Academic Performance And Achievement Motivation Of Students: Role Of School Type And Classroom Environment

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Abstract

School is the basic foundation stone of every child’s learning experiences. The purpose of the present study was to examine the role of school type and classroom environment on adolescents’ academic performance and their achievement motivation. The research adopted a 2 (school type) x 2 (classroom environment) factorial design. The sample consisted of 120 subjects of 8th and 9th standards from different Odia and English medium schools of Nayagarh district, Odisha. Results revealed that students of English medium schools had higher academic performance than Odia medium schools and students having good classroom environment secured higher percentage of marks than those with poor classroom environment. Comparison of mean scores disclosed that students of English medium schools had higher achievement motivation than Odia medium schools and also good classroom environment gives rise to achievement motivation than the poor classroom environment.

Keywords: academic performance, achievement motivation, school type, classroom environment, adolescents.

Adolescence, the dynamic stage of human development has been designated as the stage of curiosity, adventure, impulsiveness, intense emotions and elation of mood. It is the period of rapid biological, social and psychological changes. It’s a transitional phase from being a dependent child to an independent adult, where the purpose is to prepare the child for adult roles (Larson, 2004). The teens experience a wide range of physical, social, psychological and emotional changes which they had never encountered before. The hormonal changes related to puberty may result in rapid mood fluctuations, making responses to peers and adults more unpredictable.

Schools play significant roles in academic performance and achievement motivation of students. In Odisha, schools are categorised into English medium schools and Odia medium schools. In English medium schools, the means of instruction is English and Odia language is the means of instruction of Odia schools. Both have their own strengths and weaknesses. But effective schools can dynamically influence students’ academic performance and achievement motivation. In effective schools, teachers strongly emphasize academics, originate a task-oriented and student friendly atmosphere and manage discipline problems efficiently. In a study, Suvin (2009) found that private school students had higher levels of achievement in comparison to government school students.

Classroom environment is one of the learning situations where learning takes place. Generally, it is designed by the school, the teachers and peers. It has both physical elements and human elements which can be termed as the psycho-social dimensions of classroom environment. Physical elements involve physical environment like; blackboard, furniture, space, lighting etc., whereas human elements contain teacher-student communication, interaction among students etc. A good classroom environment often nurtures student’s achievement. A classroom climate, which is optimistic and where students feel safe, secure and comfortable is more likely to improve academic performance of children. However, there is no specific clarity about which factors cause a poor classroom environment. So it can be held that the environment which makes children feel insecure, uncomfortable and inhibited in any way for any reason, it can be specified as a poor classroom climate. Good classroom climate safeguards effective and successful teaching learning process. Students acquire more information in optimistic classroom settings and thus exhibit good performance. In a study, MacAulay (1990) and Walker et al. (1995) observed that a well-structured classroom can enhance students’ academic and
behavioural outcomes. Haertel et al., (1981) pointed out students’ perceptions of classroom environment as an important factor that show some aspects of students’ outcomes i.e., achievement motivation and satisfaction. Kausar et al., (2017) observed that a well-managed and vibrant classroom environment has a positive effect on academic achievement of students. On the other hand, Pandy and Pratap (2001) stated that no difference was found in achievement motivation and educational achievement.

Achievement motivation is a popular concept in the field of motivation. It is the desire to accomplish difficult tasks and to excel. So it can be said that achievement is the result of what an individual has learned from educational and family experiences. Globally, there has been an increasing concern regarding optimizing students’ learning at schools. In other words, there is a strong need to promote academic excellence of the students. Achievement goals can affect the way a person performs a task and represent a desire to show competence (Harackiewicz et al, 1997).

Academics have always received maximum priorities during childhood and adolescence. Now-a-days parents are developing a strong tendency of competition and comparison of their children with the children of the same class. Parents have very high aspirations regarding the future of their children and so they get involved in children’s academic activities to a greater extent in order to increase academic performance.

Now-a-days due to the advancement of modern technologies and social media, adolescents are able to know many more things that they might not be expected to know at their age and getting diverted from their paramount aims of life. Since it is already a stormy period of life, combined with physical maturity and psychological irresponsibility, they easily get distracted even by minor factors. The present study is an attempt to yield further knowledge in the area of school type, classroom environment, academic performance and achievement motivation of adolescents. This will help us to identify the role of school type and classroom environment to shape students’ academics and if required, accordingly intensive intervention strategies can be programmed and implemented to promote academic performance among them.

Objectives
1. To study the role of school type on academic performance and achievement motivation of adolescents.
2. To probe into the effect of classroom environment on adolescent’s academic performance and their achievement motivation.
3. To assess the interaction effect of school type and classroom environment on academic performance and achievement motivation among adolescents.

Design
The study was based on a 2 (school type) x 2 (classroom environment) factorial design with independent variables being the school type (English medium and Odia medium) and classroom environment (good classroom environment and poor classroom environment) of the school students. The dependent measures were academic performance and achievement motivation.

Sample
The sample consisted of 120 school students. There were 60 subjects in the English medium school group and 60 subjects in the group of Odia medium. In each group there were 30 students from good classroom environment and 30 from the poor classroom environment. All of them were in 8th and 9th standards. Subjects were randomly selected from different English and Odia medium schools of Nayagarh district, Odisha.

Tools
In this study two tests were used to measure the independent variable and dependent variable namely, the classroom environment and achievement motivation. In addition to this, their percentage of marks in the last final examination was taken as the indicator of their academic performance.
1. My Class Inventory (Fisher and Fraser, 1981)

This scale consisted of 25 items related to the classroom environment. Each statement was meant to describe what the actual classroom was alike. The subjects were asked to circle ‘Yes’ if they agree with the statement or ‘No’ if they do not agree with the statement. The items included 20 affirmatives and 5 negative statements. The affirmative items were scored by allocating ‘3’ for Yes and ‘1’ for No. The negative items were scored in reverse manner. The maximum possible score in the scale was 75. As a result, subjects were likely to earn a higher score if they had a good classroom environment.

2. Achievement Motivation Test (Rao, 1974)

The test was suitable for secondary school students of both sexes. There were 20 incomplete sentences, each of which was followed by two possible alternatives A and B, out of which one was achievement-related item. Though both alternatives were achievement-oriented and socially acceptable, yet one of them implied a higher sense of achievement and excellence. The students had to indicate the alternative they mostly preferred. Generally 8-10 minutes were required to complete the test. The reliability and validity of the test were 0.79 and 0.25 respectively.

Procedure

After taking prior permission from the principal, the researcher approached the subjects in the school campus according to their convenience. The very purpose of the research was explained and they were assured of the confidentiality of data. Adequate amount of rapport was established before administering the questionnaires.

Results

The primary purpose of the present study was to find out the role of school type and classroom environment on academic performance and achievement motivation of adolescent students. Test scores of both types of schools from good and poor classroom environments were statistically analysed by Means, Standard Deviations and ANOVA. Results are given below.

Table- 1

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>School type</td>
<td>11870.48</td>
<td>1</td>
<td>11870.48</td>
<td>66.58***</td>
</tr>
<tr>
<td>Classroom environment</td>
<td>885.22</td>
<td>1</td>
<td>885.22</td>
<td>4.96*</td>
</tr>
<tr>
<td>School type x Classroom environment</td>
<td>508.24</td>
<td>1</td>
<td>508.24</td>
<td>2.85</td>
</tr>
<tr>
<td>Error</td>
<td>20680.66</td>
<td>116</td>
<td>178.28</td>
<td></td>
</tr>
</tbody>
</table>

*p <0.05, ***p <0.001

Results in Table-1 showed that there was significant main effect of school type on academic performance of the subjects, F (1, 116) = 66.58, p <.001. Classroom environment also had a significant effect on the variable, F (1, 116) = 4.96, p <.05. But school type x classroom environment interaction effect was not found to be significant on academic performance of the subjects, F (1, 116) = 2.85, p >.05.

Table- 2

Mean and SD of academic performance scores of the subjects

<table>
<thead>
<tr>
<th>School Type</th>
<th>Classroom Environment</th>
<th>Combined</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Good classroom environment</td>
<td>Poor classroom environment</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>English medium</td>
<td>87.02</td>
<td>77.47</td>
<td>82.09</td>
<td>11.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odia medium</td>
<td>63.00</td>
<td>61.68</td>
<td>62.37</td>
<td>15.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Combined</td>
<td>74.61</td>
<td>69.84</td>
<td>72.23</td>
<td>16.83</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Mean scores in Table-2 revealed that students of English medium school (M=82.09) had higher academic performance than Odia medium school (M=62.37) indicating that English medium school scored higher percentage of marks than Odia medium school. Comparison of mean scores revealed that students having good classroom environment (M=74.61) achieved more marks in academics than those with poor classroom environment (M=69.84).

**Figure 1 Showing the Mean score on academic performance of English medium school and Odia medium school**

![Mean score comparison between English and Odia medium schools](image)

**Figure 2 Showing the Mean score on academic performance of good classroom environment and poor classroom environment**

![Mean score comparison between good and poor classroom environments](image)

**Table- 3**

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>School type</td>
<td>1169.63</td>
<td>1</td>
<td>1169.63</td>
<td>31.96***</td>
</tr>
<tr>
<td>Classroom environment</td>
<td>256.36</td>
<td>1</td>
<td>256.36</td>
<td>7.00***</td>
</tr>
<tr>
<td>School type x Classroom</td>
<td>46.63</td>
<td>1</td>
<td>46.63</td>
<td>1.27</td>
</tr>
<tr>
<td>environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>4244.91</td>
<td>116</td>
<td>36.59</td>
<td></td>
</tr>
</tbody>
</table>

***p <0.001
Results in Table-3 indicated that there was a significant main effect of school type on achievement motivation of the subjects, $F (1, 116) = 31.96$, $p < .001$. Classroom environment had also a significant main effect on the variable, $F (1, 116) = 7.00$, $p < .001$. School type x classroom environment interaction effect, $F (1, 116) = 1.27$, $p > .05$, was not found to be significant on achievement motivation of the subjects.

### Table- 4
Mean and SD of achievement motivation of the subjects

<table>
<thead>
<tr>
<th>School Type</th>
<th>Classroom Environment</th>
<th>Combined</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Good classroom</td>
<td>Poor classroom</td>
</tr>
<tr>
<td></td>
<td>environment</td>
<td>environment</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>English medium</td>
<td>53.17</td>
<td>5.86</td>
</tr>
<tr>
<td>Odia medium</td>
<td>45.67</td>
<td>7.18</td>
</tr>
<tr>
<td>Combined</td>
<td>49.30</td>
<td>7.54</td>
</tr>
</tbody>
</table>

Mean scores in Table-4 revealed that students of English medium school (M=51.01) had higher achievement motivation than students of Odia medium school (M=44.86). Comparison of mean scores revealed that students having good classroom environment (M=49.30) had higher achievement motivation than those with poor classroom environment (M=46.58).

**Figure 3 Showing the Mean score on achievement motivation of English medium school and Odia medium school**

**Figure 4 Showing the Mean score on achievement motivation of good classroom environment and poor classroom environment**
Discussion and Conclusion

The present study primarily aimed to study the role of school type and classroom environment on academic performance and achievement motivation of adolescents. Results revealed that students of English medium school had higher academic performance than Odia medium school. This may be due to the fact that English medium schools are achievement-oriented which means they focus more on students, their tasks and their performance. Regular researches are conducted on improving their education system. They impart quality education, have well-equipped labs, better infrastructural facilities, better plan of action which contribute to better standard of teaching than the Odia medium schools. These schools arrange parents-teachers meetings in order to discuss a child’s progress, to explore his/her strengths and weaknesses and to find out solutions to academic or behavioural problems, if any. The exams are conducted on regular intervals and the children’s marks and grades are taken so seriously which motivate them towards improving their academic performance. Competent and qualified teachers are appointed in English medium schools as competent teachers have the ability to recognise potentialities among students and to channelize them in a proper manner. Monthly performance of teachers is assessed and feedback is given. On the other hand, in Odia medium schools all these facilities are either not available or available to a lesser degree that stands as barrier in their way of academic advancement. English medium schools charge more fees and so they take extra care of children and of their overall development.

From the results, it was also observed that students having good classroom environment achieved more marks in academics than those with poor classroom environment. A classroom that creates a sense of belongingness, trust and encouragement enhances the self-esteem of students which leads to better mental health. Higher self-esteem and better mental health might instinctively increase the academic performance. A classroom which is stress-free, supportive, student friendly and where asking questions are always praised may ensure a good workflow and positive environment. Lack of teacher’s attention, poor teaching, uncomfortable classroom furniture, insufficient technology and etc. are probably constitute a poor classroom condition which interferes with students’ morale, motivation and productivity. All these factors might cause the variations of marks among students of the two different classroom conditions.

Type of school had a sizable impact on the achievement motivation of the adolescents as per the results. The syllabus of English medium school provides broader scope while the curriculum of Odia medium school is confined only to the state due to the language, which forms one of the major hindrances in the path of developing higher achievement motivation. The former schools prepare their students better for national level examinations whereas the latter don’t get enough scope for this. English medium schools encourage their children to interact in English, to handle challenges, and provide enough opportunities to build social skills and strategies to succeed. Students of English medium schools greet their teachers by saying “good morning” which probably minimizes the teacher-student gap. They also give as equal importance to extra-curricular activities like personality development, sports, picnic, yoga etc. as their curriculum for the overall development. Here, teacher-student ratio is emphasized and also school counsellors are appointed for assisting their students. These children get enough exposure in their learning process through power point presentation, teaching models, and the use of computers which may make the teaching materials interesting and hence strengthen their achievement motivation. Parental involvement is relatively higher among students of English medium schools. But in case of Odia schools not much parental involvement is found and even not emphasized, as the parents of most of these students are less qualified. Teachers merely focus on completing the syllabus not on extracurricular improvements of students. Students give respect by touching feet of teachers which may maximize the teacher-student gap. Students are less smart and even feel hesitate to clear their doubts. These factors may attribute to higher achievement motivation of English medium schools compared to Odia medium schools.

Results also stipulate the significant effect of good classroom environment on achievement motivation of students. A good classroom environment where each student is respected and accepted as they are, where they are treated equivalently, they feel more motivated to learn and achieve in their lives. When students will get ideas from divergent sources, obtain scopes of using a variety of learning
models, and acquire the chance of asking questions to teachers without any hesitation, it may accelerate their interest to excel. If the teachers are empathetic, understanding and concerned about the curiosity of their students by providing a healthy, interactive classroom environment, it may automatically enhance their achievement motivation. But students who are not provided such opportunities may have lower academic achievement.

However, there is no significant school type x classroom environment interaction effect on the two dependent variables, namely, academic performance and achievement motivation of the students.

Types of schools and classroom environment both remarkably contribute to students’ learning process. Because teenage is a critical life period, it is essential for parents and teachers to understand the teens and to provide them effective school and positive classroom environment. In this competitive world there is a need to prepare each student for every challenge by providing them adequate facilities and scope. This can only be possible through the selection of appropriate school which can be able to produce good classroom environment for smoothening the optimal development of adolescents. Responsible parents and teachers can protect teenagers from academic disruption. Since youths are the future of the nation, schools those who lack many advances should improve their possessions which can ultimately enhance the potentialities of the students physically and psychologically so that they can commit to national building process.

References