

INFLUENCE OF ACADEMIC LEARNING ENVIRONMENT ON ACADEMIC ACHIEVEMENT OF HIGH SCHOOL STUDENTS BY CLASSES

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ABSTRACT

The present study aims to find out the influence of school learning environment, home learning environment and academic achievement of high school students by classes and also to study the relationship between school learning environment, home learning environment, academic achievement and socio-economic status of the family of high school students. 240 students from 8th, 9th, and 10th class were selected from eight high schools in Dharwad city Karnataka state. The results showed that Eighth class students were significantly higher on study habits, cooperation, goal orientation, involvement and had better teaching materials than ninth and tenth class students. Whereas Ninth class students reported significantly higher cooperation and involvement in school activities. Both Eighth and ninth class students had significantly better co-curricular activities than tenth class students. While students of tenth class had significantly higher academic achievement than eighth and ninth class students. In case of correlation Home learning environment had positive and significant influence on school learning environment and academic achievement only among tenth class students. Socio-economic status of the family exhibited positive and significant influence on home learning environment and academic achievement of high school students among eighth class.

KEYWORDS: Influence of School Learning Environment

INTRODUCTION

One of the major aims of the education is the development of wholesome personality. Family is the socio-biological unit that exerts the greatest influence on the development and perpetuation of the individual's behaviour. Next to home, school is the most important experience in the process of development of children. Both the environments, share influential place in child's life and also contribute to the development of children. School is the second home to children. Teachers and parents have greater responsibility to foster mental health status of the students. At times in adverse conditions the school may also substitute the home situations and meets the emotional needs of those neglected in the home. Pupils perception, or attitude towards the school climate or environment has got considerable influence over their mental health. School atmosphere, includes favourable attitude towards school teacher, co-students, curriculum, methods of teaching, facilities available in the classroom and teacher-student interaction.

School environment as perceived by students has an advantage of characterizing the setting through the eyes of the actual participants. Students have a good advantage point to make judgments about classrooms because they have encountered several learning environments and have enough time in a class to form accurate impressions.

In the school system, classroom is the most vital one for the transactional business going on between school and the society. The uniqueness of the classroom is due to the type of membership enjoyed by its members. The membership is not only mandatory but members are also more or less similar in age and achievement level. As a work group, the

classroom group assembles together for the purpose of learning, which is held deliberately and in a planned manner. Naturally in that teaching learning situation, social interaction, the main theme behind the formation of any group, occurs compulsorily as well as accidentally. The process of social interaction implies that type of relationship between persons where the behaviour of one is the stimulus to the behaviour of other thus it becomes reciprocal.

Thus the present study is designed to study the influence of school learning environment, home learning environment and academic achievement of high school students by classes and also to study the relationship between school learning environment, home learning environment, academic achievement and socio-economic status of the family of high school students.

The population of the study consisted of high school children from 8th, 9th and 10th class students with an age range of 12-16 years studying in high school of Dharwad city. A preliminary survey was carried out in year 2005 to collect information regarding the total number of private and government schools in Dharwad city. There were 27 aided and 12 unaided high schools in Dharwad. Out of these 8 coeducational schools were selected. From each of the selected high school and from each of the class (8th, 9th, and 10th) only one section of the students were selected randomly. From the selected section a minimum of 5 each boys and girls from all three classes were randomly selected. Thus the total sample for the study consisted 240 children.

Tools Used for the Study

- **Academic learning environment**
 - School learning environment schedule
 - Home learning environment schedule
- **Academic achievement**
- **Socio-economic status schedule a combination of items developed by Aaron *et al.* (1969), Venkataramaiah (1983) and Hauser (1994).**

School Learning Environment Schedule

A full pledged schedule was developed to study the school learning environment. The schedule consists of 130 items with 10 components, viz., goal orientation, study habits, school environment of the students, students involvement in school activities, physical facilities in the school, teaching materials used by school, teacher-student interaction, equality, and method of teaching and qualification of teacher. Each of the statement with a response as 'yes' or 'no' with score of 2 and 1 respectively. Spilt half method was used to test the reliability of the schedule. The reliability of the tool was = 0.65.

Home Learning Environment Schedule

Home learning environment schedule was developed to know the home learning environment of high school students. The developed version has 37 items categorized into five components viz., parental encouragement and care, facilities provided at home, parental guidance and support, parenting and co-curricular activities. All statements are positive and score of 2 and 1 for 'yes' or 'no' responses are given respectively. Spilt half method was used to test the reliability of the schedule. The reliability of the tool was= 0.63.

Data collection was made by using pre-tested questionnaires. Prior permission of the principal or Headmaster’s was taken from the eight high schools to conduct the study. Among each section 5 boys and 5 girls were selected randomly. After establishing a rapport with subjects, school learning environment schedule and home learning environment schedule was self administered on students. All the selected students from classes 8th to 10th were clubbed in one classroom and tool was administered on students. The students were instructed to give the responses.

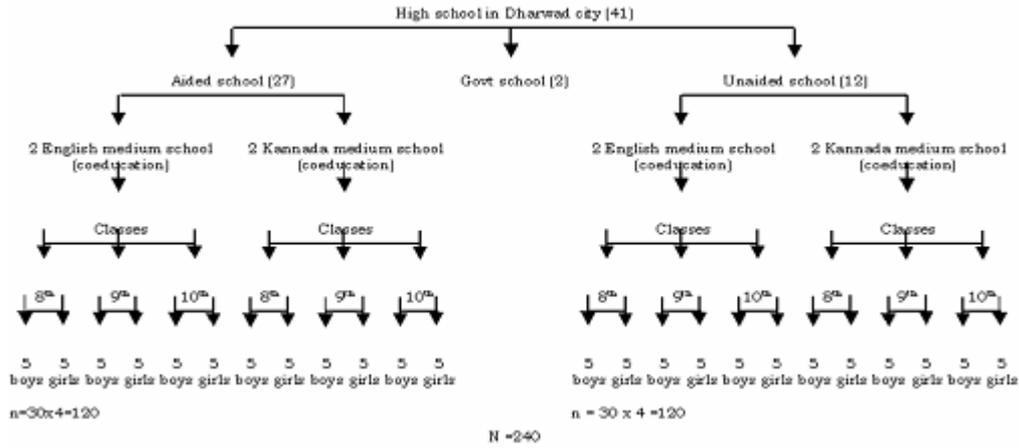


Figure 1: Selection of the Sample

Students ‘t’ test was carried out to know the differences in the school learning environment and home learning environment of high school students by classes. Karl Pearson’s product moment correlation coefficient analysis was used to measure the relationship between school learning environment, home learning environment, academic achievement and socio-economic status of the family of high school students.

RESULTS AND DISCUSSIONS

The table 4, 5 indicate that ninth class students had highest scores while tenth students had lowest scores. The F-ratio showed non significant difference between classes which indicates students did not differ by class. It is noticed from the same table that, that eighth and ninth class students differed significantly on academic achievement in which ninth class students were higher on academic achievement. Tenth class students were significantly highest on academic achievement in comparison with eighth and ninth class students.

It is observed from the table that, tenth class students had higher mean scores than eighth and ninth class students on academic achievement. Statistical analysis indicated that, there was non significant difference, implies that the academic achievement of students of different classes did not differ significantly. Above results of the study revealed that, as the age advanced the students academic scores increased. This may be because of motivation or goal orientation.

The table 4.5a revealed that, the eighth class students had significantly higher mean scores in all the components of school learning environment, than ninth and tenth class students. Eighth class students had significantly better study habits. They were more cooperative with their classmates. They also had higher qualified teachers than ninth class students.

When eighth and tenth class students were compared, eighth class students were significantly more goal oriented. They had better study habits and were more cooperative with their peers. They were significantly better on involvement in

school activities and were better treated by their teachers. They reported more satisfaction with teaching materials than tenth class students. This indicated that, eighth class students had better school learning environment than tenth class students.

When ninth and tenth class students were compared, students of ninth class were significantly better on involvement in school activities. They were more cooperative with their classmates than tenth class students. The reason for this trend may be because, majority of the tenth class students attended tuition classes rather than schools. Hence the perception of these students towards school learning environment tended to be decreased than eighth and ninth class students. Similarly Telli (2002) reported that ninth grade students had more positive perceptions towards biology classrooms. They also perceived that they had greater student cohesiveness, task orientation were more cooperative and provided equal opportunity and involvement for all the students.

The results showed that (table 4.5b) students of eighth class had significantly better co-curricular activities than students of tenth class. Tenth class students were lowest on co-curricular activities in comparison with eighth and ninth class students, ninth class students received significantly more encouragement and care by their parents, guidance and support and had better facilities in home in comparison with eighth and tenth standard students. This may be due to the fact that students of tenth class gave more attention to only curricular aspects than extra reading or co-curricular activities to gain knowledge. This might be because of aspiration for good marks in Board examination.

Table 4.6 indicates that there was a positive relationship between home learning environment and school learning environment among students of eighth and tenth classes. Gutman and Midgley (2000) reported that, significant interactions were found between family and school factors. They reported that the combination of both family and school factors was most effective in supporting the academic achievement of poor African American students during the transition to middle level schools.

It is observed from the same table that, there was positive relation between school learning environment and academic achievement of eighth and tenth classes. This indicates that, if the school learning environment is good, the children fare better. Academic achievement is a product of various factors namely family and school backgrounds and the development of personality.

The results of the present study also revealed that, there was a non significant negative relation between school learning environment and academic achievement among ninth class students. However, Moos (1979) report that more academically mature students adjust and perform better even in less structured learning environment.

In the present study it has been observed that home learning environment was positively correlated to academic achievement only among tenth class students. Bradley *et al.* (1988) reported that, significant correlation were observed between home environment and children's achievement test scores and their classroom behaviour.

The same table 4.7 also revealed that, socio-economic status was positively related to school learning environment among high school students of all classes (8th, 9th and 10th classes). Thus the results indicated that, an increase in socio-economic status lead to increase in school learning environment. This may be due to the fact that the students of high socio-economic group, seek admission to good schools, with good reputation as they can afford the fees and the educational materials. Parents who are educated may interact and involve better to provide good learning environment in school.

The table also revealed that home learning environment was positively and significantly related to socio-economic status among eighth class students. There was positive correlation observed between home learning environment and socio-economic status between tenth and ninth class students and socio-economic status also exhibited positive and significant influence on academic achievement of eighth, ninth and tenth class students. Thus the result indicated that, an increase in socio-economic status of the family increased the home learning environment of high school students. This may be due to the fact that, high socio-economic status tends to have good facility in home. Parents can afford better educational facilities in home. Familial factors such as parents support, parents education and occupation, their involvement, parents interaction with children contribute good learning environment.

CONCLUSIONS

Conclusion of the study indicate that Eighth class students were significantly higher on study habits, cooperation, goal orientation and involvement and had better teaching materials. Whereas Ninth class students reported significantly higher cooperation and involvement in school activities than eighth and tenth class students. Both Eighth and ninth class students had significantly better co-curricular activities than tenth class students. While students of Tenth class had significantly higher academic achievement than eighth and ninth class students. In case of correlation home learning environment had positive and significant influence on school learning environment and academic achievement only among tenth class students. Socio-economic status of the family exhibited positive and significant influence on home learning environment of students of eighth class. Socio-economic status of the family also had positive and significant influence on academic achievement only among eighth class students.

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APPENDICES

Table 1: Mean and SDs of School Learning Environment of High Students by Classes

Standard	N	Mean	SD
8 th	80	234.60	16.21
9 th	80	236.26	14.11
10 th	80	233.41	16.45
Total	240	234.76	15.60

ANOVA

Source	d.f.	Sum of square	Mean square	F	Sig
Between groups	2	327.90	163.95	0.67	0.51 ^{ns}
Within groups	237	57871.07	244.18		

NS – Non significant.

Mean and SDs of Home Learning Environment

Standard	N	Mean	SD
8 th	80	67.97	4.31
9 th	80	68.38	3.38
10 th	80	67.30	3.67
Total	240	67.88	3.82

ANOVA

Source	d. f.	Sum of Square	Mean Square	F	Sig
Between groups	2	1519.52	759.76	5.71**	0.004
Within groups	237	31539.03	133.07		

** Significant at 0.01 per cent level

Mean and SDs of Academic Achievement

Standard	N	Mean	SD
8 th	80	67.80	10.08
9 th	80	71.93	12.18
10 th	80	73.82	12.21
Total	240	71.18	11.76

ANOVA

Source	d.f.	Sum of Square	Mean Square	F	Sig
Between groups	2	47.23	23.61	1.63	0.19 ^{NS}
Within groups	237	3433.50	14.48		

NS – Non significant.

Table 2: Comparison of Mean Scores of Components of School Learning Environment of Students by Classes

Sl. No	Components	(A) 8 th n=80		(B) 9 th n=80		(C) 10 th n=80		't' (AxB)	't' (BxC)	't' (AxC)
		Mean	SD	Mean	SD	Mean	SD			
1.	Goal orientation	18.39	1.75	18.20	1.45	17.81	1.61	0.74	1.93	2.16*
2.	Study habits	29.65	12.56	28.64	2.31	28.25	2.42	2.63*	1.04	3.58**
3.	Co-operation	32.25	1.95	31.50	2.04	30.61	2.33	2.38*	2.55*	4.79**
4.	Involvement of students	25.50	2.01	25.24	1.89	24.50	2.28	0.85	2.04*	2.76*
5.	Physical facilities in school	26.23	3.54	25.69	2.97	25.40	4.04	1.04	0.51	1.37
6.	Teacher-student interaction	47.73	4.29	47.28	4.03	47.53	2.98	0.68	-0.45	0.34
7.	Equality	20.79	1.67	20.25	2.21	19.99	1.95	1.74	0.98	2.79*
8.	Method of teaching	14.96	1.35	14.93	1.40	14.73	1.22	0.17	0.96	1.16
9.	Qualification of the teacher	7.85	0.78	8.13	0.75	8.00	0.78	2.48*	1.03	-1.42
10.	Teaching materials	20.15	1.54	19.89	1.53	19.50	1.94	1.08	1.40	2.34*
	Total school learning environment	234.60	14.11	236.26	16.21	233.41	16.45	-0.69	1.17	0.46

*- Significant at 0.05 level

** - Significant at 0.01 level

Table 3: Comparison of Mean Scores of Components of Home Learning Environment of by Class

Sl. No.	Components	(A) 8 th n=80		(B) 9 th n=80		(C) 10 th n=80		't'	't'	't'
		Mean	SD	Mean	SD	Mean	SD	(AxB)	(BxC)	(AxC)
1.	Parental encouragement and care	14.49	1.51	14.60	1.24	14.40	1.34	-0.52	0.39	0.98
2.	Facilities in home	10.44	1.45	10.55	1.21	10.36	1.29	-0.53	0.35	0.95
3.	Parental guidance and support	13.55	1.49	13.58	1.43	13.29	1.49	-0.11	1.12	1.25
4.	Parenting	21.74	1.69	21.88	1.67	21.95	1.87	0.52	-0.75	-0.27
5.	Co-curricular activities	7.68	0.63	7.71	0.38	7.40	0.77	0.39	2.46*	2.89*
	Total home learning environment	67.97	4.31	68.38	3.38	67.30	3.67	0.65	1.07	1.93

* Significant at 0.05 per cent level

** Significant at 0.01 per cent level

Table 4: Correlation Co-Efficient between School Learning Environment, Home Learning and Academic Achievement of Students

Classes	N	'r' between HLE x SLE	'r' between SLE x AA	'r' between HLE x AA
8 th	80	0.02	0.12	0.11
9 th	80	0.76	-0.05	-0.08
10 th	80	0.11	0.09	0.25*
Total	240	0.09	0.05	0.08

*Significant at 0.05 per cent level

SLE – School learning environment

HLE – Home learning environment

AA - Academic achievement

Table 5: Correlation Co-Efficients between Socio-Economic Status of the Family, School Learning Environment, Home Learning Environment and Academic Achievement of the Students

Classes	N	'r' between SLE x SES	'r' between HLE x SES	'r' between AA x SES
8 th	80	0.19	0.42**	0.25*
9 th	80	0.22	0.11	0.16
10 th	80	0.16	0.05	0.04
Total	240	0.18**	0.21**	0.14*

* Significant at 0.05 per cent level

** Significant at 0.01 per cent level

SLE – School learning environment

HLE – Home learning environment

AA - Academic achievement

SES – Socio –economic status

