



## PARENTAL INVOLVEMENT, SELF-REGULATED LEARNING AND ACADEMIC ACHIEVEMENT OF STUDENTS

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### ABSTRACT

The present study investigates the relationship between parental involvement, self-regulated learning and academic achievement of students. Survey method is used to select a sample of 300 students at the higher secondary level. The Parental involvement Inventory (Chopra and Sahoo, 2006) is used to study the parental involvement, Self-regulated Learning Scale (developed for the present study) is used to assess self-regulated learning and academic achievement marks scored by students in their quarterly examination were taken for academic achievement scores. The results of the statistical analyses show a significant correlation between parental involvement, self-regulated learning and academic achievement of students. A significant difference is found between students at the higher secondary level in state, matriculation and central board schools, pertaining to parental involvement, self-regulated learning and academic achievement.

**KEYWORDS:** Parental Involvement, Self-regulated Learning, and Academic Achievement.

### 1.INTRODUCTION

Education is widely regarded as a basic human right, a key to enlightenment, and a source of wealth and power (Mugenda and Mugenda, 1999). Education is critical to industrial and technological development, with the history of developed nations bearing records of this and developing nations aspiring to realize the same status thereby putting a premium. UNESCO (1986) indicates that

knowledge holds the key to the attainment of the millennium development goals, which include food security, eradication of child mortality, and reduction of the spread of fatal diseases among others.

High parental involvement, as perceived by the adolescent, has been found to be an important influence on adolescents' self-regulatory behaviours



(Purdie et al., 2004). However, it is recognized that during adolescence, young people typically become less reliant on their parents and spend increasing amounts of time with their peers, whose friendships are increasingly complex and valued (Brown and Larson, 2009). Peers and peer groups have the potential to exert significant influence over motivation for learning and for school.

Self-regulated learning is recognized as an important predictor of student academic motivation and achievement. Self-regulation is essential to the learning process (Zimmerman, 2008; Jarvela and Jarvenoja, 2011). Parents are also assumed to be proximal forces of development for young people. There is considerable evidence to suggest that parents are able to influence the academic and psychosocial development in children and adolescents

Therefore, a need is felt to investigate the variables, parental involvement, self-regulated learning and academic achievement of students. Hence this vital area for the present investigation has been selected.

## **2. REVIEW OF RELATED LITERATURE**

For any researcher, it need not be emphasized that the review of studies related to the area of their investigation is essential, but providing information of what has already been done in the field gives direction to the present study. The purpose of the investigation is to study the parental involvement, self-regulated learning and academic achievement of students at the higher secondary level in different systems of education. Studies reviewed pertaining to the present study have been compiled and presented below under appropriate headings.

### **2.1 Studies Related to Parental involvement and Academic Achievement:-**

Tsang (2004) investigated academic motivation and achievement among students from immigrants and America born families. Data was collected through survey method and university records from over 998 college students. The results indicated that immigrants placed more importance

on family interdependence than American born families. Family interdependence attitude and behavior were found to influence academic adjustment.

The meta-analysis of 41 studies conducted by Jeynes (2005) examined the relationship between parental involvement and academic achievement of urban elementary school children. Analyses determined the effect sizes for parental involvement overall and subcategories of involvement. Results indicated a significant relationship between parental involvement overall and academic achievement. Parental involvement, as a whole, was associated with all the academic variables.

Ghazi and others (2010) examined parental involvement in their children's academic motivation in rural areas at the primary level. The study was conducted on a sample of 250 students from Bannu in Pakistan. Data was collected through structured interview from students and their parents. The results showed that parents' encouragement, discussion of importance of education and educational affairs had a direct positive influence on achievement motivation. The findings also revealed that most of the parents were not well aware of their role in their children's education.

Adetayo and Kiadese (2011) investigated emotional intelligence and parental involvement as predictors of students' achievement in financial accounting. Data was collected from 200 senior secondary school students from Nigeria by the survey method. The results of the study revealed a significant relationship between emotional intelligence and academic achievement of the students. The findings indicated that both emotional intelligence and parental involvement both predicted student's achievement in financial accounting.

### **2.2 Studies Related to Self-regulated learning and Academic Achievement:-**

Sui-Chu Ho (2004) aimed to compare the self-regulated learning techniques in Hong Kong students with students of other chosen countries that participated in the first cycle of PISA (Programme for International Students

Assessment) study. Using Hierarchical Linear modeling, the study also investigated the relationships between self-regulated learning and academic performance of 15-year-old students in Hong Kong. The findings showed that most of the self-regulated learning constructs were positively related to academic achievement in reading, Mathematics, and Science domains among Hong Kong students. The results particularly showed that control strategies and self-efficacy appear to be the two most important learning strategies associated with performance in all three domains, but on the contrary instrumental motivation and memorization have negative associations with mathematical and scientific literacy performances.

Alharbi and others (2011) examined the different learning styles and self-regulated learning strategies used by students in a core computer Science course. An Index of Learning Styles and a Self-Regulated Learning Strategies Questionnaires were administered to second year students studying programming languages concepts and paradigms. Results showed that aspects of students' preferred learning styles had a significant impact on academic performance in the midterm examination. Further, consideration of the self-regulated learning strategies used by students provide evidence that meta-cognitive strategies were the least popular strategies among students.

Suthar and Khooharo (2013) investigated the effect of mathematical beliefs and self-regulated learning strategies on Mathematics achievement of university undergraduate students using binary logistic regression model. Sample consisted of eighty-six undergraduate students who completed a self-reported questionnaire related to students' beliefs on three dimensions viz-a-viz beliefs about Mathematics, beliefs about importance of Mathematics and beliefs one's ability in Mathematics. The study indicated positive relationships among students' mathematical beliefs, self-regulated learning and Mathematics low and high ability outcomes. In addition, overall binary logistic regression equation which assessed the joint contribution of one aspect of beliefs and self-regulated learning variables was significant. In

addition it was found that 8.1% of the variance in Mathematics ability could be explained by beliefs and self-regulated learning variables.

### 2.3 Critique:-

The above discussed study indicate that parental involvement and self-regulated learning influence academic achievement of students. Studies pertaining to parental involvement, self-regulated learning and academic achievement based on gender difference are not clear and it necessitates further investigation.

### 3.STATEMENT OF THE PROBLEM

This study has its primary objective to assess the parental involvement, self-regulated learning and their relationship to performance outcomes. Specifically, the study was organized around the following questions:

- (i) Are the variables, parental involvement, self-regulated learning, and academic achievement significantly correlated between them?
- (ii) Do the students in different systems of education, namely, state, matriculation and central board schools differ in the parental involvement, self-regulated learning and academic achievement? Based on the review of related literature and the research questions, the study is undertaken keeping the following objectives in mind:
  - (i) To investigate if there is any significant relationship between the selected variables of students in state, matriculation and central board schools at the higher secondary level;
  - (ii) To investigate if there is any significant difference in parental involvement, self-regulated learning and academic achievement of students in state, matriculation and central board schools at the higher secondary level and
  - (iii) To investigate if there is any significant difference in the parental involvement, self-regulated learning and academic achievement of boys and girls in state, matriculation and central board schools at the higher secondary level.

**4.HYPOTHESIS FORMULATED**

The following hypotheses have been framed for the present study:

- (i) There is no significant relationship between the selected variables of students in state, matriculation and central board schools at the higher secondary level;
- (ii) There is no significant difference in parental involvement, self-regulated learning and academic achievement of students in state, matriculation and central board schools at the higher secondary level and
- (iii) There is no significant difference in the parental involvement, self-regulated learning and academic achievement of boys and girls in state, matriculation and central board schools at the higher secondary level.

**5.METHOD OF INVESTIGATION**

As the method of investigation is designed on the basis of the problem, objectives and hypotheses formulated, it warrants a psychometrically sound design, procedure, tools and execution. The investigation is planned to verify hypotheses using suitable tools and appropriate statistics for data processing.

**5.1Research Design:-**

The present study deals with the analysis of the parental involvement, self-regulated learning, and academic achievement of students in different

systems namely, state, matriculation and central board schools at the higher secondary level.

**5.2Sample selected:-**

From the target population a sample of 300 students, are chosen from the secondary level studying in different systems of education, namely, state, matriculation and central board schools. The chosen sample comprises of 100 students from state, 100 students from matriculation and 100 students from central board schools.

**5.3Tools used for the study:-**

The research tools used for the present study to analyze the parental involvement, the self-regulated learning and academic achievement of students in different systems of education at the higher secondary level are as follows:

The research tools used for the present study to analyze the students in different systems of education at the higher secondary level are as follows:

- (i) Parental Involvement Scale (PIS) (Chopra and Sahoo, 2006)
- (ii) Self regulated Learning Scale (Developed for the present Study)

The marks scored by the students in the quarterly examination were taken as a measure of academic achievement.

**6.ANALYSES OF DATA**

The results of the analyses of data collected are compiled and presented in tables below

**Table-1: Analysis of Correlation between the Select Variables of Students at the Secondary Level**

	Parental Involvement	Self-regulated Learning	Academic Achievement
Parental Involvement	1	0.17**	0.94**
Self-regulated Learning	x	1	0.16**
Academic Achievement	x	x	1

\*\*Significant at 0.01 level

In the above table (Table-1), it is seen that there exists a significant correlation between parental involvement, self-regulated learning and

academic achievement among students at the higher secondary level.

**Table-2: Analysis of Variance of Parental involvement, Self-regulated learning and Academic Achievement of Students in different Categories of Schools at the Higher Secondary Level**

Variable	Source of Variation	df	Sum of Square	Mean of Sum of Square	F-ratio
<b>Parental Involvement</b>	Between groups	2	127.23	63.61	0.71**
	Within groups	297	26510.57	89.26	
	Total	299	26637.80	-	
<b>Self-regulated Learning</b>	Between groups	2	24024.86	12012.43	92.23**
	Within groups	297	38684.22	130.25	
	Total	299	62709.08	-	
<b>Academic Achievement</b>	Between groups	2	27215.89	13607.94	112.85**
	Within groups	297	35815.10	120.59	
	Total	299	63030.99	-	

\*\*Significant at 0.01 level

In Table-2, for the analysis of variance different categories of schools are treated as different groups. The F-ratio is 0.71, 92.23, 112.85, which is significant at 0.01 level. Thus there is a significant difference in parental involvement, self-regulated learning and academic achievement of students in different categories of schools at the higher secondary level.

In order to establish the actual degree of difference between students belonging to different categories of schools namely, state, matriculation and central board schools, critical ratios are worked out and the actual difference between the mean scores are established. The tables (Table-2a to Table-2c) presented below thus indicate the mean difference between students in the different categories of schools at the higher secondary level.

**Table-2a: Statistical Analysis of Means of Parental Involvement of Students in State, Matriculation and Central Board Schools at the Higher Secondary Level**

Variable	Sample Size	Mean	SD	SEM	SED	CR
<b>State Board</b>	100	71.82	14.81	1.27	1.65	10.89**
<b>Matriculation Board</b>	100	89.60	12.13	1.04		
<b>State Board</b>	100	71.82	14.81	1.27	1.78	11.74**
<b>Central Board</b>	100	92.83	11.19	1.11		
<b>Matriculation Board</b>	100	89.60	12.13	1.04	1.54	1.49**
<b>Central Board</b>	100	92.83	11.19	1.12		

\*\*Significant at 0.01 level

SD-Standard Deviation

SEM-Standard Error of Mean

SED-Standard Error of Difference

CR-Critical Ratio

In Table-2a, it is evident that students in central board schools are significantly better in their parental involvement when compared to students in other two categories of schools, state and matriculation board schools at the higher secondary level.

**Table-2b: Statistical Analysis of Means of Self-regulated learning of Students in State, Matriculation and Central Board Schools at the Higher Secondary Level**

Variable	Sample Size	Mean	SD	SEM	SED	CR
<b>State Board</b>	100	70.83	12.88	1.29	1.63	10.89**
<b>Matriculation Board</b>	100	88.60	10.03	1.00		
<b>State Board</b>	100	70.83	12.88	1.29	1.70	11.74**
<b>Central Board</b>	100	90.83	11.15	1.11		
<b>Matriculation Board</b>	100	88.60	10.03	1.00	1.50	1.49**
<b>Central Board</b>	100	90.83	11.15	1.12		

\*\*Significant at 0.01 level

SD-Standard Deviation

SEM-Standard Error of Mean

SED-Standard Error of Difference

CR-Critical Ratio

In Table-2b, it is evident that students in central board schools are significantly better in their self-regulated learning when compared to students in other two categories of schools, state and matriculation board schools at the higher secondary level.

**Table-2c: Statistical Analysis of Means of Academic Achievement of Students in State, Matriculation and Central Board Schools at the Higher Secondary Level**

Variable	Sample Size	Mean	SD	SEM	SED	CR
State Board	100	50.89	13.25	1.33	1.66	10.87**
Matriculation Board	100	68.88	9.92	0.99		
State Board	100	50.89	13.25	1.33	1.62	13.47**
Central Board	100	72.75	9.37	0.94		
Matriculation Board	100	68.88	9.92	0.99	1.37	2.83**
Central Board	100	72.75	9.37	0.94		

\*\*Significant at 0.01 level

SD-Standard Deviation

SEM-Standard Error of Mean

SED-Standard Error of Difference

CR-Critical Ratio

In Table-2c, it is evident that students in central board schools are significantly better in their academic achievement when compared to students in other two categories of schools, state and matriculation board schools at the higher secondary level.

**Table-3a: Statistical Analysis of Means of Parental involvement, Self-regulated learning and Academic Achievement of Boys and Girls in State Board Schools at the Higher Secondary Level**

Variable	Groups	Sample Size	Mean	SD	SEM	SED	CR
Parental Involvement	Boys	50	64.70	9.70	1.25	2.10	1.94**
	Girls	50	67.64	11.12	1.69		
Self-regulated Learning	Boys	50	64.20	9.06	1.28	2.22	5.99**
	Girls	50	77.46	12.78	1.81		
Academic Achievement	Boys	50	43.92	9.33	1.32	2.26	6.17**
	Girls	50	57.86	12.98	1.84		

\*\*Significant at 0.01 level

SD-Standard Deviation

SEM-Standard Error of Mean

SED-Standard Error of Difference

CR-Critical Ratio

In the above table (Table-3a), it is seen that the girls are significantly better than the boys in the same state board schools with respect to all variables, parental involvement, self-regulated learning and academic achievement.

**Table-3b: Statistical Analysis of Means of Parental involvement, Self-regulated learning and Academic Achievement of Boys and Girls in Matriculation Board Schools at the Higher Secondary Level**

Variable	Groups	Sample Size	Mean	SD	SEM	SED	CR
Parental involvement	Boys	50	67.04	9.40	1.33	1.73	0.24 <sup>NS</sup>
	Girls	50	67.46	7.79	1.10		
Self-regulated Learning	Boys	50	86.04	10.67	1.51	1.95	2.63**
	Girls	50	91.16	8.72	1.23		
Academic Achievement	Boys	50	66.30	10.36	1.47	1.93	2.68**
	Girls	50	71.46	8.84	1.25		

\*\*Significant at 0.01 level

SD-Standard Deviation

SEM-Standard Error of Mean

SED-Standard Error of Difference

CR-Critical Ratio

In the above table (Table-3b), it is seen that the girls are significantly better than the boys in the same matriculation board schools with respect

to all variables, parental involvement, self-regulated learning and academic achievement.

**Table-3c: Statistical Analysis of Means of Parental involvement, Self-regulated learning and Academic Achievement of Boys and Girls in Central Board Schools at the Higher Secondary Level**

Variable	Groups	Sample Size	Mean	SD	SEM	SED	CR
<b>Parental Involvement</b>	Boys	50	64.46	8.94	1.26	2.26	6.17**
	Girls	50	68.08	8.78	1.24		
<b>Self-regulated Learning</b>	Boys	50	89.44	10.99	1.55	2.22	1.25**
	Girls	50	92.22	11.25	1.59		
<b>Academic Achievement</b>	Boys	50	71.26	10.11	1.43	1.86	1.60**
	Girls	50	74.24	8.40	1.19		

\*\*Significant at 0.01 level

SD-Standard Deviation

SEM-Standard Error of Mean

SED-Standard Error of Difference

CR-Critical Ratio

In the above table (Table-3c), it is seen that the girls are significantly better than the boys in the same central board schools with respect to all variables, parental involvement, self-regulated learning and academic achievement.

## 7.DISCUSSION

Researches in the past have established significant gender difference pertaining to academic achievement. The girls were found to be significantly better than the boys with regard to not only academic achievement but also with respect to their self-regulated learning and regarding their parent involvement.

In the present study it is found that there is a significant difference in the parental involvement and self-regulated learning among the students in different categories of schools following different systems of education, namely, state, matriculation and central board schools at the secondary schools. The students belonging to the matriculation board schools are found to be significantly higher in their parental involvement when compared to the students in the state board schools similarly the students in central board schools are found to be significantly better in their parental involvement. When compared to the students in the other two boards, namely the state and the matriculation board schools at the secondary level. This is because the students in matriculation board schools come

from better socio-economic conditions than when compared to their counter parts in the state board schools parents. The students in matriculation board schools are better educated and better placed than the parents of the students in the state board schools. Infrastructure facilities at home, the home environment and the attitude of these children in matriculation schools are very much better when compared to their counter parts in state board schools. Thus, the children in the matriculation schools are significantly better in their parental involvement than the children in matriculation board schools. Similarly, the student in the central board schools have significantly better home and school environment that control student in central board schools when compared to the students in matriculation and state board schools.

It is also been found that there is a significant difference in the academic achievement among students in the three different categories of schools following different system of education, namely the state, the matriculation and the central board schools students at the secondary level, are significantly better in their academic achievement when compared to their counter parts in state board schools. The matriculation and central board students have significantly better facilities at school and better home and school environment. Thus, these children are significantly better in their parental involvement leading to significantly better academic achievement when compare to the children is state board schools at the secondary level.

## 8. CONCLUSION

A major goal of higher education is to create lifelong learners – intentional, independent, self-directed learners who can acquire, retain, and retrieve new knowledge on their own. Only lifelong learners will be able to keep up with the explosive growth of knowledge and skills in their career and to retool into a new career after their previous one runs its course. The need to retool is already a reality in this society – witness the unprecedented expansion in adult education and the high unemployment rate among workers who haven't met this challenge and it will become the norm for this generation of traditional-age students as well as subsequent ones. Turning our students into lifelong learners no longer translates into the academic ideal of producing widely-read cultural elite.

Parents play a vital role in the development and education of their children and in the success of schools. Parental involvement is a common vehicle for bringing teachers and parents together in schools. Parent involvement programs tend to be directed by the school and attempt to involve parents in school activities and to teach parents specific skills and strategies for teaching and reinforcing tasks at home. With parent involvement, the emphasis is upon harnessing what parents can do to help the school realize its outcomes.

Consequently parental involvement in children's learning makes a difference- it is the most powerful school improvement lever that we have. Parental involvement will not take place in a school without concerted effort, time and commitment of both parents and schools

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