

A Study on Classroom Climate in Relation to Academic Achievement of XI Standard Students

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Abstract: A Classroom is unique predict marked by interpersonal relationship among its members. These interpersonal relationships precisely acknowledge about the teacher student relationship and peer relationship. The general atmosphere within which the academic activities take place is influenced by these social relationships. This present investigation was also aimed to study the classroom climate of XI standard students in relation to their academic achievement. The sample consisted of 290 higher secondary school students were selected from 6 schools of Madurai district. The Classroom Climate Inventory developed by Vijayalakshmi (2007) was administered to collect the data. Collected data were subjected to suitable statistical analysis and scores of the sample were computed. The results of the study revealed that Classroom Climate of XI standard students differed significantly in their Sex, Medium of Instruction, Stream of Study, Location of School and Type of school management. The result also revealed that Academic Achievement of XI standard students differed significantly in their Sex, Medium of Instruction, Location of School and Type of school management. The XI standard students did not differ significantly in their Academic Achievement with respect to their Stream of Study. There exists a high positive correlation between Classroom Climate and Academic Achievement of XI standard students.

Keywords: Classroom Climate, Academic Achievement, Higher Secondary Students.

INTRODUCTION

A Classroom is unique predict marked by interpersonal relationship among its members. These interpersonal relationships precisely acknowledge about the teacher student relationship and peer relationship. The general atmosphere within which the academic activities take place is influenced by these social relationships. The atmosphere influences to a great extent the learning activities of the students and ultimately the achievement. The teacher plays a crucial role for they depend on his attitude and mental calibre maximum learning will takes place when the relationship between the teacher and the learner has friendliness. The environment, climate, atmosphere, tone, ethos or ambience of a classroom is believed to exert a powerful influence on students' behaviour attitudes and achievements.

Types of Classroom Environment

In looking broadly at different kinds of learning environment, there are three observable general functions that support different environments. They are: [1]

- Participating in discourse
- Participating in activities
- Presenting examples of work to be evaluated.

Factors involved in Classroom Climate

The interpersonal relationships within the group and the management of such relationships by the teacher are important factors in classroom morale. The feelings of students and expression of those feelings toward one another learning activities and work procedures school and community towards the teacher and the classroom situation all of these factors operating simultaneously produce the social climate of the classroom. The social climate vitally affects conduct and work activities social climate may be grouped into four categories. They are listed below [2]:

- An archaic Climate
- Repressed Climate
- Competitive Climate
- Co-operative Climate

REVIEW OF RELATED STUDY

Sindhu conducted a study of classroom students climate, teachers motivation and academic achievement and reported the following (i) Both male and female teachers were found to possess average or above average level of motivation to work (ii) Most students displayed average and above average adjustment with school environment the girls displayed superior adjustment compared to that of boys (iii) The

girls were found to have liking for their teachers than the boys (iv) No significant difference was found in the achievement of boys and girls (v) Low positive correlations were found between students liking for their teachers and school adjustment (vi) Better liking of teachers contributed to better achievement of boys [3].

Carroll *et al.* investigated about the school environment and academic achievement in Australian high school students: The structural relations among self-efficacy, academic aspirations and delinquency on the academic achievement of 935 students aged 11-18 years from ten schools in two Australian cities were used in their study. The Children's Self-efficacy Scale, Adapted Self-report delinquency scale (Revised) and Children's Academic Aspirations Scale were administered to participants prior to academic achievement being assessed wing mid-year school grades. Structural equation modeling was employed to test three alternative models for the relationships from academic, social self-regulatory efficacy had an indirect negative relationships, with academic aspiration and academic achievement; however the relationship between academic aspiration and academic achievement was not significant in the final model [4].

Statement of the Problem

The present study is stated as 'A Study on Classroom Climate in relation to Academic Achievement of XI Standard Students'.

Need and Significance of the Study

Scholastic achievement is one of the most highly important and valuable aspect of students' academic career. Not only does it mould one's vocational career but also determines the pattern of one's living. In view of this the factors which play an important role in determines on individual's scholastic achievement is studied in detail. The study of academic achievement of higher secondary students and their relationship to classroom climate is very relevant in the present day context. So the investigator considers it worthwhile to investigate into the classroom climate in relation to their academic achievement. Academic achievement is taken as index of the intelligence of the student. It is necessary for teachers to know the different variables which are closely related to the academic achievement of the students.

Operational Definitions

Classroom Climate

The word classroom climate is merely a short hand reference to those qualities which consistently predominate in most teacher-pupil contacts and pupil-pupil contacts in the teaching learning process.

Academic Achievement

Academic achievement is the knowledge attained or skills developed in the school subjects, usually determined by test scores or by marks assigned by teachers.

Objectives of the Study

1. To study whether there is any significant difference in Classroom Climate and Academic Achievement of XI standard students belonging to different groups based on
 - Sex
 - Medium of Instruction
 - Stream of Study
 - Location of School
 - Types of School Management
2. To study whether there is any relationship between Classroom Climate and Academic Achievement of XI standard students.

Hypotheses of the Study

1. There is no significant difference in Classroom Climate of XI standard students belonging to different groups based on
 - Sex
 - Medium of Instruction
 - Stream of Study
 - Location of School
 - Types of School Management
2. There is no significant difference in the Academic Achievement of XI standard students belonging to different groups based on
 - Sex
 - Medium of Instruction
 - Stream of Study
 - Location of School
 - Types of School Management
3. There is no significant relationship between Classroom Climate and Academic Achievement of XI standard students.

MATERIALS AND METHODS

In the present study normative method is employed. It is useful when a researcher wants to collect data on phenomena that cannot be directly observed. The present study focused on survey collected through a profile.

Tool used in the Study

The Classroom Climate Inventory developed by Vijayalakshmi [10] is used to assess the Classroom Climate of the students.

For academic achievement the total marks scored by the XI standard students in the quarterly examination has taken into consideration for this study.

Sample of the Study

Population of the present study was XI standard students in selected schools of Madurai District. The data were collected from 290 students drawn from 6 schools.

Collection of the Data

The investigator contacted the headmaster and principal of the selected schools and permission was obtained. Collection of data was done by the investigator by personally meeting with students and distributing the questionnaire by giving important

directions. A proper rapport was established to collect the pertinent data.

Statistical Technique used for Data Analysis

In the present study following statistical techniques were used.

- Descriptive analysis (Mean, Standard Deviation)
- Differential analysis (t-value, F- ratio)
- Correlation analysis (r-value)

RESULTS

Table-1: Showing the Significance of Difference in the Mean Scores of Classroom Climate of XI Standard Students with respect to their Sex, Medium of Instruction, Stream of Study and Location of School

Variable	Background Variables	Category	N	Mean	S.D	't' value	LOS
Classroom Climate	Sex	Boys	110	61.06	9.69	2.31	p<0.05
		Girls	180	58.11	11.01		
	Medium of Instruction	Tamil	160	57.01	10.26	4.05	p<0.01
		English	130	61.97	10.44		
	Stream of Study	Science	167	60.47	9.69	2.33	p<0.05
		Arts	123	57.55	11.71		
	Location of School	Urban	130	61.97	10.44	4.057	p<0.01
		Rural	160	57.01	10.26		

Note. LOS = Level of Significance.

From the table – 1 it is inferred that the Classroom Climate of XI standard students with respect to their Sex, Medium of Instruction, Stream of Study and Location of School differed significantly.

Boys had better Classroom Climate than Girls. English Medium Students had better Classroom Climate than Tamil Medium Students. Science group students had better Classroom Climate than Arts group students. Urban school students had better Classroom Climate than rural school students.

Table - 2: Showing the Significance of Difference in the Mean Scores of Academic Achievement of XI Standard Students with respect to their Sex, Medium of Instruction, Stream of Study and Location of School

Variable	Background Variables	Category	N	Mean	S.D	't' value	LOS
Academic Achievement	Sex	Boys	110	61.06	9.69	2.31	p<0.05
		Girls	180	58.06	11.01		
	Medium of Instruction	Tamil	160	58.48	11.16	5.35	p<0.01
		English	130	65.67	11.61		
	Stream of Study	Science	167	60.47	9.57	0.64	p>0.05
		Arts	123	59.63	12.73		
	Location of School	Urban	130	65.67	11.61	5.35	p<0.01
		Rural	160	58.48	11.16		

Note. LOS = Level of Significance.

From the table – 2 it is inferred that the Academic Achievement of XI standard students with respect to their Sex, Medium of Instruction and Location of School differed significantly. The XI standard students did not differ significantly in their Academic Achievement with respect to their Stream of Study.

Boys had better Academic performance than Girls. English Medium Students performed better in their academics than Tamil Medium Students. Science group students had better Academic performance than Arts group students. Urban school students performed better in their academics than rural school students.

Table-3: Showing the Group Difference of Classroom Climate of XI Standard Students with respect to their Type of School Management

Variable	Background Variable	Category	N	Mean	S.D	F-value	LOS	GD
Classroom Climate	Type of School Management	Govt.	160	57.01	10.26	9.579	p<0.01	(1,2) (1,3)
		Govt.Aided	60	60.39	9.48			
		Self-financing	70	63.32	11.08			
Academic Achievement		Govt.	160	58.48	11.16	15.71		
		Govt.Aided	60	63.95	10.08			
		Self-financing	70	67.14	12.06			

Note. LOS = Level of Significance; GD = Groups Differed.

From the table – 3 it is inferred that the Classroom Climate and Academic Achievement of XI standard students differed significantly with respect to their Type of School Management.

Further analysis of difference between individual groups tested through Tukey-HSD made for the Classroom Climate and Academic Achievement of XI standard students revealed that the students of

government schools differed significantly from those students of government aided schools. The government aided schools students had better Classroom Climate and Academic Achievement than the government schools students. Likewise, the students of government schools differed significantly from those students of self-financing schools. The self-financing schools students had better Classroom Climate and Academic Achievement than the government schools students.

Table - 4: Showing the relationship between Classroom Climate and Academic Achievement of XI Standard Students

Variables	r-value	Correlation
Classroom Climate vs. Academic Achievement	0.723	High Positive Correlation

From the table – 4 it is inferred that the ‘r’ value (0.723) was correlated for the Classroom Climate and Academic Achievement of XI standard students. It revealed that there exists a high positive correlation between Classroom Climate and Academic Achievement.

Major Findings of the Study

- The Classroom Climate of XI standard students differed significantly with respect to their Sex, Medium of Instruction, Stream of Study and Location of School.
- The Academic Achievement of XI standard students differed significantly with respect to their Sex, Medium of Instruction and Location of School. The XI standard students did not differ significantly in their Academic Achievement with respect to their Stream of Study.
- The Classroom Climate and Academic Achievement of XI standard students differed

significantly with respect to their Type of School Management. The self-financing schools students had better Classroom Climate and Academic Achievement than the government and government aided schools students.

- There exists a high positive correlation between Classroom Climate and Academic Achievement of XI standard students.

Educational Implications

Classroom climate and academic achievement are related variables. Academic achievement can improve by providing comfortable classroom atmosphere to the students. The teachers play an important role in moulding the students. Teachers have to provide good environment facilities to the students inside the classroom. Punishments and negative feedback can be avoided by the teachers. It is also the responsibility of the schools to provide suitable classroom climate to the students. Teachers,

Management of schools and parents should involve in the educational process. Education for the students must be knowledge oriented and need based one. Curriculum, curricular activities and co-curricular activities should be fit to the students. Schools can provide extra coaching classes for the students who are weak in their environment.

CONCLUSION

The adolescent period is full of uncertainties in the human life. Students belong to this period are always ensure of their own activities. Any decisions taken by this period of students are hasty. Students thought did not have any depth of knowledge but are emotional. The adolescent students are mainly distracted towards various atmospheric interruptions resulting to lesser concentration on studies. This period of students are also dominated to some extent by infatuation which also forms a factor for their distraction form studies. So teachers and parents have to be sympathetic and tactful in understanding the problems of students. We have to provide suitable environmental facilities to them, so that it helps them to secure higher standards in academic achievement. The teacher plays an important role in handling adolescents' students. It is the teachers' duty and the schools duty to provide the comfortable classroom climate for the students to help them score higher standards in academic achievement. The child is sent to school in order that some desirable changes may occur in his attitude and behaviour. School is the place where children from different walk of life attitudes and ideas. When the pupils are out along the right planes by a conductive school environment, the attitude sparkles with the right intensity.

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