

Self-Efficacy and Its Relationship with Academic Achievement of General Degree College Students in West Bengal

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Abstract: One of the key elements affecting academic performance is self-efficacy. Self-efficacy is the term used to describe students' attitudes and ideas about their potential to succeed academically, as well as their confidence in their capacity to complete academic assignments and successfully learn the subject. Self-efficacy beliefs motivate people to put up more effort, commitment, and tenacity, which results in excellent performance. While students with low self-efficacy blame their failures on their poor talents, individuals with high levels of self-efficacy explain their failures to their poor tries. It can play a role to improve the academic achievement among students of general degree colleges in North 24 Parganas and Howrah district of West Bengal. The aim of the was to identify the male & female relations respect to self-efficacy, rural & urban relations respect to self-efficacy and relationship between self-efficacy and its impacts on academic achievement. The present study was Normative Survey research. For collect the data researcher used "Self-Efficacy Scale for College Students" developed by Roy and Mahato (2023) from 100 general degree college students West Bengal (North 24 Parganas & Howrah). The 100 sample distributed as 53 male and 47 female, who had been selected purposely. The researcher used Mean & Standard Deviation (S.D.) as Descriptive Statistics, Scatterplot, Pearson's Product-Moment Correlation (r) and Independent 't'-test as Inferential Statistics applied to analyze the data. The result showed that, there is significant difference between college students male & female, there is a significant difference between college students in rural & urban areas and the self-efficacy as independent variables is negatively correlated with academic achievement, which mean EI is not significantly related to academic achievement.

Key words: Self-Efficacy, Academic Achievement, General Degree College, Descriptive Statistics, Product-Moment Correlation.

1. INTRODUCTION:

A person's self-efficacy is related to their belief in their capacity to engage in the actions necessary to produce specific performance outcomes. (Bandura, 1977, 1986, 1997). It demonstrates assurance in one's capacity to exercise control over one's own driving forces, actions, and social circumstances. According to psychologist Albert Bandura who originally proposed the concept about Self-efficacy, a personal judgment of "how well one can execute courses of action required dealing with prospective situations." "Believing in innate abilities means valuing one's unique set of cognitive strengths," continues educator Kathy Kolbe. In order to use such intrinsic qualities to attain goals, it also need tenacity and perseverance to go through challenges. Every area of human behavior is influenced by self-efficacy. The ability to face issues competently and the decisions one is most likely to make are both significantly influenced by the views one has about their ability to change circumstances. When it comes to actions that have an impact on one's health, these repercussions are particularly clear and convincing. Self-efficacy is the term used to describe students' attitudes and ideas about their potential to succeed academically, as well as their confidence in their capacity to complete academic assignments and successfully learn the subject. Self-efficacy beliefs motivate people to put up more effort, commitment, and tenacity, which results in excellent performance. While students with low self-efficacy blame their failures on their poor talents, individuals with high levels of self-efficacy explain their failures to their poor tries. As a result, self-efficacy has an impact on both task selection and task persistence. In other words, students who have low self-efficacy are more prone to avoid, put off, and eventually abandon their assignments out of fear.

In contrast, those with high levels of self-efficacy are more inclined to rely on themselves to find a solution when faced with challenging issues. They are also more likely to be patient while solving the problem, to put forth more effort, and to persevere for a longer period of time. Thus, it appears that one of the most crucial factors in students' academic success is their sense of self-efficacy. For instance, Chemers and Garcia discovered that a student's self-efficacy in their first year of college is a good indicator of how well they will perform in the future. Academic self-efficacy has a favourable and considerable impact on students' academic performance, according to research by Alyami et al. (2017) on 214 university students. Other research has demonstrated that a student's academic self-efficacy has a significant impact on their learning, motivation, and academic achievement.

2. REVIEW OF RELATED LITERATURE:

A review of earlier research findings provides an empirical framework to carry out further research. It offers a thoughtful analysis of the information that is already available. Research that has previously been done in the past can be studied to provide insight into the issue. Self-efficacy sub-factors from the self-efficacy definition of Bandura self-regulation (2001) may evaluate the academic achievements. And also from among the self-efficacy sub-factors, self-evaluation and self-regulation are of the best prediction factors of academic achievement. (Motlagh, Amrai, Yazdani, Abderahim & Sourri, 2011) Self-Efficacy sources that were positively correlated with mathematics achievement scores. (Loo & Choy, 2013) Students with self-efficacy were able to analyze and control their impulses and thrive in the face of challenge, they excelled academically. (Koseoglu, 2015) Significantly high and effective relationships between self-efficacy and academic achievement. (Pravani & Agrawal, 2015) An average relation found between self-efficacy and academic achievement among college students. (Olave, 2019) Females and males were equally sincere in terms of their academic efficacy. (Saxena & Sharma, 2020) A significant influence of academic self-efficacy on academic achievement of students. (Bhati, Baral & Meher, 2022)

3. SIGNIFICANCE OF THE STUDY:

Developing an individual's self-efficacy creates a regulation of self-awareness, which is essential in developing emotions. According to Bandura (1997), self-awareness has a strong connection to self-efficacy, as self-efficacy emphasizes self-awareness and self-regulation as factors influencing the development of self-efficacy beliefs. According to Gundlach et al. (2003), the mental processes of self-efficacy can be impacted by emotions as "emotions left uncontrolled can interfere with the cognitive processing of information that can be vital to task performance" (p. 234). One would surmise that a person with low EI and low self-efficacy will likely struggle in maintaining order in his/her daily tasks. And these qualities count significantly towards a person's success in his area of academic achievement. From the above review we showed that various studies are conducted on this matter in different countries as well as India. But they must study those variables again.

4. OBJECTIVES OF THE STUDY:

- To investigate the relationship between Male & Female Students of General Degree Colleges with respect to Self-Efficacy.
- To investigate the relationship between Rural & Urban Students of General Degree Colleges with respect to Self-Efficacy.
- To find-out the relationship between Self-Efficacy and Its Impacts on Academic Achievement of General Degree Colleges Students.

5. HYPOTHESES OF THE STUDY:

H₀ 1: There is no significant relationship between Male & Female Students of General Degree Colleges with respect to Self-Efficacy.

H₀ 2: There is no significant relationship between Rural & Urban Students of General Degree Colleges with respect to Self-Efficacy.

H₀ 3: There is no significant relationship between Self-Efficacy and Its Impacts on Academic Achievement of General Degree Colleges Students.

6. METHODOLOGY OF THE STUDY:

Normative Survey Method was used for collecting the data for this study. It is a survey type of method under the descriptive research design, which is used for both exploration and explanation for current data status from the representative sample. Total 100 selected sample from Students of General Degree Colleges (Government and Government Sponsored) in North 24 Parganas and Howrah district was considered as the population of the present study. A standardized scale namely “**Self-Efficacy Scale for College Students**” developed by Partha Roy and Mukul Mahato (2023). Content validity was checked by some expert. For developing the scale 41 items were selected. But after the final opinions 40 items were selected for the final tool. It is a 5 point Likert scale, where scales are Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree. Respondents were clearly instructed to tick marks in the box of their appropriate answer. The reliability of this scale is 0.882, measured by Cronbach's Alpha.

7. RESULTS AND DISCUSSIONS:

The results came out as follows:

Table-7.1: Mean & SD. of Self-Efficacy and Academic Achievement

Variable	N	Mean	Standard Deviation
Self-Efficacy	100	156.37	15.12
Academic Achievement	100	66.65	8.62

Above Table-7.1 & below Figure-7.1 shows that the college students are securing their position as highly Mean and Standard Deviation in respect to Self-Efficacy (156.37 and 15.12) and Mean and Standard Deviation in respect to Academic Achievements (66.65 and 8.62).

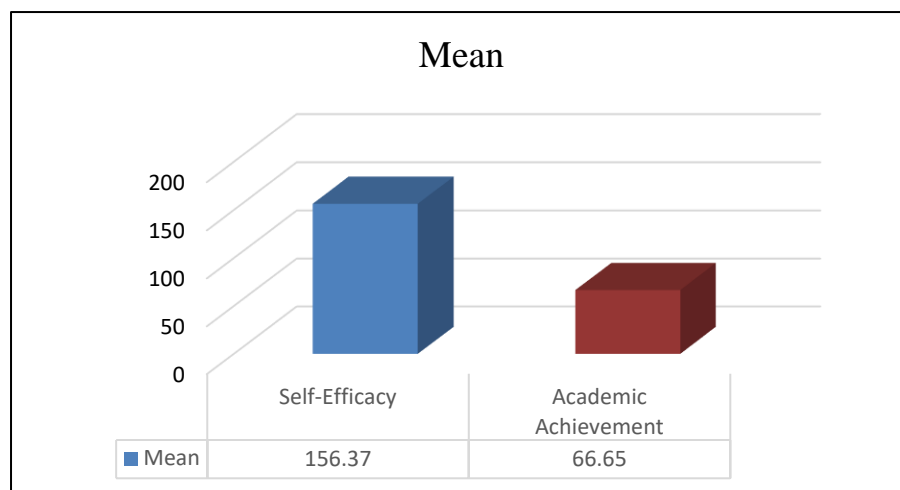


Figure-7.1: Mean Representation of Self-Efficacy and Academic Achievement

H₀ 1: There is no significant relationship between Male & Female Students of General Degree Colleges with respect to Self-Efficacy.

Table-7.2: Comparison of Self-Efficacy between Male and Female

Variable	Gender	N	Mean	SD	S.E. of M	t	df	Sig.(2 tailed)	M dif.	S.E. of dif.
Self-Efficacy	Male	53	159.26	12.56	1.725	2.065*	98	.042	6.157	2.981
	Female	47	153.11	17.13	2.498					

* Significant at 0.05 Level of Significance (P-value<0.05).

The above Table-7.2 & below Figure-7.2 show the comparison of Self-Efficacy between male & female. The initial descriptive statistics shows that the college students male are achieved more Mean score & less SD score (159.26, 12.56) than the college students female on the Self-Efficacy (153.11, 17.13). And mean difference is respectively 6.157. All of these results showed that male college students are higher in Self-Efficacy than female college students. But, in order to know whether these differences are statistically significant or not, the investigator applied t-test. Calculated $t_{(98)}$ value is 2.065 and 'p' value is 0.042 ($p < 0.05$). The result of the t-test (i.e. 2.065, $df=98$, $p=0.042 < 0.05$) shows that there is a significant difference between college students male & female. Consequently, reject the null hypothesis ($H_0 1$).

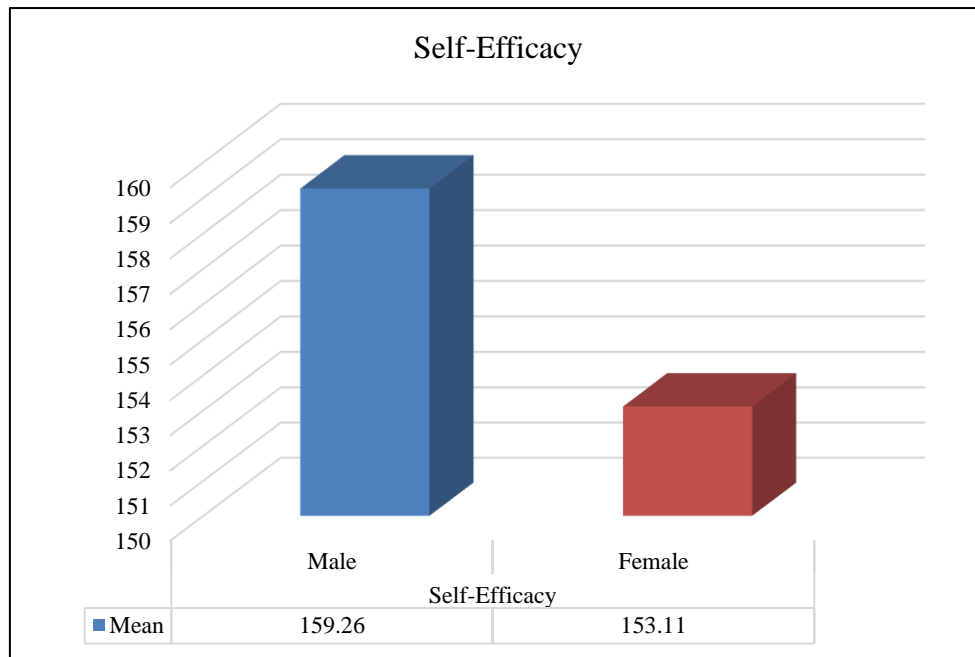


Figure-7.2: Mean of Self-Efficacy between Male and Female

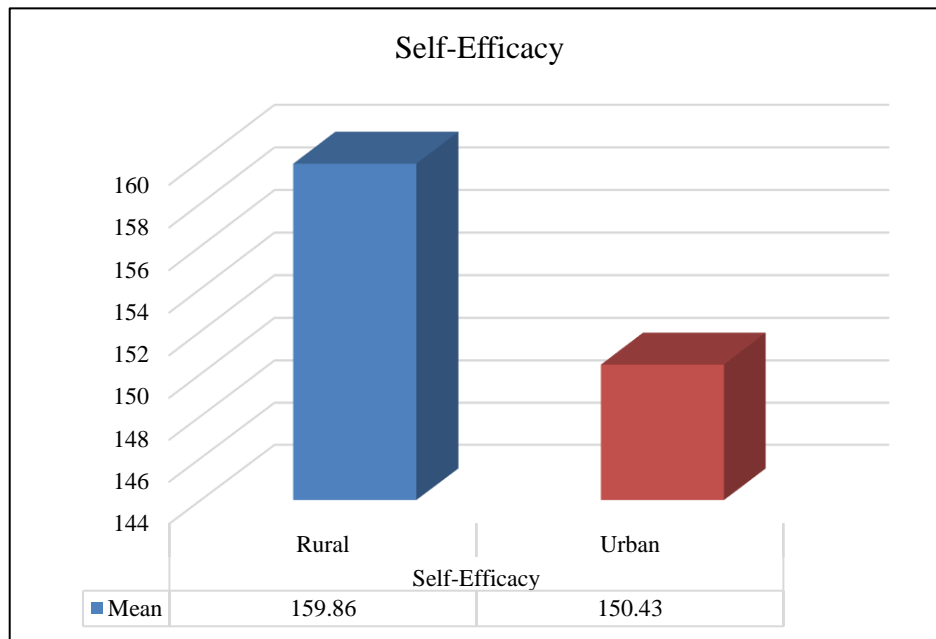
$H_0 2$: There is no significant relationship between Rural & Urban Students of General Degree Colleges with respect to Self-Efficacy.

Table-7.3: Comparison of Self-Efficacy between Rural and Urban

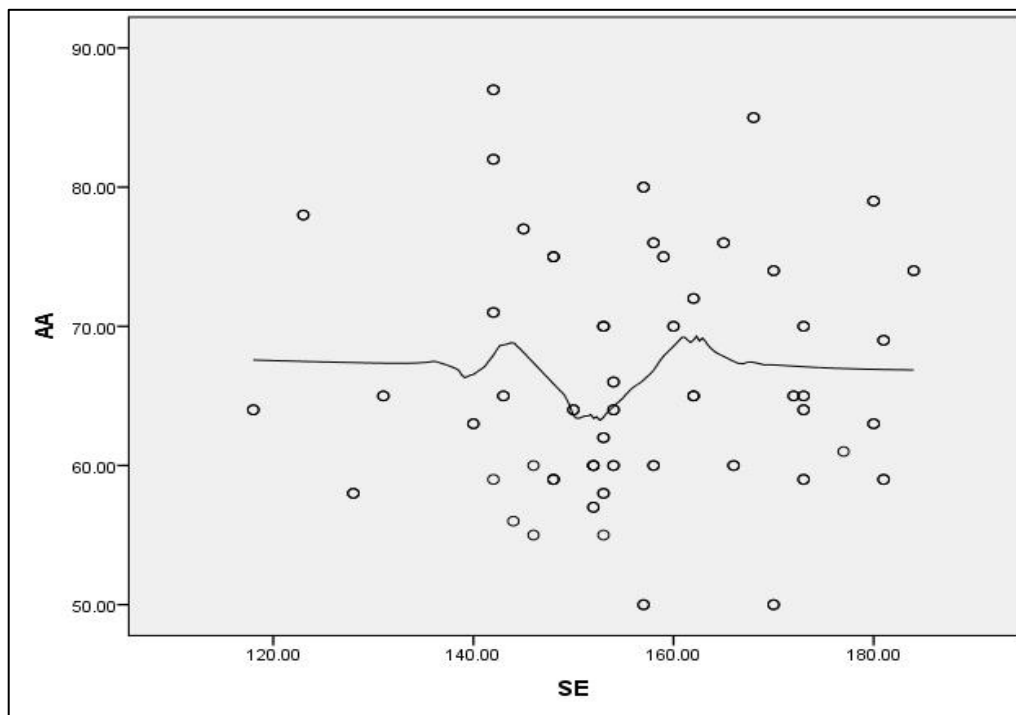
Variable	Habitat	N	Mean	SD	S.E. of M	t	df	Sig.(2 tailed)	M dif.	S.E. of dif.
Self-Efficacy	Rural	63	159.86	13.61	1.715	3.140*	98	.002	9.425	3.001
	Urban	37	150.43	15.89	2.612					

* Significant at 0.05 Level of Significance ($P\text{-value} < 0.05$).

The above Table-7.3 & below Figure-7.3 show the comparison of Self-Efficacy between rural & urban. The initial descriptive statistics shows that the college students in rural areas achieved more Mean score & less SD score (159.86, 13.61) than the college students in urban on the Self-Efficacy (150.43, 15.89). And the mean difference is respectively 9.425. All of these results showed that the college students in rural areas are higher in Self-Efficacy than college students in urban areas. But, in order to know whether these differences are statistically significant or not, the investigator applied t-test. Calculated $t_{(98)}$ value is 3.140 and 'p' value is 0.002 ($p < 0.05$). The result of the t-test (i.e. 3.140, $df=98$, $p=0.002 < 0.05$) shows that there is a significant difference between college students in rural & urban areas. Consequently, reject the null hypothesis ($H_0 2$).



H₀ 3: There is no significant relationship between Self-Efficacy and Its Impacts on Academic Achievement of General Degree Colleges Students.



[SE – Self-Efficacy, AA – Academic Achievement]

Figure-7.4: Correlation between Self-Efficacy and Academic Achievement

The above Figure-7.4 shows the correlation between Self-Efficacy as independent variable and Academic Achievement as dependent variable both are negatively correlated with each other, where the Self-Efficacy are not an attached characteristics in Academic Achievement of college students, which is visualized on the scatterplot.

Table-7.4: Correlation between Self-Efficacy and Academic Achievement

Correlations		SE	AA	Remarks
SE	Pearson Correlation	1	.000**	P-value>0.05
	Sig. (2-tailed)		.999	
	N	100	100	
AA	Pearson Correlation	.000**	1	P-value>0.05
	Sig. (2-tailed)	.999		
	N	100	100	

** . Correlation is not significant at the 0.05 level (2-tailed).

From the above Table-7.4, it is concluded that a positive and significant correlation is found between Self-Efficacy and Academic Achievement of General Degree College students, as coefficient of correlation is 0.000 and ‘p’ value is 0.999 (**p-value>0.05**). Fail to reject the null hypothesis (**H₀ 3**).

8. CONCLUSION:

In this research, the researcher studied self-efficacy and its relationships between male and female General Degree College students, self-efficacy and its relationships between rural and urban General Degree College students and also shown a negative correlation between self-efficacy and academic achievement. It can be concluded from this investigation, at the present time male students have more self-efficacy level than female students, and rural students have more self-efficacy level than urban students. So, this study showed that the concepts of self-efficacy and how much self-efficacy correlated with academic achievement at college level with respect to male-female and rural-urban students. So, it needs to special focus on self-efficacy and its positive management academically in future.

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