Test Anxiety Between Xth Standard Students In Traditional And Digital Classrooms

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ABSTRACT

The present study aims at analysing the test anxiety levels among the Xth Std students who are studying for the CBSE Board Exams of different schools. It is a comparative study of students studying in Smart Classrooms and in traditional schools. Education plays a vital role in an individual’s overall development. Various methods of teaching are adapted to help students learn better. ‘Digital Learning’ and ‘Smart Classrooms’ were one such method using technology. It was first introduced in the United States of America and then was brought to the CBSE, ICSE and IGCSE schools in India with the intention of making learning easy, enjoyable and for the improvement of academic performance among students. Examinations are a part of academic life. Anxiety is the subjectively unpleasant feelings of dread over anticipated events, such as the examinations. Test anxiety is common among adolescence appearing for an exam. Exploratory research design method was adopted for this present study. A sample of 200 Xth Std (CBSE) students were selected using a simple random sampling technique. The students were all in the adolescence age group of 15 to 17 years. One Hundred students went to schools with smart classes and the rest studied in traditional schools. ‘Test Anxiety Questionnaire’ by Nist and Diehl (1990) was used to test the test anxiety of the adolescents. The statistical analysis using t-test was done. The results showed no significant difference in the levels of anxiety among the students of both the groups.

KEYWORDS : Test Anxiety, Smart Classrooms, Digital Classrooms, Adolescence.

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INTRODUCTION

Education is a fundamental right in India. According to the Press information Bureau, over 3.5 million children from the age group of 6-14 years have enrolled in schools. Education in India is provided by the private and public sectors and have different levels of syllabus. They include the state/matriculation syllabus, CBSE, ICSE and IGCSE syllabus. Over the years, many attempts were made by the education sector to improve the quality of education and match with International standards. One such attempt was the Digitalisation of classrooms. It first started in the United states of America and over a decade ago, was introduced in India for the NCERT and CBSE schools. These were called Smart Classrooms, i.e, virtual learning using technology like laptops, tablets, pre recorded lectures, smartphones, digital content, etc. Despite the introduction of smart classrooms, most schools still follow the traditional methods of teaching. This is because of various reasons which include; finance, need for teachers with hands on experience with technology etc. Now, with the exams nearing, there is a lot of anxiety among students of both traditional and digital schools.

According to the American psychological association (APA), anxiety is an emotion characterised by feelings of tension, worried thoughts and physical changes like increased blood pressure. Digitalization in schools has made learning fun and easy. So now, it is important to know if it has also made an impact in the level of anxiety before/during the test. Hence, this research was conducted to identify if there was a significant difference in the level of test anxiety among students studying in digital classrooms and traditional classrooms.

REVIEW OF LITERATURE


M.O.Ogundokun - IFE PsychologyIA: An International Journal, Volume 19, Issue 2 (September 2011) Research demonstrated that learning styles school environment and test anxiety jointly predict the learning outcomes but test anxiety was the most potent predictor of learning outcome.

M.Victoria Lopez-Perez–Blended learning in higher education: Students’ perceptions and their relation to outcomes (2011) Research shows that the use of blended learning, i.e., including technology for learning, has a positive effect in reducing dropout rates and in improving exam marks.

Siu Cheung Kong–Developing information literacy and critical thinking skills through domain knowledge learning in digital classrooms: An experience of practising flipped classroom
strategy (September 2014) Research showed that students were able to develop their critical thinking and information literacy competency through digital learning.

Zweibelson - (PsycINFO Database Record (c) 2016 APA, all rights reserved) Journal of Consulting Psychology, (2016) Research showed that test anxiety is related to group test results.

George Mandler and Seymour Sarason (1952) Developed a theory which said that test anxiety was an important determinant in test performance. Those with high test anxiety performed lower than those with lower levels of test anxiety.

METHODOLOGY

Objectives

1. To find out the level of test anxiety among Xth STD students studying in digital classrooms.
2. To find out the level of test anxiety among Xth STD students studying in traditional classrooms.
3. To find out if there is any significant difference between test anxiety levels in students studying in digital classrooms and traditional classrooms.

Research Question

1. What is the level of test anxiety among Xth STD students?
2. Is there a difference in the test anxiety levels among students studying in digital classrooms and traditional classrooms?

Hypothesis

1. There will be no significant difference in the levels of test anxiety among Xth STD students of digital classrooms and traditional classrooms.

Research Design

Survey research method was used to study the difference between Test Anxiety Levels among adolescence studying in smart classrooms and traditional classrooms.

Sample

A total number of 200 adolescents who study in Xth STD CBSE schools in Chennai were taken for the study.

From the sample, 100 studied in traditional classrooms and the rest 100 studied in smart classrooms.

The technique used to collect samples for this study was convenient sampling technique which is a form of non probability sampling method.
ASSESSMENT TOOLS

Questionnaire

Test Anxiety Questionnaire developed by Nist and Diehl (1990), is a 10-item measuring using a five-point Likert scale. It contains questions such as “My mind goes blank during a test” and “I have trouble choosing answers”.

Reliability and Validity

A reported Cronbach’s alpha value of .9 (Ogundokun, 2011) indicated good reliability.

Scoring

The questionnaire measures low, moderate or higher level of test anxiety among adolescence. The Higher the score, the greater the test anxiety is and vice versa.

Statistical Test

T-test is used to examine the difference between Test anxiety levels among students studying in digital classrooms and traditional classrooms. SPSS version 20.

STATISTICAL ANALYSIS

Results

<table>
<thead>
<tr>
<th>Variables</th>
<th>Nature of Sample</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Standard Error Mean</th>
<th>t ratio**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart Classroom</td>
<td>Smart School Students</td>
<td>100</td>
<td>21.21</td>
<td>7.016</td>
<td>702</td>
<td>-4.287</td>
</tr>
<tr>
<td>Traditional Classroom</td>
<td>Traditional School Students</td>
<td>100</td>
<td>25.43</td>
<td>6.904</td>
<td>690</td>
<td>-4.287</td>
</tr>
</tbody>
</table>

** = significance at 0.01 level

The mean score of students studying in Smart classrooms and traditional classrooms is 21.21 and 25.43 respectively. The obtained t ratio was found to be -4.287, which implies that there is a high significant difference in test anxiety levels of students studying in digital schools and in traditional schools.

Hence the null hypothesis that there will be no significant difference between the levels of test anxiety levels of Xth STD students studying in Digital schools and Traditional schools is not accepted.
Table 2: Total number of adolescents who study in traditional classrooms and digital classrooms and their respective test anxiety levels.

<table>
<thead>
<tr>
<th>Test Anxiety Level</th>
<th>Digital Classroom</th>
<th>Traditional Classroom</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>46</td>
<td>20</td>
<td>66</td>
</tr>
<tr>
<td>Moderate</td>
<td>52</td>
<td>74</td>
<td>126</td>
</tr>
<tr>
<td>High</td>
<td>2</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>200</td>
</tr>
</tbody>
</table>

From table 2 it is clear that out of the 100 students who study in digital classrooms, the majority, 52% have moderate levels of test anxiety, 46% of them have low levels and 2% have high levels of test anxiety.

However, among the 100 students studying in traditional classrooms, 6% have high levels of test anxiety where as 74%, fall under the moderate level and 20% have low levels of test anxiety. Hence, from the table, it is observed that more students from digital classrooms have lesser levels of test anxiety levels and more students from traditional schools have higher levels of test anxiety.

**DISCUSSION**

This study reveals that there is a very high positive difference between the test anxiety levels of students studying in digital classrooms and those studying in traditional classrooms. The introduction of digitalisation in schools has helped children lower their test anxiety levels which in
turn will help in academic performance. And for those who do not study in schools with smart classrooms, can learn ways in which they can lower their stress levels during exams. Researchers George Mandler and Seymour Sarason (1952) developed a theory which said that test anxiety was an important determinant in test performance. Those with high test anxiety performed lower than those with lower levels of test anxiety. Hence, high levels of test anxiety result in negative impact on performance.

LIMITATIONS

Several limitations of the study should be noted, to provide direction for future research:

1. The sample size was only limited to 200 students; hence generalisation of results is somewhat limited. More students could be included.
2. Only CBSE board students were chosen for this study, so, other syllabus schools results may vary. Research can be extended to other types of schools (Matriculation, ICSE, etc) for a wider comparative difference.
3. Although there is a considerable amount of test anxiety among adolescence, this study has limited only to the urban population and does not include the rural.

IMPLICATIONS

The characteristic of any research is that it contributes something to the development of the area concerned. This study has implications for all people who are involved in the lives of adolescence.

The implications are as follows:

1. Test Anxiety is normal before taking a test, but if it reaches the high end, it will have a negative impact on our performance. The method of teaching has affected the levels of test anxiety in students. Hence, adopting different methods will enhance the performance of students.
2. The sample description highlights the fact that the children studying in digital classrooms feel less anxious before/during an exam and those from traditional schools experience higher levels of test anxiety. The teachers and parents of those students can work in ways to help ease the anxiousness by helping the student manage his/her fear during examinations.
3. It is important for teachers, parents and students to work on reducing feelings of fear or anxiety during examinations. This can be done through various methods such as psychological counselling, breathing and exercise techniques, planning well before exams etc.
4. Teachers can learn how to identify if their student has high test anxiety levels and intervention can be given at the earliest.

5. Schools can adopt digitalised system of teaching to help students learn in a more interactive and fun way.

CONCLUSION

1. This study shows that the levels of test anxiety among Xth STD students (CBSE) studying in traditional classrooms is higher than those studying in Smart Classrooms.

2. Researchers George Mandler and Seymour Sarason (1952) developed a theory which said that test anxiety was an important determinant in test performance. Those with high test anxiety performed lower than those with lower levels of test anxiety.

3. Hence, this study also suggests that there is an urgent need to help students with test anxiety so that their academic performance is not hindered.

REFERENCES


