

Self-Regulated Learning Of Secondary School Students In Relation To Their Academic Achievement

Ms. Ansu Manuel

Research Scholar, VELS Institute of Science, Technology & Advanced Studies (VISTAS),
Pallavaram, Chennai.

Dr. R. Jeyanthi

Associate Professor, VELS Institute of Science, Technology & Advanced Studies (VISTAS),
Pallavaram, Chennai.

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ABSTRACT

The present study was conducted to find out the relationship between Self-Regulated Learning and Academic Achievement of secondary school students. A sample of 200 students (male = 91 & female 109) was randomly selected from eight secondary schools (Govt.-aided-3 & private-5) in Idukki District of Kerala. For the assessment of Self-Regulated Learning, the tool Self-Regulated Learning Scale and to assess the Academic Achievement of the secondary school students (X standard student), the Board examination total marks of class IX (2023) were used to collect the relevant data. Mean, S.D., t-test, correlation co-efficient were used to analyse the data. The study revealed that both levels of Academic Achievement and Self-Regulated Learning of secondary school students were average. The finding also revealed that there is a significant difference in the Self-Regulated Learning as well as Academic Achievement of secondary school students in terms of their Gender, Locality and Type of School. Another major finding of this study is that there is a significant relationship between the Academic Achievement and Self-Regulated Learning of secondary school students.

Keywords: Self-Regulated Learning, Academic Achievement, Secondary School Students

Introduction

Academic achievement is a crucial indicator of student success, reflecting their ability to meet educational goals and adapt to the intellectual demands of their environment. In secondary education, academic performance not only determines students' future educational and professional pathways but also contributes significantly to their social and emotional development. Understanding the factors influencing academic achievement has become increasingly important in modern education, with self-regulation emerging as a key element. Self-regulation, the ability to manage one's thoughts, emotions, and behaviours, plays a vital role in helping students achieve their goals and navigate academic challenges effectively.

Research suggests that Self-Regulated Learning is a critical predictor of academic achievement.

Students who can set goals, monitor their progress, and employ adaptive strategies are more likely to perform well academically. Additionally, Self-Regulated Learning fosters better relationships with teachers and peers, creating a supportive learning environment. However, factors such as gender, locality, and type of school can influence both academic achievement and Self-Regulated Learning, making it essential to study these variables to better understand their effects. Identifying patterns and differences within these subsamples provides valuable insights for educators and policymakers to design targeted interventions.

This study aims to examine the relationship between Self-Regulated Learning and academic achievement among secondary school students while exploring variations based on gender, locality, and type of school. By testing hypotheses that explore differences in scores and their interrelationship, the research seeks to uncover significant trends and correlations. The findings of this study will provide a deeper understanding of how Self-Regulated Learning impacts academic outcomes, offering a framework to support students in achieving their potential across diverse educational settings.

Self-Regulated Learning

According to Dr. Ponitz (2009), self-regulation is the ability to control and direct one's feelings, thoughts, and actions. Traditionally regarded as a vital component of a child's emotional development, self-regulation is now increasingly recognized as a strong predictor of academic success. Beyond academics, good self-regulation skills significantly contribute to a child's social development. McClelland (2009) emphasizes that self-regulation helps children thrive in classroom environments, leading to better relationships with teachers, greater acceptance by peers, and enhanced academic performance.

Children with strong self-regulation skills are also more motivated to achieve, benefiting from their ability to manage their behaviours and emotions effectively. Both Ponitz and McClelland (2009) highlight the pivotal role of parents and teachers in fostering self-regulation. Ponitz notes that parents and teachers serve as essential guides and role models, helping children learn to control themselves. Providing a structured, consistent, and organized environment at home and in the classroom is a key factor in promoting the development of self-regulation in children.

Self-Regulated Learning is the self's ability to modify its behaviours to align with specific standards, ideals, or goals, whether derived from internal motivations or societal expectations (Baumeister & Vohs, 2007). The effectiveness and quality of these actions are influenced by an individual's beliefs and motives (Zimmerman, 2000). Shah and Kruglanski (2000) emphasize that self-regulation is a dynamic process, involving the pursuit of multiple goals, standards, and ideals in everyday life.

Academic Achievement

The term Academic Achievement originates from the word "academy," which refers to a school providing specialized instruction. Academic Achievement signifies the proficiency and performance levels attained by students in educational settings. Higher achievement in academics contributes to better student adjustment and plays a critical role in various fields such as science, medicine, education,

and literature. Notably, a strong academic record serves as a reliable predictor of a child's future prospects.

In recent years, Academic Achievement has taken centre stage in educational discussions. It forms the foundation upon which the broader development of a student's personality is built. A well-rounded academic performance not only enhances intellectual capabilities but also fosters emotional and social growth. A happy and fulfilling life for a child often relies on developing essential skills in intellectual and scholastic pursuits, emphasizing the critical importance of academic success.

Generally, Academic Achievement reflects the current level of a student's learning. Specifically, in the context of ESSA (Every Student Succeeds Act) accountability, it refers to the percentage of students in a school who meet or exceed their grade-level standards. This metric provides a framework to evaluate and enhance student performance, ensuring that educational institutions support learners in achieving and surpassing established benchmarks.

Need and Significance of the Study

The secondary school years are a critical phase in students' academic and personal development, marked by increasing academic demands, social influences, and the need for independent decision-making. Self-regulation, as a pivotal skill, enables students to manage these challenges effectively by setting goals, monitoring progress, and adopting strategies to improve performance. Understanding the role of self-regulation in academic achievement is essential for identifying how students can take ownership of their learning, particularly in a dynamic educational environment that emphasizes lifelong learning skills.

This study is significant as it sheds light on the interplay between Self-Regulated Learning and academic success, highlighting the factors that contribute to better learning outcomes. Insights from this research can inform educators, parents, and policymakers on strategies to cultivate self-regulatory skills among students, such as fostering time management, emotional control, and problem-solving abilities. Such skills not only improve academic performance but also prepare students for higher education and professional challenges by nurturing resilience and adaptability.

Moreover, the findings of this study can guide curriculum development and teaching practices to incorporate Self-Regulated Learning focused interventions, such as self-assessment tools, reflective exercises, and collaborative learning techniques. By addressing gaps in students' self-regulatory abilities, this research contributes to creating an inclusive and supportive educational framework that empowers all learners to achieve their full potential. Thus, this study has profound implications for enhancing both individual and systemic educational outcomes.

Objectives of the Study

1. To study the level of Self-Regulated Learning of secondary school students.
2. To study the level of Academic Achievement of secondary school students.
3. To find out the significant difference between male and female students Achievement in Academic

4. To find out the significant difference between Urban and Rural school students in their Academic Achievement.
5. To find out the significant difference between Government and Private school students in their Academic Achievement.
6. To find out the significant difference between Male and Female students in their Self-Regulated Learning
7. To find out the significant difference between Government and Private school students in their Self-Regulated Learning.
8. To find out the significant difference between Urban and Rural school students in their Self-Regulated Learning
9. To find out the relationship between Self-Regulated Learning and Academic Achievement of secondary school students.

Hypotheses

1. There is no significant difference in the Academic Achievement score of secondary school students with regard to subsamples Gender, Locality and Type of school.
2. There is no significant difference Self-Regulated Learning in the score of secondary school students with regard to subsamples Gender, Locality and Type of school
3. There is no significant relationship between Self-Regulated Learning and Academic Achievement of secondary school students.

Methodology

Simple survey method was used in this study. In order to achieve the cited objectives, various aspects of the methodology followed were: sample, tools, procedure of data collection and statistical techniques, scoring procedure.

Population and Sample

All the students of IX and X standards studying in different secondary schools of Idukki District of Kerala constitute the population of the study. A sample consisting of 200 students belonging to different communities which includes males, females; studying in English medium (private) and government-aided schools were selected on stratified random sampling basis from schools i.e., 3 government and 5 private schools spread in and around the Idukki District of Kerala.

Table 1: Distribution of Sample

Distribution of the School		Distribution of Respondent (Student)					
Govt. & Aided - 3	Private - 5	Gender		Location		Type of School	
		Male	Female	Male	Female	Male	Female
		91	109	105	95	80	120

Tools Used

For the study the 1st tool published by the National Psychological Corporation was adopted by the investigator for collecting data.

- Self-Regulated Learning Scale for assessing Self-Regulated Learning of Secondary School students which is prepared and standardized by Madhu Gupta and Dimple Mehtani. The Inventory consists of 48 items designed to measure the Self-Regulation of students
- For ascertaining the Academic Achievement of the students, the researcher had collected the aggregate marks obtained by the sample students in all subject in their previous class.

Procedure of Data Collection

After selecting 200 students of selected schools, the investigator approached them individually and requested them to fill up the Self-Regulated Learning Scale Though the tool was self-administering, the investigator explained to the students how to fill the tools. After collecting the filled-in tool, it was scored and tabulated systematically for statistical calculation.

Statistical Techniques Used

The investigator used the statistical techniques like Mean, Standard Deviation, t-test, correlation etc. for analysis and interpretation of the data collected for the study. The analysed results are presented in the accompanying tables.

Scoring Procedure

In order to assess the Academic Achievement the entire sample is divided into three groups namely High Academic Achievement, Average Academic Achievement and Low Academic Achievement groups; the investigator assumed normality of distribution of Academic Achievement scores and followed the procedure of using sigma distance. The subjects whose Academic Achievement falls between $M-11$ to $M-1$ are classified as having Average Academic Achievement. Those subjects $M-1$ were regarded as having Low Academic Achievement while subject whose scores were $M+1$ were classified as having High Academic Achievement.

Table – 2

Variables	Sl. No.	Method	Mean	SD	Score	Group
Academic Achievement	1	Mean + S.D.	227.45	31.26	258.71 & above	High level
	2	In between score			197 to 257	Average
	3	Mean- S. D.			196.2 & above	Low Level

Table – 3: Norms for Interpretation of the Level of Self-Regulated Learning

Sl. No.	Total Raw Score of Male Group	Total Raw Score of Female Group	Level of Self-Regulated Learning
1	188 & above	183 & above	Extremely High
2	170 to 187	165 to 182	High
3	151 to 169	148 to 164	Above Average
4	126 to 150	123 to 147	Average
5	107 to 125	106 to 122	Below Average
6	89 to 106	88 to 105	Low
7	88 & below	87 & below	Extremely Low

Analysis and Interpretation of Data

Table – 4: Levels of Academic Achievement of Secondary School Students

Group	Male (N)	Female(N)	Population	Percentage
High Level	25	15	40	20%
Average	65	45	110	55%
Low Level	20	30	50	25%

Table -5: Level of Self-Regulated Learning of Secondary School Students

Sl.No.	Level of Self-regulation	Category	Population	Percentage
1	Extremely High	Male	08	8.79%
		Female	09	8.25%
2	High	Male	07	7.69%
		Female	08	7.34%
3	Above Average	Male	09	9.89%
		Female	10	9.17%
4	Average	Male	40	43.96%
		Female	49	44.95%
5	Below Average	Male	13	14.29%
		Female	17	15.60%
6	Low	Male	10	10.98%
		Female	11	10.09%
7	Extremely Low	Male	04	4.40%
		Female	05	4.59%

Testing of Hypotheses

Hypothesis I

There is no significant difference in the Academic Achievement score of secondary school students with regard to subsamples Gender, Locality and Type of school of the students.

Table -6 Significant of the Difference between Mean Score of Academic Achievement of students with regard to subsamples Gender, Locality and Type of school

Variable	Sub- Sample	N	Mean	S. D.	't' Value	Level of Significance
Gender	Male	91	232.31	31.67	2.24	Significant
	Female	109	222.60	29.32		
Locality	Urban	110	230	30.23	2.23	Significant
	Rural	90	224.91	27.5		
Type of school	Govt.	80	215	29.06	2.28	Significant
	Private	120	235	32.11		

In order to find out whether there is any significant difference between male and female secondary school students, urban and rural secondary school students, government and private secondary school students in respect of their Academic Achievement t' value is calculated; the ratios are 2.24, 2.25 and 2.28 at 0.05 level respectively and it is represented in the table. The t values are higher than the table value. Hence the stated hypothesis is rejected. It is inferred that there is significant difference between male and female secondary school students, as well as between, urban and rural, government and private students of secondary school in respect to their Academic Achievement.

Hypothesis II

There is no significant difference in the Mean score of Self-Regulated Learning of secondary school students with regard to Gender, Locality and Type of school.

Table -7 Significant of the Difference between Mean Score of Self-Regulated Learning of students with regard to subsamples Gender, Locality and Type of school

Variable	Sub- Sample	N	Mean	S. D.	't' Value	Level of Significance
Gender	Male	91	53	5.23	5	Significant
	Female	109	49	6.11		
Locality	Urban	110	57	6.11	12.32	Significant
	Rural	90	48	4.17		
Type of school	Govt.	80	49	4.06	15.06	Significant
	Private	120	60	6.23		

From Table 7, it is evident that the values are significant at 0.05 & 0.01 level of significance.

Hence the hypothesis is rejected. It can be concluded that there is significant difference in Self-Regulated Learning of secondary school students with respect to their Gender, Locality and Type of school.

Hypothesis III

There is no significant relationship between Self-Regulated Learning and Academic Achievement of secondary students.

Table – 8 Correlations between Self-Regulated Learning and Academic Achievement

Variable	N	Df	Calculated “r” value	Table value	Remarks
Self-Regulated Learning and Academic Achievement	200	198	226.89	30.56	Significant

It is inferred from table 8 that there is a significant relationship between Self-Regulated Learning and Academic Achievement of the Secondary School Students since 'r' value is at 5% level of significance.

Major Findings

1. The Academic Achievement of secondary school students of the entire sample is average.
2. The Self-Regulated Learning of secondary school students of entire sample is average.
3. There is significant difference between male and female, urban and rural, government and private secondary school students with regard to their Academic Achievement.
4. There is significant difference between male and female, urban and rural, government and private secondary school students with regard to their Self-Regulated Learning
5. There is a significant relationship between Academic Achievement and Self-Regulated Learning of secondary school students.

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