

**Self-Regulated Learning, Parental Involvement, And
Academic Achievement Of Students At The Secondary Level**

T. Keziah

Research Scholar

NKT National College of Education for Women

Chennai - 600005

Dr. S. Chamundeswari

Principal

NKT National College of Education for Women

Chennai - 600005,

Tamilnadu, India.

ABSTRACT

The present study investigates the relationship between self-regulated learning, parental involvement and academic achievement of the students at the secondary level. Survey method is used to select a sample of 979 students at the secondary level. The research tools used are Self-regulated Learning Scale (Archana Kumari and Chamundeswari 2015), Parental Involvement Scale (PIS) (Chopra and Sahoo, 2006) and Academic Achievement test to assess students' academic achievement. The results of the statistical analyses show a significant correlation between self-regulated learning, parental involvement and academic achievement of the students at the secondary level. A significant difference is found between students in different categories of schools and gender pertaining to self-regulated learning, parental involvement and academic achievement at the secondary level.

Keywords: Self-Regulated Learning, Parental Involvement and Academic Achievement

1. INTRODUCTION

Education aims to make students more intelligent and optimistic, not only to acquire knowledge throughout their lives. In a society that requires lifelong learning, the ability to steer one's own learning is becoming more and more important to be successful in academic as well as in non-academic contexts (Kremer-Hayon and Tillema, 1999; Zimmernan, 2002).

Several types of resources can be seen in the learning phase: a collection of cognitive and psychosocial resources, such as his academic abilities; his motivation and behaviours; and the set of learning opportunities offered by the school. Many researchers (Tross, Harper, Osher and Kneidinger, 2000; Conard, 2006; Nofle and Robins, 2007; O'Connor and Paunonen, 2007; Komarraju, Karau, and Schmeck, 2009; Poropat, 2009) have concluded that specific personality factors explain additional variance in the academic presentation of students. The student background characteristics and previous academic achievement with the supporting factors like self-regulated learning and parental involvement control the performance of the students.

Self-regulation refers to the students' ability to setting goals, planning activities, monitoring progress, controlling and regulating their own cognitive activities and actual behaviour (Pintrich and others, 1993). Planning activities include analysis of the task, choosing strategies and making decisions on specific behaviours. Monitoring stands for comparing progress against goals or standards in order to guide the following actions. For instance, a type of self-regulatory strategy for reading occurs when a student slows the pace when confronted with more difficult or less familiar text (Tanner and Jones, 2003).

Parental involvement in Education has many faces and assumes varying degrees (Vaden-Kierman and McManus, 2005). Research findings suggest that parents' attitudes, along with their behaviour and activities with regard to their children's education, do affect academic achievement in a positive way (Hui-Chen Huang and Mason, 2008). There appears to be a

general agreement about the effects the family can have by being involved with their children's Education. Students earn higher grades, they enroll in higher education, and their attitude towards school becomes more positive if the family, the community and school all work together (Henderson and Mapp, 2002). In addition, Henderson and Berla (1994) claim that parental involvement in their children's education affects their school attendance, more students graduate and the behaviour of student's improve.

2. NEED FOR THE CURRENT RESEARCH

Intellectual capacity is widely regarded to anticipate academic achievement (Poropat, 2009). Previous research has established the most reliable indicator of perseverance in learning (Gottfredson, 1997; Pascarella and Terenzini, 2005). Though, intellectual ability is also not a guarantee of success in completing school or higher education. There are many empirical studies that show that ability, intellect and IQ are not important predictors of achievement in the future and are not significant predecessors of success (Duckworth and Seligman, 2005; Duckworth et al., 2007; Dweck, 2007; de Vera, Gavino and Portugal, 2015). If students with less academic ability are able to conduct similarly well compared to students with more academic skills, there may be other more accurate academic achievement measures. Duckworth et al. (2007) argued that achievement results from a combination of innate talent and effort. In other words, success is not solely based on the learner's abilities but rather on the combination of cognitive ability and personality traits, deliberate practice and environmental conditions.

Although the attention to intellectual ability on academic achievement is recognized and even required, a growing awareness of the inferiority of intellectual ability to forecast all aspects of academic achievement and performance later on in life remains unclear. Thus a need is felt to investigate certain personal and environmental variables, such as self-regulated learning and parental involvement and their contribution in determining the academic achievement of students.

3. REVIEW OF RELATED LITERATURE

Studies reviewed pertaining to the present study have been compiled and presented below under appropriate headings.

3.1 Studies related to Academic Achievement

Parents and teachers alike are very much concerned about the students' performance in the various public examinations which are being held at different levels and at different periods of the year. That these examinations attract so much interest and attention is nothing unusual because success or failure in these examinations may well prove to be the vital determinant of the course a student will have to take.

Lounsbury and Ridgite (2004) conducted a study on predicting academic success in relation to general intelligence, big five personality traits, and work drive. The sample comprised 140 undergraduate college students of the south-eastern University of America. Data was gathered using the general intelligence scale. Through the results, general intelligence was found to predict both course grade and grade point average. The results also indicated that intelligence had a significant relationship with academic achievement.

Suleman and others (2014) conducted a study to determine the factors that affect students' academic performance at tertiary institutions with the view of enhancing learning. The survey was adopted as the research method for the study. A sample of 670 students (363 men, 307 women; age range 17-38 years) from the University of Ghana, Kwame Nkrumah University of Science and Technology, and the University for Development Studies, Ghana, were included. The analyses revealed that the major factor affecting a student's academic performance was infrastructure provision. The regression analysis further showed a strong relationship between the provision of educational infrastructural facilities and academic performance.

In view of the above, many studies have been conducted to assess the possible factors which affect student's academic achievement. It has been proven by many researchers that there are many and varied factors

which are contributory towards a student's success or failure in the examinations. Among the various factors which are most commonly cited are intelligence, emotional correlates, motivation, personality, creativity, self-concept, socio-economic background, school milieu, parental involvement, teacher's prophecy and so on. The studies analyzed relating to student academic achievement are collected and summarized below.

3.2 Studies related to Self-regulated Learning and Academic Achievement

Self-regulated learners are individuals who are metacognitively, motivationally, and behaviourally active participants in their own learning process.

Self-regulation has been found to be positively correlated to achievement, with highly self-regulated students being more motivated to use planning, organizational, and self-monitoring strategies than low self-regulated students (Pintrich and De Groot, 1990). Pintrich and others (1994) have articulated a model of student cognition, which argued that students regulate their cognition by using motivational strategies in addition to cognitive and meta-cognitive strategies.

Janagam and others (2011) conducted a Quasi-Experiment study to examine the efficiency of task-based Learning and traditional instructional approaches on various facets of students self-regulated education, including motivation and learning strategies with the help of motivated strategies learning questionnaire. Participants included 61 Periyar University post-graduate students from 2 intact classes (Task-based Learning and non-Task-based Learning) Instructed by the same environmental Economics teacher. Non-TBL group was given teacher-centred, textbook oriented traditional instruction, and the experimental group was given task - based learning in which students worked with ill-structured problems. Results revealed that Task-based Learning students had higher levels of intrinsic goal orientation, task value, and use of elaboration learning strategies, critical thinking, metacognitive self-regulation, effort regulation and peer

learning as compared to the control-group students.

Jahedi (2012) explored and identified the relationship between motivational beliefs (self-efficacy, intrinsic value, test anxiety) and self-regulated strategies (cognitive strategy and self-regulation) and academic achievement (marks obtained by students in four test conducted during that academic year) of school students. Data was collected from 8th standard students in the age group of 12 to 15 years of English medium schools in Pune city. The major findings showed a significant correlation between motivational belief components and self-regulated learning components of the students. Further, all components of motivation and self-regulated learning strategies proved to influence the academic achievement of students.

3.3 Studies related to Parental Involvement and Academic Achievement

On parental involvement and academic achievement, studies have shown to date that the two constructs seem to be positively related. Findings have demonstrated that parent's involvement in the education of the children has been found to be of benefit to parents, children, and schools (Campbell, 1995; Tella and Tella 2003).

Zang and Carrasquillo (1995) also similarly remarked that when children are surrounded by caring, capable parents and are able to enjoy nurturing and moderate competitive kinship, a foundation for literacy is built with no difficulty. Similarly, children of passive parents were found to perform poorly academically. As a matter of fact, McMillan (2000a) noted that parental pressure has a positive and significant effect on public school performance. This becomes particularly obvious when the exactness of parental pressure is brought to bear on the children's academic performance.

Yan (2000) conducted a between-group study of parental involvement, comparing three samples that included 6459 students drawn

from the national educational longitudinal study-88 of the University of Pennsylvania. The groups comprised successful Afro-American students, successful Euro- American students and unsuccessful Afro-American students. Once the background variable of social class was factored out, parental involvement became a significant discriminating factor between groups. Results demonstrated that parental involvement influenced academic success positively.

Devi and Mayuri (2003) investigated the family and school factors that affect the academic achievement of residential school children studying in the ninth and tenth classes. Data from the sample of 120 students of Hyderabad city was collected through an interview schedule developed by the investigator to study the family factors. The outcomes of the study revealed family factors like parental aspirations and socio-economic status to be a significant contributor to academic achievement.

Sunitha (2005) examined the academic learning environment of students from aided and unaided co-educational high schools. A sample constituting 240 students from the schools of Dharwad city was chosen for the study. Data were collected by administering the Home Learning Environment Scale developed by the researcher and academic achievement was taken as average percentage marks of the previous year and two semesters of the current year of the students. Family size was found to have a negative influence on the academic learning environment, whereas the home learning environment was found to have a significant and positive relationship with the academic achievement of students.

Lakshmi and Minakshi (2006) studied perceived parental behaviour as related to students' academic school success and competence on a sample of 500 high school students comprising 250 male and 250 female students of Varanasi city. Data were collected by administering adolescent's perception of parental behaviour questionnaire and academic competence scale developed by the researcher and associates. School success was assessed by marks obtained in the high school board examination. Results of the study revealed parental acceptance and encouragement scores to be

positively related to academic success. Parents who were perceived as being more acceptant and using less restrictive and hostile psychological control tended to have adolescents with higher academic success and competence.

4. STATEMENT OF THE PROBLEM

The review done from the available relevant literature, relating to the present research area, led the investigator to conceptualize the problem in an endeavor to fill in the lacunae found.

Thus the problem is stated as here under:

Self-regulated Learning, Parental Involvement, and Academic Achievement of Students at the Secondary Level

The problem thus stated warranted formulation of hypotheses.

5. OBJECTIVES OF THE STUDY

The major objectives of the present study are as follows:

- (i) To investigate if there is any significant relationship between self-regulated learning, parental involvement and academic achievement among students in government, government-aided and private schools at the secondary level;
- (ii) To investigate if there is any significant difference in self-regulated learning, parental involvement and academic achievement among students in government, government-aided and private schools at the secondary level;
- (iii) To investigate if there is any significant difference in self-regulated learning among boys and girls in government, government-aided and private schools at the secondary level;
- (iv) To investigate if there is any significant difference in parental involvement among boys and girls in government, government-aided and private schools at the secondary level;

- (v) To investigate if there is any significant difference in academic achievement among boys and girls in government, government-aided and private schools at the secondary level;

6. HYPOTHESES

- (i) There is a significant relationship between self-regulated learning, parental involvement and academic achievement among students in government, government-aided and private schools at the secondary level;
- (ii) There is no significant difference in self-regulated learning, parental involvement and academic achievement among students in government, government-aided and private schools at the secondary level;
- (iii) There is no significant difference in self-regulated learning among boys and girls in government, government-aided and private schools at the secondary level;
- (iv) There is no significant difference in parental involvement skills among boys and girls in government, government-aided and private schools at the secondary level;
- (v) There is no significant difference in academic achievement among boys and girls in government, government-aided and private schools at the secondary level;

7. METHOD OF INVESTIGATION

The method of investigation has been designed on the basis of the problem, assumptions and hypotheses formulated and it also warranted a psychometrically sound design, procedure, tools and execution. The investigation was planned to verify hypotheses using suitable tools and appropriate statistics for data processing.

7.1 Research Design

The present study deals with the analyses of self-regulated learning, parental involvement and academic achievement of students at the

secondary level in different categories of schools, namely, government, government-aided and private schools.

7.2 Population and Sample Characteristics

The study has been aimed at the population of students at the secondary level, belonging to different categories of schools, namely, government, government-aided and private schools. Random sampling method has been intended for obtaining the sample.

7.3 Tools used for the Study

The research tool used for the present study to analyze the student self-regulated learning, parental involvement and academic achievement among students in different categories of schools, namely, government, government-aided and private schools at the secondary level are Self-regulated Learning Scale (Archana Kumari and Chamundeswari 2015), Parental Involvement Scale (PIS) (Chopra and Sahoo, 2006) and Academic Achievement Test.

8. ANALYSES OF DATA

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

Statistical analyses will be based on the hypotheses formulated for the present study. It is envisaged to be multivariate statistical analyses as the study includes multiple variables.

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

Variables	Self-regulated Learning	Parental Involvement	Academic Achievement
Self-regulated Learning	1	0.53*	0.52*
Parental Involvement	X	1	0.74**
Academic Achievement	X	X	1

*significant at 0.05 level

**significant at 0.01 level

In the above table, it is seen that there is a significant correlation between all select variables, namely, independent variables, self-regulated

learning, parental involvement and the dependent variable, academic achievement.

Table-2: Analysis of Variance of Self-Regulated Learning, Parental Involvement and Academic Achievement of Boys in different Categories of Schools at the Secondary Level

Variables	Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F value	Level of Significance
Self-Regulated Learning	Between Groups	2	75081.98	37540.99	210.18	0.001
	Within Groups	480	85735.54	178.62		
	Total	482	160817.52	-		
Parental Involvement	Between Groups	2	17880.46	8940.23	272.64	0.001
	Within Groups	480	15739.99	32.79		
	Total	482	33620.45	-		
Academic Achievement	Between Groups	2	39665.06	19832.53	404.91	0.001
	Within Groups	480	23510.55	48.98		
	Total	482	63175.61	-		

On comparing the boys in different categories of schools, namely, government, government-aided and private schools it is evident that there exists a significant difference between them pertaining to the variables, self-regulated learning, parental involvement and thereby academic achievement.

The following tables, 2a, 2b and 2c have clearly given the nature and direction of difference for explanation of the difference.

Table-2a: Summary of Significance of Mean Difference between Boys in Government and Government-aided Schools at the Secondary Level

Variables	Groups	N	Mean	SD	SEM	SED	CR	Level of Significance
Self-Regulated Learning	Government	159	16.70	1.32	116.50	1.64	18.13	0.001
	Government-aided	160	12.35	0.98	146.30			
Parental Involvement	Government	159	70.23	6.44	0.51	0.66	21.80	0.001
	Government-aided	160	84.51	5.21	0.41			
Academic Achievement	Government	159	52.20	6.20	0.49	0.77	28.40	0.001
	Government-aided	160	74.06	7.49	0.59			

On comparing the boys in government and government-aided schools, it is observed that the boys in aided schools are significantly better pertaining to self-regulated learning whereas girls are found to be better in parental involvement and the dependent variable academic achievement.

Table-2b: Summary of Significance of Mean Difference between Boys in Government and Private Schools at the Secondary Level

Variables	Groups	N	Mean	SD	SEM	SED	CR	Level of Significance
Self-Regulated Learning	Government	159	116.50	16.70	1.32	1.54	13.78	0.001
	Private	164	137.73	10.34	0.81			
Parental Involvement	Government	159	70.23	6.44	0.51	0.66	16.61	0.001
	Private	164	81.26	5.48	0.43			
Academic Achievement	Government	159	52.20	6.20	0.49	0.75	19.65	0.001
	Private	164	66.95	07.23	0.57			

On comparing the boys in government and private schools, it is observed that the boys in private schools are significantly better than the boys in government schools. Private schools are managed by private trust/ society and are not dependent on the government for any financial support. All expenses and maintenance of instructional and infrastructure facilities are maintained by the Management. As a result they are able to provide adequate and required learning environment and experiences to the students. Further the parents of the students in private schools are well educated and are placed in relatively better jobs when compared to the students in government schools. As a result the boys in private schools develop adequate knowledge and skills and perform better in their academics.

Table-2c: Summary of Significance of Mean Difference between Boys in Government-aided and Private Schools at the Secondary Level

Variables	Groups	N	Mean	SD	SEM	SED	CR	Level of Significance
Self-regulated Learning	Government-aided	160	146.30	12.35	0.98	1.26	6.78	0.001
	Private	164	137.73	10.34	0.81			
Parental Involvement	Government-aided	160	84.51	5.21	0.41	0.59	5.47	0.001
	Private	164	81.26	5.48	0.43			
Academic Achievement	Government-aided	160	74.06	7.49	0.59	0.82	8.70	0.001
	Private	164	66.95	7.23	0.57			

On comparing the boys in government-aided and private schools, it is observed that the boys in government-aided schools perform better than the boys in private schools. Though the private schools may have better infrastructure facilities, the parents from government-aided schools show much interest and involvement in their child's education and monitor their performance regularly than the parents of the private schools boys who spend less time with their children because of their busy schedule. As a result the government-aided school boys are able to perform better when compared to the boys in private schools.

Table-3: Analysis of Variance of Self-regulated Learning, Parental Involvement and Academic Achievement of Girls in different Categories of Schools at the Secondary Level

Variables	Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F value	Level of Significance
Self-regulated Learning	Between Groups	2	57858.40	28929.20	151.94	0.001
	Within Groups	493	93863.87	190.39		
	Total	495	151722.27	-		
Parental Involvement	Between Groups	2	9693.13	4846.57	129.98	0.001
	Within Groups	493	18383.08	37.29		
	Total	495	28076.21	-		
Academic Achievement	Between Groups	2	32774.40	16387.20	256.36	0.001
	Within Groups	493	31514.023	63.92		
	Total	495	64288.423	-		

The variables, manifesting differences among students in the three groups of girls in different categories of schools necessitated further analysis using critical ratios. The results are presented in tables (Table-3a, 3b and 3c).

Table - 3a Summary of Significance of Mean Difference between Girls in Government and Government-aided Schools at the Secondary Level

Variables	Groups	N	Mean	SD	SEM	SED	CR	Level of Significance
Self-regulated Learning	Government	166	126.86	13.74	1.07	1.70	14.97	0.001
	Government-aided	166	152.33	17.09	1.33			
Parental Involvement	Government	166	76.15	7.47	0.58	0.72	13.67	0.001
	Government-aided	166	86.03	5.57	0.43			
Academic Achievement	Government	166	58.80	9.02	0.70	1.00	18.09	0.001
	Government-aided	166	76.89	9.21	0.72			

On comparing the girls in government and government-aided schools, it is observed that the girls in aided schools are significantly better in their self-regulated learning, parental involvement, and thereby their academic achievement also.

Table-3b: Summary of Significance of Mean Difference between Girls in Government and Private Schools at the Secondary Level

Variables	Groups	N	Mean	SD	SEM	SED	CR	Level of Significance
Self-regulated Learning	Government	166	126.86	13.74	1.07	1.30	14.45	0.001
	Private	164	145.62	9.44	0.74			
Parental Involvement	Government	166	76.15	7.47	0.58	0.70	2.49	0.001
	Private	164	84.89	4.99	0.39			
Academic Achievement	Government	166	58.80	9.02	0.70	0.81	20.12	0.001
	Private	164	74.98	5.01	0.39			

On comparing the girls in government and private schools as discussed earlier in the case of the boys due to better infrastructural and instructional facilities in private schools, the girls in private schools are significantly better than their counterparts in government schools pertaining to all variables, self-regulated learning, parental involvement and academic achievement.

Table-3c: Summary of Significance of Mean Difference between Girls in Government-aided and Private Schools at the Secondary Level

Variables	Groups	N	Mean	SD	SEM	SED	CR	Level of Significance
Self-regulated Learning	Government-aided	166	152.33	17.09	1.33	1.52	4.41	0.001
	Private	164	145.62	9.44	0.74			
Parental Involvement	Government-aided	166	86.03	5.57	0.43	0.58	1.96	NS
	Private	164	84.89	4.99	0.39			
Academic Achievement	Government-aided	166	76.89	9.21	0.72	0.82	2.34	0.005
	Private	164	74.98	5.01	0.39			

Like in the case of the boys in the case of the girls also, on comparing them in government-aided and private schools, it is observed that the girls in aided schools are significantly better than the girls in private schools pertaining to the variables, self-regulated learning, parental involvement, and academic achievement. Thus it is very evident that though the infrastructure facilities in private schools are significantly better than that in the aided schools due to better exposure of the government programmes arranged for students the boys make use of all the facilities to enrich their learning with the help of their parents who are concerned about their future.

9. DISCUSSION

Most attempts have been made to improve the academic achievements of students many committed teachers and parents have always been concerned that their students and children will be as successful as possible. Individual differences play a significant role in academic achievement of students. The problem of low academic achievement has been addressed many time and certain factors are identified in the explanation of academic performance. Among the numerous variables researched, demographic status (Casanova, Garcia-Linares, de la Torre, and de la Villa Carpi, 2005: Ray,2010; O'Sullivan, 2009), intelligence (Deary, Strand, Smith and Fernandes, 2007), behavioural characteristics (Ergul,

2004; Lane, Barton-Arwoo, Nelsonz, and Wehby, 2008), and psychological factors, namely, attitudes (Erdogan, Bayram, and Deniz, 2008;), have been used to explain academic achievement.

On looking into the results of the analyses of data collected from boys in government schools, it is observed that all independent variables, namely, self-regulated learning and parental involvement correlate positively and significantly with the dependent variable, academic achievement.

On comparing the boys and girls in each category of schools, namely, government, government-aided and private schools, it is observed that the girls are significantly better than the boys in the same schools pertaining to the independent variables, namely, self-regulated learning and parental involvement and the independent variable, academic achievement.

On comparing the boys in different categories of schools, namely, government, government-aided and private schools, it is observed that the boys in government-aided schools are better than the boys in government and private schools pertaining to the variables, self-regulated learning and parental involvement, as a result their academic achievement is also found to be better. It is surprising results, that though the infrastructural and instructional facilities are better in private schools, the aided schools that are governed by Management, make the best use of all facilities made available by the Government and give intense training to their students along with the help of their parents.

Similar to the case of the boys, on comparing the girls in different categories of schools it is observed that the girls in the government-aided schools are significantly better when compared to the students in government and private schools pertaining to both the independent and dependent variables.

10. CONCLUSION

Self-regulated learning helps students get to know themselves, become wise and determinant in their learning-oriented approaches

(Zimmerman, 1990). Students getting to know themselves can be viewed as a process that is associated with meta-cognitive skills, acquiring knowledge with cognitive skills, and obtaining the ability to motivate them and manages their environment effectively. Thus, teaching adolescents to become self-regulated learners may require educators to shift their own beliefs and practices as well as to build their pedagogical skills and strategies to support student learning in new ways. It may be necessary to consider academic behaviour, perseverance and skill development as creations of school and classroom environments with the help of parents rather than as personal qualities that students bring to school with them.

Further, parents' involvement are very influential in an individual life especially at the adolescence stage. Parents play a vital role in shaping the personality of the children. Because of parents, their way of looking at life may influence one to change oneself. Since adolescents spend time with others, it is no surprise that parents are playing a major role in young people's lives. During their teens, it is important for the students to be monitored by their parents in guiding them academically so that it will influence the future point of life. It is therefore recommended that parents are also advised to give considerable time to their children to understand their needs.

References

- Campbell, C.P. (1995). ***Race, Myth, and the News***, Thousand Oaks, CA: Sage.
- Casanova, F.P., Garcia-Linares, M.C., Torre, M.J. and Carpio, M.V. (2005). Influence of Family and Socio Demographic Variables on Students with Low Academic Achievement. ***Educational Psychology***, 25(4), pp. 423-435.
- Conard, M.A. (2006). Aptitude is not enough: How Personality and Behavior Predict Academic Performance. ***Journal of Research in Personality***, 40, pp. 339-346.

- De Vera, M.J., Gavino Jr, J.C. and Portugal, E.J. (2015). Grit and Superior Work Performance in an Asian Context, ***Proceedings of 11th International Business and Social Science Research Conference***, Crowne Plaza Hotel, Dubai.
- Deary, I.J., Strand, S., Smith, P. and Fernandes, C. (2007). Intelligence and Educational Achievement. ***Intelligence***, **35**(1), pp. 13- 21.
- Devi, S. and Mayuri, K. (2003). The Effects of Family and School on the Academic Achievement of Residential School Children. ***Journal of Community Guidance and Research***, **20**(2), pp. 139-148.
- Duckworth, A.L. and Seligman, M.E.P. (2005). Self-discipline Outdoes IQ in Predicting Academic Performance of Adolescents. ***Journal of Educational Psychology***, **16**(12), pp. 939-944.
- Dweck, C. (2007). ***Mindset: The New Psychology of Success***, New York: Ballantine Books.
- Erdogan, Y., Aydin, E. and Kabaca, T. (2008). Exploring the Psychological Predictors of Programming Achievement. ***Instructional Psychology***, **35**(3), pp. 264-270.
- Ergul, H. (2004). Relationship between Student Characteristics and Academic Achievement in Distance Education and Application on Students of Anadolu University, ***Turkish Online Journal of Distance Education***, **5**(2), pp.1-16.
- Golden, S. A. R. (2017). Attitude of Students and Teachers towards E-Learning-An Analysis. ***Recent Research in Social Science & Humanities***, **1**, 5-10.
- Gottfredson, L.S. (1997). Why Grit Matters: The Complexity of Everyday Life. ***Intelligence***, **24**, pp. 79–132.

Henderson, A.T. and Berla, N. (1994). ***A New Generation of Evidence: the Family is Critical to Student Achievement***. USA: National Committee for Citizens in Education.

Henderson, A.T. and Mapp, K.L. (2002). ***A New Wave of Evidence: The Impact of School, Family, and Community Connections on Student Achievement***, Southwest Educational Development Laboratory, National Center for Family and Community.

Hui-Chen Huang, G. and Mason, K.L. (2008). Motivations of Parental Involvement in Children's Learning: Voices from Urban African American Families of Preschoolers. ***Multicultural Education***, 15(3), pp. 20-27.

Jahedi, S. (2012). ***A Study of relationship between Motivational Beliefs and Self-regulated Strategies and Academic Achievement of School Students***, Unpublished Ph.D. Thesis, University of Pune, Pune.

Janagam, D., Suresh, B. and Nagarathinam, S. (2011). Efficiency of Task based Learning and Traditional Teaching on Self-regulated Education. ***Indian Journal of Science and Technology***, 4(3), pp. 308-312.

Komarraju, M., Karau, S.J., and Schmeck, R.R. (2009). Role of Big Five Personality Traits in Predicting College Students' Academic Motivation and Achievement. ***Learning and Individual Differences***, 19, pp.47-52.

Kremer-Hayon, L. and Tillema, H.H. (1999). Self-regulated Learning in the Context of Teacher Education. ***Teaching and Teacher Education***, 15(5), pp. 507-522.

Lakshmi, A.R. and Arora, M. (2006). Perceived Parental Behaviour as Related to Students Academic School Success and Competence.

Journal of the Indian Academy of Applied Psychology, 32(1), pp. 47- 52.

Lane, K.L., Barton-Arwoo, S.M., Nelsonz, J.R. and Wehby, J. (2008). Academic Performance of Students with Emotional and Behavioral Disorders Served in a Self-Contained Setting. ***Journal of Behavioral Education, 17(1), pp. 43–62.***

Lounsbury, J.W. and Ridgell, S.D. (2004). Predicting Academic Success, General Intelligence, Big five Personality Traits, and Work Drive. ***College Student Journal, 10.***

McMillan, S.J. (2000a). ***Interactivity is in the Eye of the Beholder: Function, Perception, Involvement, and Attitude Toward the Website', in M.A. Shaver (ed.)*** Proceedings of the 2000 Conference of the American Academy of Advertising, pp. 71–8. East Lansing: Michigan State University

Nofle, E.E. and Robins, R.W. (2007). Personality Predictors of Academic Outcomes: Big Five Correlates of GPA and SAT scores. ***Journal of Personality and Social Psychology, 93(1), pp.116-130.***

O'Sullivan, E.M. (2009). The Demographic and Academic Profile of Irish Dental School Faculty Members. ***Journal of the Irish Dental Association, 55(6), pp. 296-301.***

O'Connor, M.C. and Paunonen, S.V. (2007). Big Five Personality Predictors of Post Secondary Academic Performance. ***Personality and Individual Differences, 43, pp. 971-990.***

Pascarella, E.T. and Terenzini, P.T. (2005). How College Affects Students: ***A Third Decade of Research, 2.*** San Francisco, CA: Jossey-Bass.

Pintrich, P.R. and De Groot, E.V. (1990). Motivational and Self-regulated Learning Components of Classroom Academic Performance. ***Journal of Educational Psychology, 82(1), pp. 33-40.***

- Pintrich, P.R., Roeser, R.W. and de Groot, E.V. (1994). Classroom and Individual Differences in Early Adolescents' Motivation and Self-Regulated Learning. ***Journal of Early Adolescence***, 14(2), pp. 139-161.
- Pintrich, P.R., Marx, R.W. and Boyle, R.A. (1993). Beyond Cold Conceptual Change: The Role of motivational Beliefs and Classroom Contextual Factors In The Process of Conceptual Change. ***Review of Educational Research***, 63(2), pp. 167–199.
- Poropat, A. (2009). A Meta-analysis of the Five-Factor Model of Personality and Academic Performance. ***Psychological Bulletin***, 135(2), 322-338.
- Ray, B.D. (2010). Academic Achievement and Demographic Traits of Home school Students: A Nationwide Study. ***Academic Leadership***, 8(1), pp. 1-32.
- Sulemana, S., Ngah, I.B. and Majid, M.R. (2014). The Perspective of Students on Factors Affecting their Academic Performance at the Tertiary Level. ***British Journal of Education, Society and Behavioural Science***, 4(8), pp. 1021-1028.
- Sunitha, N.H. (2005). ***Academic Learning Environment of Students From Aided and Unaided Co-educational High School***, Thesis submitted to University of Agricultural Sciences, Dharwad.
- Tanner, H. and Jones, S. (2003). ***Self-efficacy in Mathematics and Students' use of Self-regulated Learning Strategies*** During Assessment Events.
- Tella, A. and Tella, A. (2003). Parental involvement, Home background, and School Environment as Determinant of Academic Achievement of Secondary School Students in Osun State, Nigeria. ***African Journal of Cross-Cultural psychology and Sport Facilitation***, 5(2), pp. 42-48.

- Tross, S.A., Harper, J.P., Osher, L.W. and Kneidinger, L.M. (2000). Not just the Usual Cast of Characteristics: Using Personality to Predict College Performance and Retention. ***Journal of College Student Development***, **41**(3), pp. 323-333.
- Vaden-Kiernan, N. and McManus, J. (2005). ***Parent and Family Involvement in Education: 2002–03*** (NCES 2005-043). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Yan, W. (2000). Successful African American Students: The Role of Parental Involvement. ***Journal of Negro Education***, **68**(1), pp. 5- 22.
- Zang, S.Y. and Carrasquillo, A.L. (1995). Chinese Parents' Influence on Academic Performance. ***New York State Association for Bilingual Education Journal***, **10**, pp. 46- 53.
- Zimmerman, B.J. (1990). Self-regulated Learning and Academic Achievement: An Overview. ***Educational Psychologist***, **25**(1), pp. 3-17.