



Self Regulated learning of Secondary School Students in relation to their Academic Achievement

***Dr. Manpreet Kaur**

Assistant Professor

S.D. Institute of Education (for girls)

Ambala Cantt. E-mail Id:

04manpreetkaur.chauhan@gmail.com

****Dr. Sakshi**

Principal, S.D. Institute of Education (for girls)

Ambala Cantt. E-mail Id:

drsakshimanocha@gmail.com

Abstract

The present investigation was undertaken with an objective of studying self regulated learning of secondary school students in relation to their academic achievement. The sample for the present study consisted of 100 secondary school students selected randomly from different schools of Ambala district. For data collection, self regulated learning scale developed and standardized by investigators, was used. Analysis of data was done using t-test and correlation. The findings of the study revealed that there is significant relationship between self regulatory learning and academic achievement of secondary school students. It was also revealed that there is no significant difference in the self regulation of secondary school students with respect to gender and no significant difference was found in the academic achievement of secondary school students with respect to gender.

Key words: Self regulated learning, Secondary school students, Academic achievement

INTRODUCTION

Education is an important aspect of human's life and plays an indispensable role in this modern, industrialized world. It is all about teaching-learning certain skills and applying all that in practical life so as to make it more productive and operative. It helps people in completing different tasks in different spheres of life very easily. Quality education is one of the predictor of academic success of the students. Good academic achievement is supported by the different knowledge and skills acquired and also supported by the self regulated learning which is a key component of 21st century. There is a common belief that to achieve academic success and overcome difficult academic tasks, learners must be able to regulate their learning processes and maintain their academic goals. In other words it can be said that self regulated learning works as a catalyst for getting success in academic areas. Moreover the technological and knowledge advancements have also led the learners to acquire knowledge and skills by taking responsibility of self-learning. Therefore, understanding the concept of self regulated learning is essential in today's academic, technological and social world. Self-regulated learning is a process that helps students in managing their thoughts,

behaviors, and emotions in order to successfully navigate their learning experiences. It is a self initiated action that is guided by one's own thinking about planning, monitoring and evaluating own personal progress with respect to some standard and further motivation to learn. In other words, it is a process of evaluating one's own learning and behavior pattern and making improvements in it. It makes students aware about their academic strengths and weaknesses so as to manage their day to day activities and academic plans. It is not a personality trait which measures the learners' intelligence, instead it helps the learners to control their behavior and emotions to enhance learning and their performance (Fonagy and Target, 2002). According to Zimmerman (2001), self-regulation is defined as individual-controlled emotions, ideas, and behaviors exhibited to reach particular goals and that occur at different levels and features in each developmental period. Zimmerman, Bandura and Martine-Pons (1992) defined that self regulated learners direct their learning processes and attainments by setting challenging goals for themselves, applying appropriate strategies to achieve their goals and by enlisting self regulative influences that motivate and guide their efforts. In other

words, self regulation refers to conscious process by which a person exercises control over the tasks or learning strategies. Additionally, **Pintrich (1999)** defined self regulation as an active and constructive process in which learners identify their learning goals, monitor and regulate their cognition, motivation and behavior. In conclusion it can be said that self regulation is a process of influencing, directing, and managing one's own behaviors. It can help students in creating better learning habits and strengthen their study skills which in turn enhance their academic outcomes.

RATIONALE OF THE STUDY

In contemporary era, everyone is doing hard to get perfection in every sphere of life. Youngsters are expected and compelled to be more competent in this modern era. They have to face more pressure from their family, school and society on one side and on the other side due to modernization, they have to face many challenges that lead to distraction in the path of success. Therefore, to cope up with this scenario, they need certain specialized skills and an ability of using acquired skills in suitable situations. In other words, to avoid unfruitful result, students must incline themselves towards self regulated learning. It is one of the effective methods that enhances learning experiences and develops varied skills required in the 21st century. Various researches have been conducted in this area and have suggested different measures. **Shing and Rameli (2020)** investigated that there is significant influence of self-regulation towards upper primary students' academic achievement in English during forethought and performance phase. **Kaptum, Koech & Mailu (2018)** found that highest correlations for learning goal orientation, self-efficacy beliefs and performance goal orientation. **Agustiani, Cahyad & Musa (2016)** revealed that self-efficacy, self-regulation of learning and academic achievements are positively correlated and any one of these three variables experience a positive or negative change, the rest will also experience change. **Sen (2016)** also studied students' task value, performance-

approach goals, time and study environment management and found positive correlation with achievement. **Kumari & Chamundeswari (2015)** also revealed that there is significant correlation between parental involvements; self regulated learning and academic achievement of students. **Daniela (2015)** proved that students are aware of the level of responsibility for their development and are more confident to internal motivation. The academic performance of students' increases if they are aware of their purpose, controls, regulates and directs their impulses. Hence, from the above researches it may be concluded that it help students in making efficient and intelligent use of their resources, learning strategies and methods for taking decisions in right direction so as to achieve their goals. Self regulated learning, if followed with greater sense of commitment, aid individuals to achieve success.

Therefore, the investigators took up the study to find out the relationship of self regulated learning in relation to academic achievement of secondary school students and suggested certain measures to be implemented in the present scenario.

OBJECTIVES

1. To find the difference in the self regulated learning of male and female secondary school students
2. To find the difference in the academic achievement of male and female secondary school students
3. To find the relationship between self regulated learning and academic achievement of secondary school students

HYPOTHESES

1. There exists no significant difference in the self regulated learning of male and female secondary school students
2. There exists no significant difference in the academic achievement of male and female secondary school students
3. There exists no significant relationship between self regulated learning and

academic achievement of secondary school students

secondary school students studying in different schools of Ambala district.

METHOD USED

The present study is descriptive in nature. To meet the objectives of the present study descriptive survey method of investigation was employed. Statistics namely mean, standard deviation, t-test and correlation were used by the investigator to arrive at the results.

SAMPLE

In the study, the investigator used simple random sampling technique for selecting the sample. The sample consisted of 100

ANALYSIS AND INTERPRETATION

TOOLS USED

Self Regulated Learning scale developed and standardized by the investigators was used. The scale consisted of 20 items. These 20 items were categorized in the following four areas viz., Planning, Monitoring, Controlling and Reflection. Each question is scored on a Likert-type scale of 1-5 (based on these replies: "Strongly Disagree," "Disagree," "Neutral," "Agree" and "Strongly Agree"). Overall assessment is done by total score. The total raw scores range from 20-100.

Table: 1
Significance of Mean Difference between Male and Female Secondary School Students on Self Regulated learning

Variable	Mean		Standard Deviation		t-ratio	Level of Significance
	Male	Female	Male	Female		
Planning	19.92	20	2.01	1.83	0.21	N.S
Monitoring	25.98	25.56	3.79	3.16	0.6	N.S
Controlling	15.8	15.86	1.75	1.83	0.17	N.S
Reflection	19.76	18.92	2.59	2.51	1.65	N.S
Total	78.36	77.52	6.97	6.24	0.64	N.S

*Significant at .05 level

**Significant at .01 level

NS: Not Significant

Table 1 inferred that the t-values between male and female secondary school students with regard to “Planning”, “Monitoring”, “Controlling”, “Reflection” dimensions came out as 0.21, 0.6, 0.17, 1.65 respectively. The t-values for the all dimensions are not significant. It implies there is no significant difference in the male and female secondary school students with regard to different dimensions of self regulated learning.

The t-value for total self regulated learning is found to be 0.64 which is not significant at 0.05 level of significance. This

means there is no significant difference in the self regulated learning of male and female secondary school students. However, the mean scores of male secondary school students (78.36) are found to be higher than female secondary school students (77.52).

The findings are similar to the findings of **Saija (2019)** who revealed that the difference between female and male undergraduate students’ motivation and self regulated learning is not statistically significant. On the contrary, **Banerjee and Kumar (2014)** revealed that male and female

students differ significantly on their self-regulated learning.

Table: 2
Significance of Mean Difference between Male and Female Secondary School Students on Academic Achievement

Variable	N	Mean	Standard Deviation	t-ratio	Level of Significance
Male	50	336.24	86.13	1.49	N.S
Female	50	311.2	82.19		

*Significant at .05 level **Significant at .01 level NS: Not Significant

Table 2 revealed that the t-value between male and female secondary school students on academic achievement is found to be 1.49 which is not significant at 0.05 level of significance. It implies there is no significant difference in the academic achievement of male and female secondary school students. The mean scores of male secondary school students (336.24) are higher than the female secondary school students(311.2). Hence, it depicts that the academic achievement of male secondary school students is more than the female secondary school students. The results

are similar with the study of **Upadhyay and Raino (2017)** who revealed that no significant difference was found in the academic achievement of male and female secondary school students. On the contrary **Suvarna and Ganesh Bhata (2016)** found that there is significant difference between academic achievement and gender of secondary school students. **Joseph (2017)** also found that there exists significant difference in the academic achievement of boys and girls and academic achievement of secondary school girls is significantly higher than boys.

Table: 3
6x6 Inter-Correlation matrix between Dimensions of Self Regulated Learning and Academic Achievement

	Planning	Monitoring	Controlling	Reflection	Total	Academic Achievement
Planning	1					
Monitoring	0.297	1				
Controlling	0.365	0.285	1			
Reflection	0.388	0.478	0.316	1		
Total	0.655	0.792	0.618	0.758	1	
Academic Achievement	0.276**	0.101	0.15	0.214*	0.237*	1

*Significant at .05 level **Significant at .01 level NS: Not Significant

Table 3 depicts that the r-values for the dimensions of self regulated learning and academic achievement are found to be 0.276, 0.101, 0.15 and 0.214 respectively. These r-values except for the dimensions “Monitoring” and “Controlling” are significant. This implies there is significant relationship between the

“Planning” and “Reflection” dimensions of self regulated and academic achievement.

The r-value for total self regulated learning and academic achievement is found to be 0.237 which is significant at 0.05 level of significance. It implies there is significant positive relationship between self regulated learning and academic achievement of

secondary school students. The findings are similar to the findings of **Arul Lawrence and Saileela (2019)** who found in their study that there is a positive relationship between self regulation and achievement in mathematics of higher secondary students. **Niranjana & Usha (2017)** also revealed that there exists significant positive relation between self regulated learning strategies and achievement in accountancy for total sample and subsample based on gender. Similarly, the study conducted by **Banarjee and Kumar (2014)** revealed that there exists significant positive correlation between self regulated learning and academic achievement among under graduate science students.

CONCLUSION

A large number of studies revealed that self-regulation is a key ingredient in academic performance. The result of the present study also revealed that there is a significant relationship between self regulatory learning and academic achievement of secondary school students. It was also found that there is no significant difference in the self regulated learning of secondary school students with respect to gender and also no significant difference in the academic achievement of secondary school students with respect to gender.

Keeping in view the results of the study it is recommended that in order to develop self regulation in students, teachers should introduce the concept of self regulated learning strategies as early as possible to students in school and provide them ample opportunities to implement and practice self regulatory behaviors in a variety of academic domains. They should modify their teaching methodologies and strategies. They should adopt student centered classroom activities. They should not dictate what, where and how of achieving their learning goals. Instead, they need to give reasons and opportunities to self regulate. Similarly, the concept is also to be extended to their families. It means teachers should set the learning environment where they can work with the families of the learners.

They should regularly monitor students and establish learning atmosphere that enable different ways of thinking and exchange of different ways of problem-solving among the students. Teachers should also use learner centered methods so as to promote curiosity and also nurture creativity, participation and innovation among learners. The school authorities by organizing various seminars and workshops should equip teachers with necessary knowledge and skills to enable them mentor their students on how to develop and apply self regulated learning strategies in their learning processes. Last but not the least the curriculum planners should design a curriculum that will encourage students' autonomy in learning.

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