Influence of Self-concept, Classroom Environment and Parental Involvement in the Academic Achievement of Boys and Girls in Secondary Schools

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ABSTRACT

The present study was conducted to find out the role of self-concept, classroom environment and parental involvement in the academic achievement of Boys and Girls in Secondary Schools. The sample for the study was collected from various schools of Kozhikode district in the state of Kerala. Sample consists of 600 secondary school students who pursue education in Malayalam and English medium schools of which 314 are boys and 286 are girls. Different standardized tools were used to measure the self-concept, classroom environment and parental involvement; and the score of annual examination was taken as the indicator of academic achievement. Mean standard deviation, t-test, z-test and stepwise regression analysis were used for analyzing data. The study revealed that all the three variables significantly predict the academic achievement of the boys and girls. After classroom environment which is the highest predictor for both the groups, self-concept plays more important role in the prediction for boys whereas parental involvement plays more important role in the prediction for girls.

Keywords: Self Concept, Classroom Environment, Parental Involvement, Academic Achievement and Secondary Schools

To educate a child is to build a society and to shape a nation. Education acts as the leading force of children towards all the good and development. For the students, education opens all the doors to success in personal and social life. Realizing this fact, people from light years away have given much importance for education. In this era of knowledge explosion, everybody is more concerned about the process of education and they are striving to obtain the best in class. Students, parents, teachers and the whole society are very well aware of the significance of education and they collectively work hard to ensure the best result of education. For the students, academic achievement is the motivating factor for achieving the goals of life. It is not an end point rather it is pushing force towards the success. Better academic achievement is a clear signal of brighter future of the students.

There are many factors to influence the academic achievement of the students. From among these factors, Self-concept, class room environment and parental involvement have great effect on academic achievement of the students in secondary stage. To Rosenberg (1979), self-concept broadly is the totality of an individual's thoughts and feelings having reference to himself as an object. Kihlstrom and Cantor (1984) define self-concept as the totality of a complex, organized, and dynamic system of learned beliefs, attitudes and opinions that each person holds to be true about his/her personal existence. Classroom environment implies a measure of the quality and quantity of the cognitive, creative and

social life in terms of teacher-pupil interaction. Class room is the studio where the teacher and the students work together to achieve the pre-determined objectives. Education is not considered as an end product of certain activities. But instead, it is the numerous processes in which the students take part in various ways. So, it is clear that the class room environment has a great influence on the academic achievement of the students. Parental involvement refers to some degree of participation at all major aspects of education programme; planning, execution, evaluation and modification. Decision-making responsibilities shared by parents become a crucial aspect of parental involvement. It emphasizes an active and meaningful participation by parents in child's education. Self-concept of the students represents the influence of the student as an individual on the process of education. The class room environment represents the influence of the educational institution on the process of education. The parental involvement represents the influence of the members of family on the process of education. So, these three variables can influence the academic achievement of the students from different angles.

Many studies have been conducted to find out the role of self-concept, classroom environment and parental involvement in the academic achievement of students. Rady (2016) studied the relationship between academic self-concept and students' performance among school age children. A descriptive correlational design was utilized for study. The study was carried out in freedom school for basic education boys and girls at Cairo governorate. The sample contained 182 school age children and their teachers. Results indicated that there is a significant statistical relationship between academic self-concept and students' performance among school age children. Ahmad and Ahmad (2016) studied the relation between the self-concept and academic achievement of senior secondary school students in Jammu. The Self Concept Scale by R.K Saraswat (English version) was used for data collection. A sample of 248 students was taken from 9 senior secondary schools of Jammu district through random sampling technique. The findings of the study showed a significant relation between the self-concept and academic achievement. Alam (2017) conducted a study to investigate self-concept and achievement motivation as predictors of

academic achievement among high school students. Data was collected using Self Concept Scale standardized by Ahluwalia (1986) and Achievement Motive Test (ACMT) developed by V.P. Bhargava (1994). Sample included 300 randomly selected students of 10th standard from various government and private schools at Darbhanga in Bihar. Findings of the study revealed that there is significant positive relationship between self-concept and academic achievement.

Samrat (2015) studied the relationship between classroom climate and higher secondary students' academic performance. Descriptive survey method was adopted. Sample of 400 students was taken from various higher secondary schools located in Pudukottai district of Tamilnadu. Rajkumar's Classroom Climate Scale (1984) and Achievement Test in History developed and validated by the researcher were employed to collect the data. Findings of the study revealed that the classroom climate to a certain extent influenced the academic performance of students. Gazmuri *et al.* (2015) assessed the extent to which teachers' actions in the classroom influence the school environment. They carried out the assessment based on a statistical analysis of videotaped classroom observations of 51,329 teachers. The study brought out the result that the classroom environment has a significant influence on students' academic performance. From various other measures of classroom environment, the teachers' ability to handle the class as a group was found consistently more significant one. Study also revealed that the overall school environment was a better predictor of students' test results than the environment in the classrooms of the students whose test results were being reported. Ado (2015) investigated the influence of learning environment on students' academic achievement in mathematics at senior secondary school level. A sample of 337 randomly selected SS II students was taken from Potiskum LGA, Yobe state. Data were collected using a questionnaire of learning environment. The result revealed a significant difference between the mean performance of students taught in an ideal learning environment and that of students taught in a dull learning environment. Ezike (2018) investigated classroom environment and students' academic interest as correlates of achievement in Chemistry of senior secondary students. The study

adopted the co relational design. Sample of the study was 208 senior secondary II students selected randomly from ten selected Public Secondary Schools in Ibadan Oyo State, Nigeria. Study found out significant relationships between each of the classroom environment and academic achievement, students' academic interest and achievement in Chemistry.

Mante *et al.* (2015) conducted a case study to examine the effects of parental involvement on academic performance of pupils at Adukrom Methodist Primary School. Sample of the study included 26 students comprising eleven boys and fifteen girls out of the entire 50 students in the class. Questionnaire, Interview, Teacher Observation and Surveys were used to collect the data. The study found out that the involvement of parents in the academic activities of the students of Adukrom Methodist Primary School had remarkable effect on their academic performance. Fajoju *et al.* (2016) investigated the relationship between parental involvement in children's education and the academic achievement of primary six pupils in Edo State, Nigeria. The ex-post facto research design was used for the study. The sample consisted of 1895 primary six pupils collected from 37,908 primary six pupils in Edo State, Nigeria. Self made tool (PIRS) was used to collect data. Results of the study revealed that parental involvement has significant influence on pupils' academic achievement in three core subjects, English Language, Mathematics and Integrated Science, in primary school. Parkash and Rani (2017) investigated the relationship of parental involvement and academic achievements of 7th class students in Sirsa district of Haryana state. A sample of 160 children studying in 7th standard has been taken randomly from 10 schools of Sirsa District in Haryana. The results showed a significant relationship between academic achievement of students and parental involvement in urban as well as rural areas.

Objective of the study

The study had the following objective:

1. To find out and compare the predictability strength of self-concept, class room environment and parental involvement on academic achievement for the boys and girls sample.

Hypothesis

1. Self-concept, class room environment and parental involvement will not be found to be the significant predictors of academic achievement for the boys and girls sample; and the two groups will show no significant difference with respect to their predictors or predictability strength.

Methodology

Survey method was used for the purpose of research. A sample of 600 students was collected using stratified random technique from government and private secondary schools that follow the SCERT syllabus in Kerala. The sample included 314 boys and 286 girls. Children's Self-Concept Scale (CSCS-AS) standardized by Dr. S.P. Ahluwalia and Dr. Hari Shankar Singh, Classroom Environment Scale standardized by the investigators; and Parental Involvement Scale (TPIS) standardized by Chauhan and Arora were used to collect the data. Marks obtained by the students in the previous year annual examination (Std IX) was considered as the academic achievement indicator. Mean, SD, t- test, z- test, Pearson product moment correlation coefficient(r) and Step wise multiple regression analysis were used for analysis of the data.

Analysis

Table 1: Correlation between the predictive variables and the criterion variable

Sl. No.	Predictive variables	Criterion Variable- Academic Achievement	
		Boys sample (N=314)	Girls sample (N=286)
1	Self-concept	0.511**	0.465**
2	Classroom environment	0.608**	0.671**
3	Parental involvement	0.52**	0.527**

**= P<0.05

It is very clear from the Table 1 that all the coefficients of correlation of the predictive variables- self-concept, classroom environment and parental involvement with the criterion variable- academic achievement are positive and significant. The correlation coefficient between academic achievement and self-concept is found to

be 0.511 for boys sample and 0.465 for girls sample. All of these values of coefficient of correlation (r's) are positive and significant at 0.05 level. This indicates that the students who get high level of self-concept will also obtain the high academic achievement. The correlation coefficient between academic achievement and classroom environment is found to be 0.608 for boys sample and 0.671 for girls sample. All of these values of coefficient of correlation (r's) are positive and significant at 0.05 level. This indicates that the students who possess high level of classroom environment will also obtain the high academic achievement. The correlation coefficient between academic achievement and parental involvement is found to be 0.52 for boys sample and 0.527 for girls sample. All of these values of coefficient of correlation (r's) are positive and significant at 0.05 level. This indicates that the students who possess high level of parental involvement will also obtain the high academic achievement.

Table 2: Stepwise regression analysis between the predictive variables and the criterion variable (Boys sample)

Predictive variables and academic achievement	df	R^2	R^2-Change	F-Change
Classroom environment	312	0.370	0.370	182.888***
Classroom environment and self-concept	311	0.439	0.069	38.431***
Classroom environment, self-concept and parental involvement	310	0.460	0.021	11.841***

***= $p<0.001$

From Table 2, it can be clearly observed that all the predictive variables i.e., self-concept, classroom environment and parental involvement are found to be the significant predictors of the criterion variable i.e., academic achievement of boys sample. The predictability strength of all the three predictive variables on academic achievement of boys sample is 46%. From among the predictive variables, classroom environment is found to be the most powerful predictor of which the predictability strength is 37% which is significant at 0.001 level. The predictability strength of self-concept is 6.9% and the least predictability strength belongs to the parental involvement which is 2.1% only.

Table 3: Stepwise regression analysis between the predictive variables and the criterion variable (Girls sample)

Predictive variables and academic achievement	df	R^2	R^2-Change	F-Change
Classroom environment	284	0.450	0.450	232.745***
Classroom environment and parental involvement	283	0.501	0.050	28.493***
Classroom environment, parental involvement and self-concept	282	0.513	0.012	7.084***

***= $p<0.001$

From Table 3, it can be clearly observed that all the predictive variables i.e., self-concept, classroom environment and parental involvement are found to be the significant predictors of the criterion variable i.e., academic achievement of the female sample. The predictability strength of all the three predictive variables on academic achievement of the female sample is 51.3%. From among the predictive variables, classroom environment is found to be the most powerful predictor of which the predictability strength is 45% which is significant at 0.001 level. The predictability strength of parental involvement is 5% and the least predictability strength belongs to the self-concept which is 1.2% only.

Table 4: Comparative strength of significant predictors of academic achievement in Boys and Girls sample

Predictive variables and academic achievement	% Shared common variance		z-value
	Boys sample	Girls sample	
Self-concept	6.9	1.2	2.399*
Classroom environment	37	45	1.993*
Parental involvement	2.1	5	1.936

*= $P<0.05$

From the analysis of the results presented in the Table 4, it is clear that the shared common variance of self-concept in the academic achievement of secondary level boys is 6.9 when it is 1.2 for the academic achievement of secondary level girls. Result of the z-test conducted to find the difference between these two percentages revealed a z-value of 2.329 which is significant at 0.05 level. So, it can be understood that self-concept plays more significant

role in determining the academic achievement of secondary level boys when compared to the secondary level girls.

The second significant predictor i.e. classroom environment occupies a shared common variance of 37% for secondary level boys when it is 45% for secondary level girls. Result of the z-test conducted to find the difference between these two percentages revealed a z-value of 1.993 which is significant at 0.05 level. So, it can be understood that classroom environment plays more significant role in determining the academic achievement of secondary level girls when compared to the secondary level boys.

Regarding the third predictor i.e. parental involvement, it is clear the Table 4 that the shared common variance of parental involvement in the academic achievement of secondary level boys is 2.1 when it is 5 for the academic achievement of secondary level girls. Result of the z-test conducted to find the difference between these two percentages revealed a z-value of 1.936 which is not significant at any level. So, it can be understood that parental involvement plays equal significant role in determining the academic achievement of boys and girls from among the secondary level students.

Findings of the Study

1. Classroom environment, self-concept and parental involvement are found to be the significant predictors of academic achievement for the boys sample and they occupy the predictability strength of 46%.

2. For the boys sample, classroom environment shares the largest predictable variance which is 37%; and self-concept and parental involvement follow it with 6.9% and 2.1% respectively.

3. Classroom environment, parental involvement and self-concept are found to be the significant predictors of academic achievement for the girls sample and they occupy the predictability strength of 51.3%.

4. For the girls sample, classroom environment shares the largest predictable variance which is 45%; and parental involvement and self-concept follow it with 5% and 1.2% respectively.

5. All the three predictors significantly predict the academic achievement of the students for both the groups. After classroom environment which is the highest predictor for both the groups, self-concept plays more important role in the prediction for boys whereas parental involvement plays more important role in the prediction for girls.

CONCLUSION AND EDUCATIONAL IMPLICATIONS

From the above findings, the researchers could arrive at the conclusion that the academic achievement of boys and girls secondary level students is influenced by their self-concept, classroom environment and parental involvement. From among the three predictors, classroom environment is found to be the largest one in both the groups. Self concept of the boys predicts their achievement more than that of their parental involvement. Parental involvement of girls predicts their academic achievement more than what their self-concept does. This clearly indicates that the classroom environment provides good learning atmosphere for both boys and girls. For boys, self-concept predicts their academic achievement more and this indicates that better results can be expected if programs are carried out to develop better self-concept of the boys. For girls, parental involvement acts as better predictor and hence more programs to ensure parental involvement will bring out better results in their academic achievement.

The present study has revealed that classroom environment plays a dominant role in predicting the academic achievement for both boys and girls. This highlights the necessity of providing the best academic atmosphere in the classrooms. A classroom environment that meets the demands of students and teachers in terms of material facilities and all other supports can definitely motivate the students for obtaining good results in education. When the teachers and students utilize advanced technology and ensures free and safe learning atmosphere, learning activities will become a joyous journey to conquer all heights of success. It is not only the student as an individual that influences his or her education. There are many factors outside the individual that has great influence on the academic achievement. In the light of the results of the present

study, it is suggested that every single teacher, heads of schools, PTA and the government should act vigilantly to ensure that each and every child gets suitable learning atmosphere in the school.

For the present study has found the self-concept of students as a significant predictor of their academic achievement, it should be given much consideration. Students should be given more and more opportunities to develop better self-concept. Regular sessions ought to be conducted to train them to possess the best self-concept and act accordingly. Such programs will remind them of the need of having a dream and exploring the different means to achieve it. Providing opportunities to interact the important personalities of the society will help the students in setting the role models and ideal self for them. Role of parents in the education of children has no limit. Parents should involve in all the matters related to the education of their children with a positive outlook. Proper communication among the parents, students and teachers will pave the way for the best result in the academic achievement of the students. When the learning process becomes a joint venture of parents and children, the outcome will be better. Parents should be aware of the fact that children need mental, moral and physical support of their parents rather than material or financial aids. Understanding the importance of parental involvement, measures should be taken to train the parents to handle different situations with their children. For the parents, the best way to help their children in their education is to understand their needs and satisfy them effectively. In a nutshell, all of these three predictors of academic achievement of the boys and girls of the secondary schools need the attention of the students, teachers, parents and social activists. It is the moral responsibility of all of them to explore vivid ways for supporting the students for achieving their educational objectives and life dreams. To make it successful in the practical field, special attention should be given to classroom environment, self-concept and the parental involvement.

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