

Research Article

Influence of Self-efficacy on Achievement Motivation among Adolescents

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ABSTRACT

The study aims at finding out the Self-Efficacy and Achievement Motivation among higher secondary school students based on Gender and Medium of instruction. The sample taken for the study is about 1200 higher secondary school students of Chennai and Ponneri Educational Districts who had opted Biology as one of the subject of study. The Achievement Motivation Inventory was developed by Muthee J.M & Immanuel Thomas (2009) and General Self-Efficacy Scale developed in Germany by Mathias Jerusalem and Ralf Schwarzer (1979), was used and created as a survey instrument by Big Brothers Big Sisters (BBBS) of greater Rochester was used in the study. The major findings of the study indicate that there is a significant difference in the Self-Efficacy and Achievement Motivation based on Gender and Medium of Instruction among higher secondary school students and also Girls exhibit higher Self-Efficacy and Achievement Motivation than that of Boys. There also exists significant relationship between Self-Efficacy and Achievement Motivation among adolescents.

Keywords: Self-efficacy, Achievement motivation, Adolescents, Academic performance, Educational psychology

INTRODUCTION

Adolescents generally avoid tasks where self-efficacy is low, but undertake tasks where self-efficacy is high. Self-efficacy is significantly beyond actual ability which leads to overestimation of the ability to complete tasks. On the other hand, when self-efficacy is found to be lower than ability it discourages growth and skill development. High self-efficacy can affect motivation in both positive and negative ways. A similar finding has been revealed by Prat-Sala, Merce; Redford, Paul (2010) who found that students classified as high in Self-

Efficacy (reading and writing) were more likely to adopt to Deep or strategic approach to studying, while students classified as low in Self-Efficacy were more likely to adopt a surface approach. In general, adolescents with high self-efficacy are more likely to make efforts to complete a task, and to persist longer in those efforts, than those with low self-efficacy. The stronger the self-efficacy or mastery expectations, the more active the efforts would be for adolescents'. This is supported by Chen, Jason A.; Usher, Ellen L(2013) who found that mastery experiences are a powerful source of self-efficacy among middle and high school students. However, those with low self-efficacy sometimes experience incentive to learn more about an unfamiliar subject, where someone with a high self-efficacy may not prepare so well for a task.

Research on Australian Science students showed that those with high self-efficacy showed better academic performance than those with low self-efficacy. Confident individuals who typically took control over their own learning experiences, were more likely to participate in class, and preferred hands-on learning experiences. Those with low self-efficacy typically shied away from academic interactions.

Bandura showed that difference in self-efficacy correlates to fundamentally different world views. People with high self-efficacy generally believe that they are in control of their own lives, that their own actions and decisions shape their lives, while people with low self-efficacy may see their lives as outside their control.

RELATED WORK:

Britner, Shari L (2008) found that in life science classes, girls earned higher grades but did not report stronger self-efficacy and report higher science anxiety, they also found that girls, self-efficacy was also the strongest predictor of science grade across fields. Torchia, Sean P (2012) found that students' self-efficacy and intrinsic motivation are influenced positively. Bryan, Robert R.; Glynn, Shawn M.; Kittleson, Julie M. (2011) found that consistent with social cognitive theory, self-efficacy was the motivation factor most related to achievement. Hacieminoglu, Esme; Yilmaz-Tuzun, Ozgul; Ertepinar, Hamide (2009) found that students previous science grades were positively correlated with achievement, meaningful learning, and self-efficacy and negatively correlated with rote learning and performance orientations

OBJECTIVES OF THE STUDY

1. To find out whether a significant difference exists in Self-Efficacy and Achievement Motivation of Higher Secondary School Students based on Gender.
2. To find out whether a significant difference exists in Self- Efficacy and Achievement Motivation of Higher Secondary School Students based on Medium of Instruction.
3. To find out whether Self-Efficacy of Higher Secondary students is significantly related to Achievement Motivation of Higher Secondary School Students.

METHODOLOGY

Keeping in view the nature and purpose of the study, the investigator adopted a descriptive survey method to carry out the study. This method deals with what exists at present and it describes and interprets the current and prevailing situation and conditions.

SAMPLE FOR THE STUDY

The investigator selected students of XI standard Biology subject group from three different types of schools- Government, Government Aided and Private. The sample consists of 1200 students. Simple Random Sampling technique was used for the study.

HYPOTHESES OF THE STUDY

1. There is no significant difference between boys and girls in their Self-Efficacy and Achievement motivation among Higher Secondary School Students.
2. There is no significant difference between Self-Efficacy and Achievement Motivation among Higher Secondary School Students based on Medium of Instruction.
3. Self-Efficacy is not significantly related to the Achievement Motivation among Higher Secondary School Students.

RESEARCH TOOLS FOR THE STUDY

The following tools have been used by the researcher for the present study:

VARIABLES AND RESEARCH DESIGN

- a. General Self-Efficacy Scale developed in Germany by Mathias Jerusalem and Ralf Schwarzer (1979), was used and created as a survey instrument by Big Brothers Big Sisters (BBBS) of greater Rochester.
- b. Achievement Motivation Inventory by Muthee J. Mand Immanuel Thomas (2009)

ANALYSIS AND INTERPRETATION OF DATA:

TABLE-1: Self-Efficacy and Achievement Motivation among Higher Secondary School Students based on Gender.

Variables	Gender	N	Mean	Standard Deviation	Std Error	't'	p	L.S
Self-Efficacy	Boys	340	63.15	8.862	0.481	2.010	0.040	0.05
	Girls	860	64.34	9.381	0.3220			
Achievement Motivation	Boys	340	101.29	11.863	0.643	2.190	0.029	0.05
	Girls	860	102.98	12.124	0.413			

From the mean scores it could be seen that the girls ($M= 64.34$) have higher Self-Efficacy than that of boys ($M=63.15$). Also the 't' value (2.010) is more than the table value(1.96) which indicates that there is significant difference between the Self-Efficacy and Gender. Hence the hypothesis that there is no significant difference between boys and girls in their Self-Efficacy is rejected and the alternative hypothesis is accepted.

The table also shows that the mean score for Achievement Motivation is found to be higher for girls ($M=102.98$) than that of boys ($M=101.29$). Also the 't' value (2.190) is greater than the table value (1.96) at 0.05 level which shows that there is significant difference between Achievement Motivation and Gender. Hence the hypothesis that there is no significant difference between boys and girls in their Achievement Motivation is rejected and the alternative hypothesis is accepted.

TABLE-2: Self-Efficacy and Achievement Motivation among Higher Secondary School Students based on Medium of Instruction.

Variables	Medium of Instruction	N	Mean	Standard Deviation	Std Error	't'	p	L.S
	English	670	64.69	8.272	0.320			

Self-Efficacy	Tamil	530	63.14	10.296	0.447	2.890	0.004	0.01
Achievement Motivation	English	670	105.38	11.863	0.463	9.668	0.000	0.01
	Tamil	530	98.85	11.166	0.485			

From the mean scores it could be seen that the English Medium Students ($M= 64.69$) have higher Self-Efficacy than that of Tamil Medium Students ($M=63.14$). Also the 't' value (2.890) is more than the table value(2.58) at 0.01 level which indicates that there is significant difference between the Self-Efficacy and Medium of Instruction. Hence the hypothesis that there is no significant difference between the Self-Efficacy among Higher Secondary School Students based on Medium of Instruction is rejected and the alternative hypothesis is accepted. The table also shows that mean score for the Achievement Motivation is seen to be higher for English Medium Students ($M=105.38$) than that of Tamil Medium Students ($M=98.85$). Also the 't' value (9.668) is greater than the table value (2.58) at 0.01 level which shows that there is significant difference between Achievement Motivation and Medium of Instruction. Hence the hypothesis that there is no significant difference between the Achievement Motivation of Higher Secondary students based on Medium of Instruction is rejected and the alternative hypothesis is accepted.

TABLE-3: Relationship between Self-Efficacy and Achievement Motivation among Higher Secondary School Students.

Variable	N	Correlation	Level of Significance
Self - Efficacy Vs Achievement Motivation	1200	0.198	0.01

The above table shows that the Coefficient of Correlation for Self-Efficacy and Achievement Motivation for Higher Secondary School Students is 0.198 which is significant at 0.01 level.

RESULTS AND DISCUSSION:

The present study reveals that girls have higher Self-Efficacy than boys which is supported by the study of Sawtelle, Vashti (2011) who found that women rely on different sources of Self-Efficacy than men. It is also analyzed in the present study that girls have higher Achievement Motivation than boys, which is supported by the study of Fironzeh Sepehrian

Azar-(2013) found that there was significant difference among boys and girls in terms of the level of achievement motivation, academic achievement and academic self-efficacy. The present study shows that there is significant difference in Self-Efficacy and Achievement Motivation among the higher secondary school students with reference to their medium of instruction which show that students who have been taught in English as the medium of instruction have high Self-Efficacy which in-turn boosts up their Achievement Motivation to achieve better in their Academics. Also Self-Efficacy is positively correlated to Achievement Motivation which shows that both are inter-related for the performance of the students as a whole. Clemons, Trudy L (2008) found that student's self-perception had strong influences on achievement motivation and study and organizational skills.

EDUCATIONAL IMPLICATIONS:

Adolescents high in need-Achievement are characterized by a tendency to seek challenges and a high degree of independence. Their most satisfying reward is the recognition of their achievements.

Considering the findings of the study the investigator attempts to suggest the following educational implications.

- Since the girls have higher Self-Efficacy than that of boys there can be planned programmes created by the academicians which provide opportunities for the adolescent boys to develop their level of self-efficacy which in-turn motivates them to achieve in their performances.
- Girls have higher Achievement Motivation than boys which can be enhanced by creating a positive environment for the adolescents in the school and encourage them to participate in all the activities which are of interest to them.
- English as the Medium of instruction has been proved to be a positive factor to develop Self-Efficacy and Achievement Motivation among adolescents hence the teachers should play a positive role in motivating the students to develop their level of performance irrespective of the language taught or written as it only plays the role of communication and not a negative image on their personality.
- Rewards and correction, cooperation and competition, and guidance and special help provided by the teachers, educators, administrators and parents play a major role in building the level of performance among students as a whole.

CONCLUSION

Higher Secondary Schools of today have been designed to motivate students especially the adolescents to achieve high in academics. Achievement Motivation dominates all the instructional and learning procedures involved in schools. Other related factors for higher academic achievement can be attributed to Self-Efficacy. Adolescents of today need to exercise Self-Efficacy to be positively correlated to Academic Achievement.

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