Secondary_School_in_Jiri_Community.