CLASSROOM CLIMATE AND ACADEMIC PERFORMANCE OF HIGHER SECONDARY STUDENTS

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ABSTRACT
This study focused on the relationship between classroom climate and student academic performance. Classroom climate as the intellectual, social, emotional and physical environments in which our students learn. In the present study, efforts have been made to investigate the influences of classroom climate on academic achievement of higher secondary students. Sample of four hundred students selected from various higher secondary schools located in Pudukottai District of Tamilnadu. Survey method was undertaken. Classroom climate to a certain extent has some influence on academic performance of students. Teachers could employ the maximum participation of students individually or collaboratively. Teachers could strive to create a conducive classroom climate to help students attain academic success.

Keywords: Classroom Climate; Academic Performance; Higher Secondary Students

INTRODUCTION
Climate is determined by a constellation of interacting factors that include faculty-Student interaction, the tone instructors set, instances of strew typing or tokenism, the course demographics, student-student interaction and the range of perspectives represented in the course content and materials. Quality of education has determined by the climate of the classroom. The structural and functional characteristics of classroom climate play in the smooth functioning of the class and its pupils. The physical and physiological characteristics interact to produce a climate that can be significant to both the individual and the classroom. The individual in a classroom setting becomes the environment of one another. The general atmosphere of a classroom may be characterized in many ways. That is, a classroom climate may be competitive rather than non-competitive, restrictive rather than permissive, and elitist rather than universal in orientation. These properties will express themselves the physical facilities, presence and use of instructional aids, teacher-teaching approaches, learner-learning process, teacher-pupil relationship and classroom management in a classroom.

Definition of Classroom Climate
A classroom climate refers to a composite of variables working together to promote learning in a comfortable environment in a classroom. Every classroom is unique because there is a wide range of variables that have an impact on the climate in a classroom. However, a number of elements are required for the establishment of a successful learning environment. The most important thing for a classroom is to create an atmosphere promoting learning. In order to achieve this atmosphere, every item in the classroom should emphasize learning in some way.

Classification of Classroom Climate
The class room climate is classified into two major groups they are
1. Physical climate
2. Physiological climate

**Physical Climate:** Physical climate is divided into two dimensions and physiological climate is further divided into five dimensions. They are as follows:

The factors and forces that influence passively the phenomena of the classroom are called structural climate or physical climate. The dimensions of physical climate are:

1. Situation and facility
2. Instructional aids

**Physiological Climate:** The factors and forces that influence activities of the phenomena of the classroom are called physiological climate or functional climate.

The dimensions of physiological climate are:

1. Teacher and teaching
2. Utilization of instructional aids
3. Learner and learning
4. Teacher – pupil relationship
5. Classroom management

**NEED AND IMPORTANCE OF THE STUDY**

An ideal classroom is having the more constraints and difficulties in India like developing countries. We should identify the conditions necessary to influence the classroom setting. The interaction of the factors that take place in the classroom plays an important role as the classroom is a hub of interaction network in a particular way. This interaction forms the basis for the prevailing environment in any class room. The environment provides a network of forces and factors which play on the individual of any classroom. Some individual may resist this network and some rare individuals completely avoid or escape from these forces. The environment is a shaping and reinforcing forces which acts on the individual’s learning. At the same time every individual becomes the part or the component of the environment. It is an imperative to consider the interaction between the teacher and the pupil, teaching and learning, availability and utilization of instructional aids, discipline control, situation and facility available etc. It is believed that the different climate will have different effect on the achievement of pupils. That is, if one moves from classroom to classroom he/she finds that conditions differ. Hence, the investigator has chosen the present problem.

**OBJECTIVES**

The objectives of the present study are as follows,

1. To find out the level of classroom climate of higher secondary students.
2. To find out whether there is any significant difference in physical climate of higher secondary students with respect to gender.
3. To find out whether there is any significant difference in physiological climate of higher secondary students with respect to gender.
4. To find out whether there is any significant difference in academic achievement of higher secondary students with respect to gender.

**HYPOTHESES**

The following are the hypotheses of this study,
1. The level of classroom climate of higher secondary students is high.
2. There is no significant difference in physical climate of higher secondary students with respect to gender.
3. There is no significant difference in physiological climate of higher secondary students with respect to gender.
4. There is no significant difference in academic achievement of higher secondary students with respect to gender.

**Research Design**

Survey method is adopted by the researcher

**Population**

The population of this study comprises of the first year higher secondary students studying in the higher secondary schools at Pudukottai District of Tamilnadu.

**Sample and Sampling Procedure**

Four hundred standard XI History students randomly selected from the higher secondary schools located in Pudukottai District of Tamilnadu State.

**Tools Used**

The following tools were used in the present study,

1. Personal Data Sheet developed by the researcher
2. Rajkumar’s Classroom Climate Scale (1984)
3. Achievement Test in History developed and validated by the researcher

**DATA ANALYSIS**

Descriptive and differential analyses were made to compute the data and to verify the hypotheses formulated in this study by using the Statistical Package for the Social Sciences (SPSS).

**Table 1. Level of Classroom Climate of Higher Secondary Students**

<table>
<thead>
<tr>
<th>Level of Classroom Climate</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>115</td>
<td>28.8</td>
</tr>
<tr>
<td>Moderate</td>
<td>175</td>
<td>43.8</td>
</tr>
<tr>
<td>High</td>
<td>110</td>
<td>27.4</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100</td>
</tr>
</tbody>
</table>

From the above table, it is observed that 43.8 % of higher secondary students (N=400) involved in the present study have moderate level of classroom climate 28.8 % of them have low level of classroom climate and the remaining 27.4 % have high level of classroom climate.

**Table 2. Physical Climate of the Classroom Higher Secondary Students with Respect to Gender**

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>190</td>
<td>6.34</td>
<td>3.13</td>
<td>0.378*</td>
<td>NS</td>
</tr>
<tr>
<td>Female</td>
<td>210</td>
<td>6.46</td>
<td>3.19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *NS = Not Significant

From the above table, there is no significant difference is noted in physical climate of higher secondary students with respect to gender at 0.05 level.
Table 3. Physiological Climate of the Classroom Higher Secondary Students with Respect to Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>*NS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>190</td>
<td>16.68</td>
<td>6.73</td>
<td>0.211*</td>
<td>NS</td>
</tr>
<tr>
<td>Female</td>
<td>210</td>
<td>16.54</td>
<td>7.10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *NS = Not Significant

From the above table, there is no significant difference is noted in physiological climate of higher secondary students with respect to gender at 0.05 level.

Table 4. Academic Achievement Climate of the Classroom Higher Secondary Students with Respect to Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>*NS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>190</td>
<td>755.15</td>
<td>89.04</td>
<td>0.260*</td>
<td>NS</td>
</tr>
<tr>
<td>Female</td>
<td>210</td>
<td>752.62</td>
<td>87.56</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *NS = Not Significant

From the above table, there is no significant difference is noted in academic achievement climate of higher secondary students with respect to gender at 0.05 level.

MAJOR FINDINGS

From the analysis, the following findings are observed, Table - 1 reveals that among higher secondary students, 43.8% of them are having moderate level of classroom climate, 27.4% of them are having high level classroom climate and the remaining 28.8% of them are having low level of classroom climate.

Table - 2 reveals that no significant difference is observed as the obtained t-value (0.378) is lesser than the table value at 0.05 levels. Therefore, it is inferred that there exists no significant difference between the boys and girls of higher secondary students in their physical climate of the classroom.

From Table - 3, no significant difference is observed as the obtained t-value (0.211) is lesser than the table value at 0.05 levels. Therefore, it is inferred that there exists no significant difference between the boys and girls of higher secondary students in their physiological climate of the classroom.

From Table - 4, no significant difference is observed as the obtained t-value (0.260) is lesser than the table value at 0.05 levels. Therefore, it is inferred that there exists no significant difference between the boys and girls of higher secondary students in their academic achievement.

CONCLUSION

Based on the findings, the level of classroom climate was moderate in nature. A classroom is a unique place marked by interpersonal relationship among its members. This interpersonal relationship precisely acknowledges the teacher-student relationship and the peer relationship. Teachers should try to create positive and congenial classroom climate and to make involve the parents who are unable to be actively involved in the classroom throughout the school day. To a certain extent, classroom climate had contributed to their academic performance. Teacher factor, class activities and general classroom atmosphere can significantly motivate them to attain academic success. As to social environment in the classroom, the students’ most preferred leadership by the teacher was democratic and their most preferred mode of participation was collaborative. Somehow, it is implied by the result that academic success of the students still depends on the concerted effort of the two main stakeholders of the learning environment: the teachers and the students.

REFERENCES