

INFLUENCE OF SELF-EFFICACY ON ACADEMIC ACHIEVEMENT OF HIGHER SECONDARY LEVEL STUDENTS

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ABSTRACT: This study aimed to find out the influence of self-efficacy on the academic achievement of Higher Secondary School Students. The investigation is carried out on the research question that whether there is significant relationship between self-efficacy and academic achievement of Higher Secondary School Students. A survey method of investigation is carried out on 300 higher secondary school students. The data analysis rightly showed that the presence of Self-efficacy in higher secondary students act as a positive indication in their academic achievement. So, this study requires great advantage in this regard..

Key words: Self-Efficacy, Academic Achievement

INTRODUCTION

Education is a natural process, which lasts from birth to death. Ability to beget education is the gift of nature of man that he tries to absorb and adjust himself to the outer world. It's is a powerful and necessary tool in the hands of society for its development which helps the society convey knowledge, beliefs, ideals, hopes, traditions, customs and dogmas to the progeny. Knowledge forms the basis of all kinds of development. Generally, the higher secondary course aims to teach students fundamental skills, such as how formulate appropriate questions, differentiate between evidence and opinion, recognize bias and organize and communicate results effectively. Students are required to research information from a variety of sources, to think critically and make connections between the ideas and facts to gather and to use that information to solve problems through both independent effort and collaborative work. Through this course students required to get essential knowledge and transferable skills that are applicable in various areas of their lives: in their personal, family life, in their postsecondary studies and in the workplace. This stage is crucial stage in the schooling period of a child. If the teacher or a parent is not considering a child at this stage for their physical and mental well-being it will turned to serious problem to the students as well as society. So, it is very necessary to conduct a study in this direction.

Self-efficacy of an individual is a judgment of one's own ability to perform novel and to do difficult tasks. Each and every individual in the society possess a self-efficacy of his own; but the range of it varies from individual to individual. It can neither said to be truly hereditary factors nor an environmental factor;

but is actually fusion of the two. Education, which is the process of imparting myriad forms of knowledge, thus upholds a pivotal position in the progress of human life. Our nation cannot depend on sheer quality of manpower, but must strive to find high quality personnel especially having self-efficacy and inspiration to deal with vital problems. A person's view of himself or his self-efficacy is closely related to how he behaves and learns. We must understand that a student's performance depends on how self-efficient she/he is. Thus, student's self-efficacy is the functional and facilitating factor for academic achievement.

NEED AND SIGNIFICANCE OF THE STUDY

Academic achievement of students is the prime concern of teachers, educators and psychologists. Researchers have been busy in identifying and investigating various factors influencing academic achievement. The importance of academic achievement has raised several important questions in educational researches like which factors facilitate and retard achievement in students and how far do the different factors contribute towards achievement, as individual differences contribute towards difference in achievement, as there are differences between expected outcomes of education and the real outcomes. Thus, the nature of education itself demands research in its various areas.

As the quality of performances, the determinant for success in an ever-growing competitive world, everyone desires a high level of achievement. Instruction at any level primarily centered on academic achievement of students. Hence scholastic achievement has become a fertile ground for research work to identify the factors and their influence on achievement. Now a day as against the previous concept of assigning major roles to cognitive variables, more emphasis is laid on self-efficacy, inspiration and so on. Here the investigator gives much importance to self-efficacy.

Today the role of teachers or the duties of teachers have been decreased. They are also a part of their activity-oriented methods, shoulder small-small responsibilities to their students. The students by experiencing those responsibilities feel themselves as self-confident, self-reliant and seem to be boosted with self-efficacy.

At higher secondary stage a well-organized scientific thinking in students is very essential. It requires good thoughts, feelings, and concerns about self and very focused on their ideas. Teacher's role is to provide meaningful and worthwhile academic activities. A highly inspirational and a high-level self-efficacy student directly make their learning meaningful and worthwhile. The investigator feels that pupils who do not have a minimum self-efficacy and inspiration to achieve high score. This sometimes cause under achievement. Therefore, low self-efficacy is the important causes of underachievement. The need and significant of the study the investigator also tried to analyze whether high self-efficacy influence the level of academic achievement or not.

OBJECTIVES OF THE STUDY

- To find out the extent of Self-efficacy of students at Higher Secondary level.
- To find out the level of Academic achievement of Higher Secondary Students.
- To find out the relationship between Self-efficacy and Academic achievement of students at Higher Secondary level
- To compare the Self-efficacy of Higher Secondary students based on subsamples of gender and type of management of school,

HYPOTHESES OF THE STUDY

- There exists significant relationship between self-efficacy and academic achievement of Higher Secondary Students.
- There is significant difference between the level of Self-efficacy among boys and girls.

METHODOLOGY USED FOR THE STUDY

Investigator used normative survey method for conducting the study. Study was conducted on a representative sample of 300 higher secondary students from two districts from Kerala (Thiruvananthapuram and Kollam) using stratified random sampling technique. It includes seven schools. The independent variable is selected as Self-efficacy and the dependent variable as academic achievement of higher secondary students. The tools used for study were Self-efficacy Scale (Dr. D Bindu) and Academic achievement Test. The statistical techniques used are percentages, independent samples t test and Karl Pearson's Product Moment correlation.

ANALYSIS AND DISCUSSION

1. Analysis of Self-Efficacy Scores of Higher Secondary Level students

- **Extent of Self efficacy scores of Higher Secondary Humanities students**

To find out the extent of Self efficacy scores of Higher Secondary students, the total sample of students were grouped in three levels, viz, High, Average and Low based of their Self efficacy scores. For this purpose, mean and standard deviation (σ) were calculated. Those getting scores at or above $M+\sigma$ were grouped 'high' and those getting scores below $M-\sigma$ were grouped as 'low'. Those getting scores between $M-\sigma$ and $M+\sigma$ were grouped as 'average'. The details are presented in the Table.1

Table .1 Data and Results of extent of Self efficacy score of Higher Secondary Students.

Extent of self- efficacy	Number	%
High Self efficacy	17	5.67
Average Self efficacy	247	82.33
Low Self efficacy	36	12
Total	300	100

Table 1 shows that only 17 (5.67%) students have high Self efficacy scores, 247 (82.33%) students have average self-efficacy scores and 36 (12%) students have low self-efficacy scores. This shows that a great majority of the students have only average Self efficacy score.

- **Comparison of Self efficacy scores of Higher Secondary boys and girls**

In this section the Self-efficacy of boys and girls were separately found out and calculated arithmetic mean and standard deviation. For comparison significance of difference between the mean values of these samples were found by calculating the critical ratio. The details are given in the Table.2

Table 2 Data and results of test of significance of the difference in Self efficacy scores of male and female students

Self-efficacy	N	Mean	SD	CR	Level of Significance
Boys	132	176.79	36.64	0.55	P>0.05
Girls	168	179.05	34.29		

The mean and standard deviation of the Self-efficacy score in boys are 176.78 and 36.64 and of girls are 179.05 and 34.29 respectively. The difference in the mean was tested for significance. The critical ratio obtained is 0.55 which is less than the value set of significance that is 2.58 at 0.01 level and 1.96 at 0.05 levels. The inference is that there is no significant difference between the Self-efficacy scores of boys and girls.

- **Comparison of Self-efficacy scores of students with respect to Type of Institutions**

The whole samples of students were divided into two groups, viz, those who are studying in Government schools and those in Private(aided) schools. To find out whether there exists any significant difference between these groups in their self-efficacy scores. The result of the analysis is given in the Table.3

Table 3 Data and results of test of significance of the difference in self-efficacy scores of higher secondary students belong to Government and Private schools

Variable	N	Mean	SD	CR	Level of Significant
Self-efficacy					
Government	180	174.92	35.87	1.91	P>0.05
Private	120	182.76	34.04		

The obtained critical ratio is not significant at 0.05 level. (CR=1.91; P>0.05). This means that there is no significant difference in the self-efficacy scores of higher secondary students studying in Government and Private schools.

2 Analysis of Academic Achievement Scores of Higher Secondary Students

- **Extent of Academic achievement scores of Higher Secondary students**

In order to find out the extent of Academic achievement of Higher Secondary students, the total sample of students were grouped in three levels viz High, Average and Low based of their Academic achievement scores. For this purpose, mean and standard deviation (σ) were calculated. Those getting scores at or above $M+\sigma$ were grouped 'high' and those getting scores below $M-\sigma$ were grouped as 'low'. Those getting scores between $M-\sigma$ and $M+\sigma$ were grouped as 'average' details are presented in the Table.4

Table 4 Data and results of extent of Academic achievement scores of Higher Secondary students

Extent of Achievement	No.	%
High achievement	43	14.33
Average achievement	206	68.67
Low achievement	51	17.00
Total	300	100

The table shows that only 43(14.33%) students have high Academic scores, 206(68.67%) have average Academic scores and 51 (17%) have low Academic achievement scores. This shows that a majority of the students have average Academic achievement scores.

- **Comparison of Academic achievement scores of Higher secondary boys and girls**

In this section the Academic achievement scores of boys and girls were separately found out and calculated Arithmetic mean and standard deviation. For comparison, significance of difference between the mean values of these samples was found by calculating the critical ratio. The details are given in the Table.5

Table 5 Data and results of test of significance of Academic achievement scores of boys and girls

Group	N	Mean	SD	CR	Level of Significance
Boys	132	385.89	60.08	0.083	P>0.05
Girls	168	380.32	54.34		

The mean and standard deviation of the Academic achievement scores of boys are 385.89 and 60.08 and of girls are 380.32 and 54.34 respectively. The difference in the mean was tested for significance. The critical ratio obtained is 0.083 which is the less than the value set of significance that is 2.58 at 0.01 level and 1.96 at 0.05 levels. Therefore, The inference is that there is no significant difference between the Academic achievement scores of boys and girls.

- **Comparison of Academic achievement scores of students with respect to type of management of the school**

The whole sample of students were divided into two groups viz those who are studying in Government schools and those in Private (aided) schools. To find whether there exists any significant difference between these groups in their Academic achievement scores. The result of the analysis is given in the Table 6.

Table 6 Data and results of the test of significance of Academic achievement scores of higher secondary school students on the basis of type of School.

Group	N	Mean	SD	Critical Ratio	Level of Significance
Govt	180	377.62	58.68		
Private	120	390.48	53.44	1.96	P=0.05

The obtained critical ratio is significant 0.05 level (CR=1.96, P=0.05). This means that there is significant difference in the Academic achievement scores of students studying in Government and Private (aided)schools. Students studying in Private schools have more Academic achievement compared to those in Government schools.

3. Correlation Analysis

- **Relationship between self-efficacy and Academic achievement of Higher Secondary students**

In this section an attempt has been made to find out whether there is any significant relationship between self-efficacy and Academic achievement of the higher secondary students based on the whole sample and subsamples based on Gender. Details of analysis are given in Table No 7 and Table No 8.

Table 7 Data and results of the test of significance of the correlation between Self efficacy and Academic achievement of Higher Secondary students of the total sample

Variables correlated	N	r	SEr	Confidence interval	
				lower	upper
Self-efficacy and Academic achievement	300	0.282**	0.053	0.145	0.419

** significant at 0.01 level

It is evident that the coefficient of correlation between Self-efficacy and Academic achievement for the total sample is 0.282. The confidence interval values (r_{pop}) at 0.01 level are 0.145 to 0.419. Therefore, it can be stated that there exists a positive correlation between Self-efficacy and Academic achievement scores for the whole sample.

- **Relationship between Self-efficacy and Academic achievement scores of male and female students**

To find out the relationship between Self-efficacy and Academic achievement scores of male and female students co-efficient of correlation 'r' is calculated. The table 8 shows the details of the analysis.

Table No .8

Results and test of significance in the correlation between Self efficacy and Academic achievement of male and female students

Variables correlated	Gender	n	r	ser	Confidence interval	
					lower	upper
Self-efficacy and academic achievement	Male	132	0.247**	0.081	0.036	0.458
	Female	168	0.319**	0.069	0.140	0.498

** significant at 0.01 level

The 'r' value obtained for Self-efficacy and Academic achievement scores for male students is 0.247. The 0.01 confidence interval lies between 0.036 and 0.458. So, the 'r' value is significant at 0.01 level. Therefore, there exists significant relationship between Self-efficacy and Academic achievement scores of the male students.

The 'r' value obtained for Self-efficacy and Academic achievement scores for female students is 0.319. The 0.01 confidence interval lies between 0.140 and 0.498. So, the 'r' value is significant at 0.01 level. Therefore, there exists significant relationship between Self-efficacy and Academic achievement scores of the female students.

FINDINGS AND CONCLUSION

- There is a significant relationship between Self-efficacy and Achievement of students at Higher Secondary level for the whole sample and subsamples based on Gender. The 'r' value of Self-efficacy and Achievement for the whole sample is 0.282 and the 'r' values of Self-efficacy and Achievement for the boys and girls are 0.247 and 0.319 respectively.
- There is no significant difference between the Academic achievement of boys and girls in the Higher Secondary level. The 't' value 0.083 indicates that the male students and female students do not differ significantly in their Academic achievement.
- There is significant difference between the Academic achievement of students of Private (aided) and Government schools. Because the 't' value 1.96 indicates that the type of management differs significantly with their Academic achievement.
- There is no significant difference between the Self-efficacy of boys and girls in the Higher Secondary level. Because the 't' value 0.55 indicates that the male student and female student do not differ significantly in their Self-efficacy.
- There is no significant difference between the Self-efficacy of Government and Private school students. Because the 't' value 1.91 indicates that the Government and Private school students do not differ significantly in their Self-efficacy.

Self-efficacy of an individual is a judgment of one's own ability to perform novel and difficult tasks. Each and every individual in the society possess a self-efficacy of his own; but the range of it varies from individual to individual. It can neither said to be a truly hereditary factor nor an environmental factor; but is actually a fusion of the two. It was found that certain practices can improve the self-efficacy of individual. Training to develop self-efficacy has to be genuinely practiced from childhood days. During those days, home provides a congenial atmosphere and the parents can help their children in developing their self-efficacy; by giving them training to develop self-confidence, engage in self-regulated activities, from efficacy of their own in every matter that shadows them. when they reach the school, the remaining responsibility to mold them to become fruitful citizens, rests on their teachers.

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