THE PREDICTIVE ROLE OF ACADEMIC SELF-EFFICACY ON ACADEMIC PERFORMANCE OF SENIOR SECONDARY SCHOOL STUDENTS

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Abstract

Self-efficacy is a main contributor of potential behavior than performance attainment (Bandura, 1997). Self-efficacy is a fundamental feature in educational process and scaffold the learning procedure successfully. The objective of the investigation was to scrutinize level of academic self-efficacy and difference of academic self-efficacy with regard to gender, locality and type of school. 360 senior secondary students were taken as sample for the study. The academic Self-Efficacy Scale by Abdul Gafoor K. and P. Muhammed Ashra was used. There are 40 items in the scale. The end result of the study indicate that there is small relationship between academic self efficacy and academic performance of senior secondary school students. The paper conclude that there is significant predictive role of academic self-efficacy on academic performance among senior secondary school students.

Keywords- Academic self-efficacy, Senior secondary school, students, Predictive role

INTRODUCTION

A person's belief in his/her talents to establish and accomplish a required course of act to attain anticipated goals (Bandura, 1997) is known as self-efficacy. It very well may be likewise characterized as a person's conviction on his/her capacities to finish and achieve an task efficiently as well as fruitfully (Akhter, 2008). Self-Efficacy is the ability to perceive and value one's own self-worth which often comes depending upon the ability to achieve academic excellent competitively (Covington, 1984) and one's sense of worth completely depend on accomplishment. In addition,, youngsters' confidence in their own capacity and their desire for progress firmly affects their instructive results (Wigfield and Eccles, 2000).

Around 40 years ago, the term self-efficacy came into existence by Albert Bandura (1977a). He defined it as: "Self-efficacy is a mechanism to explain and predict one's thought emotion and action and to organize and execute courses of action to attain designated goals, in this conceptualization. Self-efficacy serves as self-regulatory function by providing individuals with the capability to influence their own cognitive processes and actions and thus alter their environments (Bandura,2001)". Multidimensional theory distinguished across multiple domains of functioning is regarded as self-efficacy.

Four chief foundations of self-efficacy are: Inactive mastery experience - that is, practical experience; relayed experiences—other people's experience; verbal persuading—an assessment or feedback from others (Bandura, 1977a), it can be realistic to similar learning conditions once self-efficacy is established.

The natural need of children is thinking of themselves. If we want to satisfy this need, children must trust that they are accomplished of doing well. In school room, children ascertain and progress much of their sense. For learning and training process for potential educators, this fact is very important, because it is estimated that students who are having great academic self-efficacy are extra self-confident and inculcate additional optimistic attitudes to upcoming performance.

LITERATURE REVIEWS

Ayllon et al, (2019) conducted study to find out teachers' participation and students' self-efficacy: Keys to achievement in higher education. The research was conducted on students of University of Girona. It was concluded that there was a positive significant relationship between teacher's involvement, student's self-efficacy and achievement of students.

Mafla et al., (2019) in their study on Academic Performance and Self-Efficacy in Colombian Dental Students from Universidad Cooperativa de Colombia, Pasto, Colombia concluded that academic performance and self-efficacy and are positively correlated. Participant's semester grade point average was used as a measure of academic performance.This affiliation was statistically significant only among females and those in low SES strata.It was most extreme among understudies with an overwhelming scholarly course load.

Meral et al., (2012) conducted a study " to determine the relationship between self-efficacy and academic performance of sophomore students". The sample size consisted of eighty two sophomore students. They appeared "Instructional Planning and Evaluation class at the Marmara University Technical Education Faculty". They used survey method in order to collect data. They used final grade note of each student for measuring performance. Scale used by them to measure self-efficacy was Motivational Strategies Scale which was given by Pintrinch and De Groot in 1990. After that they changed it into Turkish by Altun and Erden in 2006. Pearson's correlation statistical technique used to analyze the data. The result indicated that there was a strong positive correlation between self-efficacy and academic performance.

Saberi et al., (2016) conducted a research on "Research self-efficacy and its relationship with academic performance in postgraduate students of Tehran University of Medical Sciences". This study was conducted, "with the aim of determining the research self-efficacy and its relationship with academic performance in postgraduate students of Tehran University of Medical Sciences (TUMS) in 2016".The results of this study revealed that "the research self-efficacy score of TUMS postgraduate students is at an acceptable level or we can say at satisfactory level, except the quantitative and computer skills". "There is a direct and significant relationship between research self-efficacy score and student's academic performance, as found in the study, research self-efficacy will also increase students' academic erformance".

Hasan and Parvez (2019) carried out study to understand "the effect of Self-Efficacy, Gender and Locale on the Academic Achievement of Secondary School". For this purpose sample of students of secondary school (Class 9th& 10th) were taken into consideration for the study. 400 students including male (200) and female (200) were designated for the ultimate sample of the research. The technique was Simple random sampling technique Self-Efficacy Scale (SES) developed by Singh and Narain was administered on the 400 students for taking their responses. As a result, it is concluded that, "there is a significant positive correlation between self-efficacy and academic achievement".

Motlagh et al., (2011) conducted a research to study the relationship between self-efficacy sub-factors and academic achievement of school students in Tehran. 250 students were selected through multistage cluster sampling as sample size. The efficacy scale includes questionnaire which was established by Pour Jafar Doust in 2007. Their GPA (grade point average) was used to measure achievement. The data was examined by exhausting correlation coefficient and regression analysis. The results showed that "sub-factors of self-efficacy i.e., self-evaluation, self-regulation and self-directing were significantly correlated with academic achievement". As per results, it was concluded that self-efficacy is considerable predictor of academic achievement.

Arbabisarjou et al., (2016) investigated "relationship between self-efficacy and academic achievement of medical students in Zahedan University of Medical Science, Iran". They conducted an analytical and descriptive research on 190 medical sciences students during 2015-2016. Random sampling technique was used to select students and data was collected by two-part questionnaire tool. Demographic characteristics were included in first part and self-efficacy questionnaire was used in second part. SPSS version 19 was used by them to analyze data through descriptive statistics. Pearson's Correlation Coefficient was used as statistical technique. The result indicated that "there was a strong relationship between self-efficacy and gender, but there was no significant relationship between gender and academic achievement". Females have high self-efficacy than males. "There was a significant relationship observed between self-efficacy and academic achievement of students measured through Pearson's correlation coefficient". From finding it was concluded that students with high self-efficacy are believed to have more academic status than those with low self-efficacy.

Domenech-Betoret et.al., (2017) investigated "a relationship between self-efficacy, students' expectancy value-beliefs, teaching process satisfaction and academic achievement". The main motive of this research was to determine the motivational mechanism which played a mediating role between self-efficacy and academic achievement relationship. Students' academic achievement and satisfaction played an important role to indicate instruction quality. The sample size consists of 797 Spanish students' pursuing secondary education form 36 educational setting and 3 schools. Students' general academic self-efficacy scale by Bandura in 1990 and by Pastorelli et al. in 2001; Expectancy-value scale as per Motivational Theory by Pintrich in 1989 and De Groot in 1990; Satisfaction of the teaching process scale developed by Domenech in 2011 were used to collect data. The scales of "self-efficacy and expectancy-value beliefs were operated at the beginning of the course and scales of achievement and satisfaction were administered at the end of the course". To analyze the data, Structural equation modeling (SEM) method was used. The results indicated that expectancy-value beliefs of students exhibited a mediator role between self-efficacy and academic achievement relationship.

Amir et al., (2018) studied a research on "Research self-efficacy and its relationship with academic performance in postgraduate students of Tehran University of Medical Sciences in 2016". "Research self-efficacy is one of the main factors influencing the successful conduction of research and following it in students". This study is conducted, "with the aim of determining the research self-efficacy and its relationship with academic performance in postgraduate students of Tehran University of Medical Sciences (TUMS) in 2016". The research self-efficacy score of TUMS postgraduate students is at an acceptable level or we can say at satisfactory level, except the quantitative and computer skills is the major finding of this study. As found in results that "there is a direct and significant relationship existed between research self-efficacy score and student's academic performance", which will help in refining the research self-efficacy will also increase students' academic performance.

Koseoglu (2015) studied "the relationship between self-efficacy and academic achievement of under graduate university students in İstanbul, Turkey". He took 214 students pursuing under graduate degree in university and their average age was 18 to 20. MSLQ (Motivated strategies for learning questionnaire) scale was used to measure self-efficacy, Inherent theories of Intelligence Scale to measure intelligence and Achievement goal inventory scale developed by Grant and Dweck in 2003 was used to assess achievement of participants. A multivariate analysis of co-variance (MANCOVA) statistical procedure was used to define that to what extent students with low and high self-efficacy varies with respect to academic achievement and implicit theories of intelligence. The results indicated that the students with low self-efficacy supposed that intelligence is something that cannot be changed though it is inherited. On the other hand the students with high self-efficacy believed possess mastery goals as well as performance goals that will lead to good grades. Also, the students who possesses self-efficacy were competent to face challenges and succeeded in it and be excellent in academics.

OBJECTIVE

1) To find the significant correlation and predictive role of academic self-efficacy on academic performance among senior secondary school students.

RESEARCH METHOD

The current study is "descriptive in nature"; therefore "descriptive survey method" was used. The data was collected from three districts of Punjab i.e. Amritsar, Ludhiana and phagwara belong to Majha, Malwa and Doaba and researcher went to three types of school i.e. government, private and meritorious. The sample size was 360 students of senior secondary school in which both gender was there.

TOOL FOR DATA COLLECTION

Tools are mechanisms which assist the investigator to collect the data. They are used for collection of certain type of information which in turn helps to make analysis of the responses of the sample on the variable under study. In order to collect data on this study, academic Self-Efficacy Scale -2006 by Abdul Gafoor K. and P. Muhammed Ashraf was used. There are 40 items in the tool. The idea on which the scale is grounded is efficacy of the students in each of the dimensions of work of academic would give to the overall academic self-efficacy.

Correlation and reliability of ASE scale

"Test-retest coefficient of correlation"	.85	"N= 30"
"Split half reliability of the scale"	.90	"N=370"

Norms

Serial no.	Academic self efficacy Levels	Range
1.	High	164 & above
2.	Average	163-126
3.	Low	125 & below

ANALYSIS AND INTERPRETATION

Data analysis is the most important part of any research. The data which has been tabulated give meaning only after analysis and interpretation of data collected so as to arrive at some empirical solution of selected problem.

One of the objectives of this study is to determine the relation and predictive role of academic self-efficacy and academic performance. Hence data was collected using Ryff psychological well-being scale and academic self-efficacy scale and is subjected to statistical analysis using correlation. The analysis was done for all the dimensions of the various scales mentioned.

Correlation Table of academic self-efficacy and academic performance

Percentage		"Academic self-efficacy"	Percentage
"Academic self-efficacy"	Pearson Correlation	1	.260[**]
	Sig. (2-tailed)		.000
	N	360	360

From the table, it is clear academic self-efficacy is significantly correlated with academic performance, p value being .000 significant at 0.01 level of significance. The pearson correlation value (.260) reveals that though both the variables are related but correlation is very low.

Table of Model Summary

"Model"	"R"	"R Square"	"Adjusted R Square"	"Std. Error of the Estimate"
1	.332[a]	.110	.090	11.606
a. Predictors: (Constant), ASE				

From the model summary table it can be seen that value of regression coefficient ($R^2 = 0.110$), which means that academic self-efficacy is contributing 11% to academic performance among senior secondary school students

Predictive role of ASE on academic performance among senior secondary school students.

ANOVA[a]					
Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	5854.522	8	731.815	5.433	.000[b]
Residual	47282.409	351	134.708		
Total	53136.931	359			
a. Dependent Variable: % b. Predictors: (Constant), ASE					

Looking at the ANOVA table above, it is clear that regression model is statistically significant (df1= 8, df2= 351, F= 5.433) with p= 0.00 which indicated that overall, the model applied can statistically and significantly predict the dependent variable (Academic Achievement). Therefore, the null hypothesis stated that "There exists no significant predictive role of psychological well-being and academic self-efficacy on academic performance among senior secondary school students" is not accepted, indicating that there is significant predictive role of academic self-efficacy on academic performance among senior secondary school students.

Coefficient Table

Coefficients[a]					
	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
1 (Constant)	36.575	6.447		5.673	.000
ASE	.146	.033	.230	4.357	.000
Dependent Variable: Academic Performance (%)					

From the table of coefficients, it is clear that the p-value for Academic self efficacy is 0.000 (t= 4.357), so Academic self efficacy has significant positive role on academic achivement and predicted regression equation is: Students' Academic Achievement = 36.575 + 0.146 x Academic self-efficacy. Indicating that one unit rise in Academic self-efficacy, there will be 0.146 unit increase in Academic achievement.

CONCLUSION AND RECOMMENDATION

Conclusion is an important part of any research work because it gives the researcher the final word on the subject matter. The conclusion allows the investigator to have finishing and ultimate part of the issue he/she has raised in the investigation. It gives summary of the thoughts. So my conclusion of the study is that The result indicates that there is small relationship between academic self efficacy and academic performance of senior secondary school students (r=.260, P value=0.000). There is significant predictive role of academic self-efficacy on academic performance among senior secondary school students (F=5.433). Academic self-efficacy is contributing 11% to academic performance among senior secondary school students. It is recommended that School should make efforts to measure the academic self efficacy level and academic performance at regular intervals of time and according to obtained results through these measures school policies and curriculum should be formed. Workshop should be organized for students for enhancing their ASE and academic performance. Teachers should take care of students' psychological well being and academic self efficacy in such a way that will influence to increase students' academic performance.

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