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Self-Regulated Leearning among Secondary School Students: An Analysis on the Basis of Academic Achievement

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ABSTRACT

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. Education helps human beings to increase and develop their thinking, reasoning, problem solving, creativity, intelligence, aptitude, sentiments, skills, good values and attitude. Through educated man is transformed into a social, moral, and spiritual human being. Proper education will teach students to understand the different environment situation and to adjust with environment like – social environment and learning environment. Learning environment has both a direct and indirect influence on student learning, including their engagement in what is being taught, their motivation to learn and their sense of well-being, belonging and personal safety. One's learning environment is very important. Mugenda & Mugenda (1999)described that "Education is a basic human right, which is a key for enlightenment, source of wealth and power".

Key Words: Education, creativity, intelligence, aptitude, sentiments, skills, Learning environment.

VARIABLE USED:

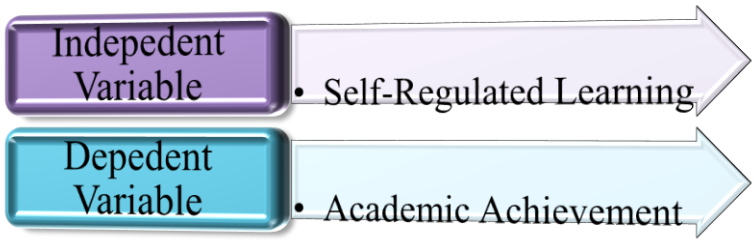
INDEPENDENT VARIABLE:

An independent variable or improvement variable (as Underwood calls it) is that factor controlled or chosen by the experimenter in his/her endeavor to learn its relationship to an observed phenomenon. In the present study, independent variable is Self-Regulated Learning

DEPENDENT VARIABLE:

According to Townsend (1953), "A dependent variable is the factor that appears, disappears, or varies as the experimenter introduces, removes or varies the independent variable." Alberto & Troutman (2006) defined that "the dependent variable is a measure of the behaviour of the subject. The dependent variable is the response that the person or animal makes. This response is generally measured using at least one of several different dimensions." The dependent variables in this study is Academic Achievement.

The present study involved two types of variables showing in the following depict:



OBJECTIVE OF THE STUDY:

1) To study self-regulated learning o secondary school students.
2) To study academic achievement of secondary school students.
3) To study relationship between self-regulated learning and academic achievement among secondary school students.

HYPOTHESES OF THE STUDY

1) There will be no significant relationship between self-regulated learning and academic achievement.
2) There will be no significant relationship between boys and girls in Self-Regulated learning.
3) There will be no significant Relationship between boys and girls in terms of Academic achievement.

METHOD AND SAMPLE

A sample is a sub set of the entire group from which it has been taken. In other words, it is a smaller representation of a larger whole. It would be difficult to work with the whole population in any scientific phenomena. Sample is a small proportion of the entire population selected for the specific purposes. Simple Random sampling was used in the present study, where every individual has equal chance of being selected in the final sample. 100 hundred secondary school students were included in the present study as subjects. Four (4) secondary schools affiliated to the Central Board of School Education, New Delhi were taken in the study. The study included one cities of Haryana, i.e. Panipat.

DISTRIBUTION OF SAMPLE

Table:3.1: LIST OF SCHOOLS

Sr. No.	Name of the Schools	Type of School	No. of Students
1.	Appollo International School, Pattikalyana	Private	25
2.	AryaAdarsh Senior Secondary School, Madlauda, Panipat	Private	25
3.	AryaBalBharti Public School	Private	25
4.	BhartiyaVidyaNiketan Senior Secondary School, Panipat	Private	25
TOTAL STUDENTS			**100**

DATA ANALYSIS AND DISCUSSION

The present investigation was conducted with the intend of examining the self-regulated learning and academic achievement of secondary school students in relation to parental involvement, achievement motivation and goal orientation. The data of 100 secondary school students of Panipat districts was analyzed using statistics such as mean, standard deviation, 't' test and by calculating Karl Pearson's Product Moment Coefficient Correlation for establishing the relationship between variables

O1: The first objective of the present investigation was to study the relationship between academic achievement and self-regulated learning of secondary school students.

Ho1: There is no significant relationship between self-regulated learning and academic achievement of secondary school students. The results pertaining to this objective are presented in Table :4.1

Table: 4.1 Overall Coefficient of correlation between self-regulated learning and academic achievement of secondary school students

Variables	No. of Students	Correlation of Coefficient
Self-Regulated Learning	100	0.785**
Academic Achievement	100	
Note: **Significant at 0.01 level		

Table 4.1 portrays that coefficient of correlation between self-regulated learning and academic achievement of secondary school students is 0.785 which is positive and significant at 0.01 level of significance. So, the null hypothesis, i.e., "There is no significant correlation between academic achievement and self-regulated learning of secondary school students" is not retained because there is a positive relationship between these parameters. It shows that self-regulated learning and Academic Achievement of secondary school students are decidedly related with one another. So, it could be concluded that secondary school students have better academic achievement if they have good self-regulated learning. It can be interpreted that higher the self-regulated learning, higher will be the academic achievement of secondary school students and vice-versa.The conclusions of the study matches with the findings of the studies conducted by (Barnard-Brak et al., 2010; Cazan, 2014; Schunk, 2005) who had found academic achievement had significant correlation between self-regulated learning.

O2: The second objectiveof the present investigation was to study the relationship between academic achievement and self-regulated learning of secondary school students of male students.

H02: There is no significant relationship between self-regulated learning and academic achievement of secondary school male students. The results pertaining to this objective are presented in Table 4.2:

Table: 4.2 Coefficient of correlation between self-regulated learning(SRL) of secondary school male students

Variables	No. of Students	Correlation of Coefficient
Self-Regulated Learning	60	0.627**
Academic Achievement	60	
Note: **Significant at 0.01 level		

A Perusal of Table 4.2 shows that the obtained 'r' value 0.627 between academic achievement and SRL of secondary school male students is found higher than the table value i.e. 0.208 that is significant at 0.01 level of significance. S0, the null hypothesis "There is no significant relationship between the academic achievement and SRL of secondary school male students" is rejected. This reveals that academic achievement is significantly related to the SRL of secondary school male students. The magnitude of 'r' indicates positive correlation which means that increase in SRL scores leads to increase in academic achievement and vice versa.

O3: To study the relationship between academic achievement and SRL of secondary school female students.

H03: There is no significant relationship between the academic achievement and study SRL secondary school female students. Table 4.3

Table: 4.3 Coefficient of correlation between self-regulated learning and SRL of secondary school female students

Variables	No. of Students	Correlation of Coefficient (r)
Self-Regulated Learning	40	0.574**
Academic Achievement	40	
Note: **Significant at 0.01 level		

A Perusal of Table 4.3 shows that the obtained 'r' value 0.574 between academic achievement and SRL of secondary school female students is found higher than the table value i.e. 0.208 that is significant at 0.01 level of significance. So, the null hypothesis "There is no significant relationship between the academic achievement and SRL of secondary school female students" is rejected. This reveals that study habits is significantly related to academic achievement of senior secondary school female students. The magnitude of 'r' indicates positive correlation which means that increase in SRL scores leads to increase in academic achievement and vice versa. This can be due to the reason that female students with good SRL have potential to complete their assignment successfully and learn the material effectively which results in enhancing academic achievement.

O4: To compare the academic achievement of male and female senior secondary school students.

Ho4: There is no significant difference in the academic achievement of male and female secondary school students. To test the null hypothesis, Mean, Standard Deviation, Standard Error of Mean, t-value, degrees of freedom (df), and level of significance of the scores obtained from academic achievement of secondary school students was calculated. The results are presented in Table 4.4.

Table 4.4: Means, SDs and 't' ratio of Academic Achievement of Male and Female Senior Secondary School Students

Variables	Group	N	Mean	SD	t-value	Level of Significance
Academic Achievement	Male	60	81.81	12.96	1.85	Not significant
	Female	40	79.45	11.46		
Note:- 't' value 1.85< table value 2.59 (at 0.01 level) ; 1.97 (at 0.05 level)						

From the Table 4.4, it can be observed that the t-value of 1.85 was found not significant at 0.01 levels with 98 degrees of freedom, which indicates that the academic achievement of male and female secondary school students did not differ significantly. So, the null hypothesis "there exists no significant difference in the academic achievement of male and female secondary school students, is accepted. Thus, we can say that academic achievement is not affected by gender. In terms of Mean scores, it can be seen that mean academic achievement score of male secondary school students i.e. 81.81 has been found higher than that of female secondary school students i.e. 79.45. The present finding is supported by the finding of Sinha, Imam and Anwar (2016) who also found that gender have no significant effect on the academic achievement of students.

O5: To compare the SRL of male and female senior secondary school students.
H05: There is no significant difference in the SRL of male and female secondary school students.
To test the null hypothesis, Mean, Standard Deviation, Standard Error of Mean, t-value, degrees of freedom (df), and level of significance of the scores obtained from study habits scale was calculated. The results are presented in Table 4.5

Table 4.5 Means, SDs and 't' ratio of Self-Regulated Learning of Male and Female Senior Secondary School Students

Variables	Group	N	Mean	SD	t-value	Level of Significance
Self-Regulated Learning	Male	60	215.46	50.73	0.326	Not significant
	Female	40	209.75	48.67		
Note:- 't' value 0.326 < table value 2.59 (at 0.01 level) ; 1.97 (at 0.05 level)						

From the Table 4.18 and Fig 4.3, it can be observed that the t-value of 0.326 was found not significant at 0.01 levels with degrees of freedom, which indicates that the SRLof male and female secondary school students did not differ significantly. So, the null hypothesis i.e. there exists no significant difference in the SRL of male and female secondary school students, is accepted. Thus, we can say that gender have no influence on the SRL. In terms of Mean scores, it can be seen that mean SRL score of male secondary school students i.e. 215.46 has been found higher than that of female secondary school students i.e. 209.75. The present finding is supported by the finding of Kumar and Sohi (2013) who found that the sex of students is not likely to have any major effect on SRL.

FINDINGS OF THE STUDY

- Self-Regulated Learning and Academic Achievement in this study, the researcher examined the correlation between overall Self-Regulated Learning and academic achievement. Coefficient of correlation between self-regulated learning and academic achievement of secondary school students is 0.785 which is positive and significant at 0.01 level of significance. It shows that self-regulated learning and Academic Achievement of secondary school students are decidedly related with one another. Therefore, it could be concluded that secondary school students have better academic achievement if they have good self-regulated learning. It can

be interpreted that higher the self-regulated learning, higher will be the academic achievement of secondary school students and vice-versa.

- The obtained 'r' value 0.627 between academic achievement and SRL of secondary school male students is found higher than the table value i.e. 0.208 that is significant at 0.01 level of significance. This study reveals that academic achievement is significantly related to the SRL of secondary school male students. The magnitude of 'r' indicates positive correlation which means that increase in SRL scores leads to increase in academic achievement and vice versa.
- This study reveals that self-regulated learning is significantly related to academic achievement of senior secondary school female students. The magnitude of 'r' indicates positive correlation which means that increase in SRL scores leads to increase in academic achievement and vice versa. This can be due to the reason that female students with good SRL have potential to complete their assignment successfully and learn the material effectively which results in enhancing academic achievement.

CONCLUSION

Consistent with previous studies (Pintrich& De Groot, 1990; Zimmerman & Martinez-Pons, 1990), the results in this study support that SRL is positively related to academic achievements among senior secondary school students at Panipat district of Haryana.Self-Regulated Learning and Academic Achievement in this study, the researcher examined the correlation between overall Self-Regulated Learning and academic achievement. Coefficient of correlation between self-regulated learning and academic achievement of secondary school students is positive and significant. It shows that self-regulated learning and Academic Achievement of secondary school students are decidedly related with one another. Further, study reveals that academic achievement is significantly related to the SRL of secondary school male students. The magnitude of 'r' indicates positive correlation which means that increase in SRL scores leads to increase in academic achievement and vice versa.Therefore, it could be concluded that secondary school students have better academic achievement if they have good self-regulated learning.

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