iJRASET
International Journal For Research in Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 12 **Issue:** IV **Month of publication:** April 2024

DOI: https://doi.org/10.22214/ijraset.2024.61358

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International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 12 Issue IV Apr 2024- Available at www.ijraset.com

Exploring the Effect of One's Efficacy on Learning Outcomes Among University Students

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Abstract: ***This study explores the impact of Self-Efficacy on Academic Performance Among University Students. Self-efficacy, defined as students' beliefs in their ability to learn and perform tasks, has been shown to influence the selection of tasks, effort exerted, perseverance, and ultimately, academic success. The study is significant as it can give teachers the understanding to help students manage themselves effectively, and their learning abilities. Utilizing a correlational study design, quantitative research methods were employed to know if Self-Efficacy has any impact on Academic Performance. The research involved 63 young adults aged between 18-30 years from India. Data collection utilized Google Forms, employing convenience sampling techniques. The study employed two main assessment tools: Sherer's General Self-Efficacy Scale (SGSES) and Academic Performance Scale (APS). The findings showed there is no significant impact of self-efficacy on academic performance among the university students.***

Keywords: Self- efficacy, academic performance, perseverance, academic success.

I. INTRODUCTION

According to Bandura (1997), self-efficacy is explained as, that one can plan and carry out the necessary activities to handle upcoming circumstances.

This idea is fundamental to how people approach problems and assignments, especially in educational environments. Perceptions of students' self-efficacy—a phrase used to characterize their ideas about their ability to learn and accomplish tasks— significantly affect their ability to succeed academically (Pajares & Miller, 1994). According to Bandura's hypothesis (Bandura, 1997; Schunk, 1995), people with greater self-efficacy happen to set tough objectives, persevere through setbacks, and eventually succeed academically.

How successfully a student satisfies the requirements set by their educational institution is referred to as their academic performance. Usually, grades, test results, and other evaluations are used to gauge it. A student's attendance, involvement in class, and general attitude toward the learning process can all be considered aspects of their academic performance. It is frequently used as a gauge for how well students comprehend the subject matter and how well they can apply it in different situations. A valid, appropriate exam that takes into account a student's learning style, personality, intelligence, and incentives is necessary to assess their development.

Numerous research have explored to demonstrate the effect of students' self-efficacy beliefs on their academic performance

Motlagh, Amrai, Yazdani, Altaib Abderahim, and Souri (2011) found the connection between academic success and the self-efficacy of high school pupils.

There were 250 students that participated in the investigation in all. The data was then analyzed by the study using regression analysis and correlation coefficient. Results demonstrated that raising students' levels of self-efficacy in high school can provide a strong reason for raising their academic performance.

In a similar spirit, Honicke and Broadbent (2016) used a systematic review to look into how academic self-efficacy affects academic performance by combining researches that look into this relationship with university students' academic performance twelve years earlier. Furthermore, the majority of the 59 qualifying papers, according to Honicke and Broadbent (2016), academic performance and academic self-efficacy have a fairly positive correlation.

Also, Research by Chemers, Hu, and Garcia (2001) revealed that college students' course success was negatively correlated with high self-efficacy in mathematics, possibly as a result of overconfidence leading to less effort.

Research by Klassen, Krawchuk, and Rajani (2008): The study's findings revealed that while effort and self-efficacy were negatively connected, self-efficacy and academic accomplishment in mathematics were favorably correlated. This suggests that people with greater level of self-efficacy may not exert as much effort.

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Research by Pajares & Miller (1994): This study indicated that college students' writing performance was adversely correlated with high self-efficacy in writing, indicating that overconfidence may be the cause of poor performance.

In many of the publications that were the subject of the research, a significant number of other mediating and moderating variables were also found. Goal orientations, deeper processing techniques, and effort regulation were found to be among the mediating and moderating factors. In order to examine the connections between the various variables under investigation, Honicke and Broadbent (2016) carried out a comprehensive review of the literature and found that there was a need for further studies due to the limited and longitudinal nature of the studies evaluated. In view of this, a research was carried out to examine the impact of academic achievement on an individual's selfefficacy.

Loo and Choy (2013) examined the relationship between academic achievement and the four forms of selfefficacy: master's experience, indirect experiences, social conviction, and emotional activation. For the purpose of determining the origins of their mathematics self efficacy, a forty item questionnaire was administered to 178 third year engineering students. The results of the study revealed a connection between sources of selfefficacy and overall grade point average for engineering degrees, with particular emphasis on math and electronics achievement. The reviewed study did not primarily focus on abandoned secondary school pupils, but rather the engineering students at the university. Compared to the current study, which employed 300 secondary school orphan children in total to establish in order to generate a representative sample, 178 samples are considered tiny.

The connection between academic success and self efficacy in Australian high school students was investigated by Bower (2007). Ten schools in two Australian cities provided a sample of 935 students aged 11 to 18 years. The ASRD Scale (Revised), the Students' AA Scale, and the SSE Scale were the instruments employed. Aspiration and academic performance were found to be positively and negatively correlated with social and academic self-efficacy, respectively; nevertheless, the final model did not reveal any significant association between the two.

II. MATERIALS AND METHODS

A. *Problem's Statement*

The link between academic performance and the level of student confidence is investigated in this study. It aims to determine students' level of self-efficacy and explores whether it influences their academic achievement.

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B. *Research Design*

The current research looks at the link between students' academic performance and self-efficacy. In this research, a quantitative method design was employed. The correlational technique was selected as the study's methodology because it effectively examines the link between students' academic success and self-efficacy.

C. *Objectives of the Problem*

1) To assess the degree of self-efficacy among students in the 18–30 age range
2) To understand whether Selfefficacy and Academic Performance among students are always negatively correlated or if is there a possibility to have a positive correlation as well.

D. *Sample*

The sample of the study encompasses a population of young adults who are pursuing their education and are from various backgrounds Ranging in age between 18 to 30 years old. The study's participants were chosen utilizing the convenience sampling technique. There was a total of 49 females and 14 males. The participants of this research consist of 63 participants.

E. *Hypothesis of the study*

HO1: There is no significant correlation between students self efficacy and their academic performance

Operational Definitions

1) *Self-Efficacy:* Bandura (1977, 1986, 1997) describes self-efficacy as the confidence in one's capacity to carry out the necessary actions to accomplish specific performance objectives. The conviction that we can impact our drive, actions and social environment on our own is understood as self efficacy.
2) *Academic Performance:* This is the outcome of the pupils' efforts. It stands for results that show how well someone has achieved particular objectives. It is a complex idea that considers a student's development and successes in the classroom.

F. Demographic Details

The demographic information gathered for the study includes age, gender, place of residence, and educational background.

G. Universe of the Study

The sample for the research is young adults. The age range of young adults who are relevant to my study is 18 to 30 years old. The study includes both males and females.

H. Geographical Area

The geographical area focused for the study was Urban Bangalore, India.

I. Sample Distribution

The sample includes participants of the age range 18-25 years. 14 males and 49 females have participated in the study, making it a total of 63 young adults.

1) Inclusion Criteria

- Participants must be between the ages of 18-30 years old.
- Participants must have been pursuing an educational degree
- Participants must provide informed consent to participant in the study

2) Exclusion Criteria

Individuals outside the specified age range and those not currently enrolled in an academic institution were not included.

3) Sample and Techniques

Data from 63 adults of all genders was gathered through Google Forms using convenience sampling.

J. Research Ethics followed

The research adhered rigorously to ethical rules, guaranteeing that each participant was apprised of their entitlement to resign from the study at any point. Data were handled and processed sensitively and in compliance with guidelines, and questionnaires and statistical software were used in accordance with recognized criteria. Every single participant in the study gave their informed consent.

K. Tools for the Study

1) Sherers's General Self Efficacy Scale (SGSES)

Sherer et al. (1982) established the Sherer's General Self-Efficacy Scale (SGSES) to evaluate self-efficacy that is not correlated with particular behaviors or situations. To gauge broad expectations of self-efficacy, questionnaires were created. These questions centered around three concepts: (a) being willing to take the lead in behavior, (b) being willing to put in the work necessary to finish the behavior, and (c) persevering in the face of difficulty. The SGSES has 23 components in total comprising of two factors: General Selfefficacy subscale and the Social Selfefficacy subscale.

2) Academic Performance Scale

The APS contained eight elements on a 5-point scale. This assessment was performed on a 5-point scale by Carson B, Emily G, Sarah H, and Christopher MG from Saginaw Valley State University. It seems that academics that are interested in student academic performance can benefit from the APS. The scale consists of eight elements total, ranging from (Strongly agree to Strongly disagree).

L. Statistical Analysis

The statistical analysis was conducted on a dataset comprising 63 individuals, to examine if there is any relationship that exits between SelfEfficacy and Academic Performance.

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III. RESULTS

Examining the connection between academic performance and selfefficacy was the aim of the study. In addition to Sherer's Self-Efficacy Scale (SSES), and Academic Performance Scale (APS) were used to gather the data. The sample size comprised 63 individuals between the ages of 18 and 30 who live and continue their education in India. After being input into Microsoft Excel, the data was exported and imported into SPSS 25 for statistical analysis. To understand whether selfefficacy and academic performance are notably correlated or not, Spearman correlation analysis was used.

Table: Showing the correlation Between SelfEfficacy and Academic Performance

		Self- Efficacy	Academic Performance
Self-efficacy	Correlation Coefficient	1.000	.048
	Sig. (2-tailed)	.	.709
	N	63	63
Academic Performance	Correlation Coefficient	.048	1.000
	Sig. (2-tailed)	.709	.
	N	63	63

***. Significance level at 0.01 (2-tailed).*

The above table presents the correlation coefficient between selfefficacy and academic performance, along with their respective p-values, based on a sample size of 63 participants. There is a 0.048 Spearman's rank correlation coefficient between Academic Performance and Self-efficacy. This suggests that the two variables have a very weak positive association. However, the p-value of 0.709 for this correlation coefficient is much higher than the significance level of 0.01. This shows the correlation is not statistically significant at the 0.01 level, meaning there is inadequate proof to dismiss the null hypothesis. This null hypothesis suggests that there is no connection between academic performance and selfefficacy among the population

Therefore, it suggests that the Null Hypothesis is true, i.e., that among university students, there is no meaningful correlation between selfefficacy and academic performance.

IV. DISCUSSION

The goal of the research regarding the connection between Academic performance and self-confidence. was to find out how students' beliefs about their own ability to learn and finish tasks influenced their academic performance.

The research aimed to assess the impact of self-efficacy among university students and the relationship between it and their academic success. The study's findings, based on a sample of sixty-three people, indicated a very weak positive connection between Academic Performance and SelfEfficacy.

Specifically, correlation coefficient was 0.048, indicating a slight inclination for students with greater self-efficacy to achieve better academic performance. However, this correlation was not statistically significant ($p = 0.709$), suggesting that any observed relationship could have occurred due to chance. The consequences of these findings for educators and policymakers are significant. The study shows the complexity of the factors influencing academic achievement even if there was no such link found in this sample between selfefficacy and academic performance. When providing support to students, teachers should take into account aspects other than self-efficacy, such as motivation, learning methodologies, and outside support networks.

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Future research could explore how specific interventions, such as promoting mastery experiences or providing social support, impact students' self-efficacy and academic performance. Understanding these dynamics more fully could lead to more effective strategies for supporting students' academic success and overall well-being.

As a result, the study's hypothesis—that self-efficacy and academic performance have no discernible relationship—is accepted. These results broaden our understanding of the possible connections between academic performance and selfefficacy, but they also highlight the need for additional research in this field to properly support students' academic success.

V. CONCLUSION

The study's goal was to investigate if university students' Selfefficacy and academic performance relate to one another.

The study showed, among university students, self-efficacy and academic performance have no discernible association.

Despite the theoretical framework suggesting that self-efficacy should positively influence academic achievement, the statistical analysis did not support this hypothesis.

The results imply that variables other than self-efficacy might be more important in predicting academic success since there was no relationship found.

It is possible that motivation, study habits, external support systems, and other individual differences may have a more direct impact on students' academic success.

These findings show how important it is to consider various of factors when trying to understand and support children's success in school. Although it can be a useful notion to understand students' perceptions of their own talents, academic achievement may not be solely or mostly determined by self-efficacy.

Future research could explore how these other factors interact with self-efficacy to influence academic outcomes. Furthermore, examining the efficiency of interventions meant to boost academic performance and self-efficacy may offer more information about how to help students meet their academic objectives.

VI. LIMITATIONS

1) *Sample Size:* With 63 participants, the study's sample size was comparatively small. The results may not be as useful to a huge population because of the small sample size. More extensive and varied sample sizes in future studies may yield a more thorough comprehension of these connections.
2) *Self-Report Measures:* For self-efficacy, academic achievement, and demographic data, the study used self-report measures. Biases in self-reported data, such as social desirability bias, may affect how accurate the results are.
3) *Limited Variables:* The study's primary focus was on academic performance, self-efficacy. While these variables are important, other factors, such as age, gender, socioeconomic status, parental involvement, and school environment, could also influence academic performance and should be considered in future research.

VII. COMPLIANCE WITH ETHICAL STANDARDS ACKNOWLEDGEMENT

A. *Acknowledgement*

The successful culmination of this research endeavour owes much gratitude to the invaluable support and contributions of numerous individuals, whose acknowledgment is deeply appreciated.

Foremost, heartfelt thanks are extended to my esteemed parents, whose unwavering love, steadfast belief in me, and to all those who have supported and encouraged us during our research endeavors. Their constant encouragement and unwavering support served as beacons of guidance, propelling me forward, even amidst adversity. I am profoundly indebted to them for being the pillars of strength and affection in my life. Sincere appreciation is extended to my research mentor and guide, Dr. Devikrishna Sabu, whose expert guidance, insightful feedback, and steadfast support have been pivotal in shaping this dissertation. Dr. Devikrishna's expertise, patience, and unwavering dedication have motivated me to strive for excellence and delve deeper into the intricacies of my research topic. I am truly grateful for her mentorship and the profound impact it has had on my academic journey.

Finally, the authors would like to convey their sincere gratitude to each and every participant for their kind contributions of time and wisdom to this research. Their readiness to take part formed the bedrock of this research endeavor. To each individual mentioned above, I extend my deepest appreciation. Their contributions have made this journey profoundly enriching and memorable.

B. *Conflict of Interests*

No such conflicts of interest was noted among the authors.

C. Ethical Approval

The college committee granted approval for this investigation because it was being done for a dissertation. Prior to participating in the trial, each subject gave written informed consent.

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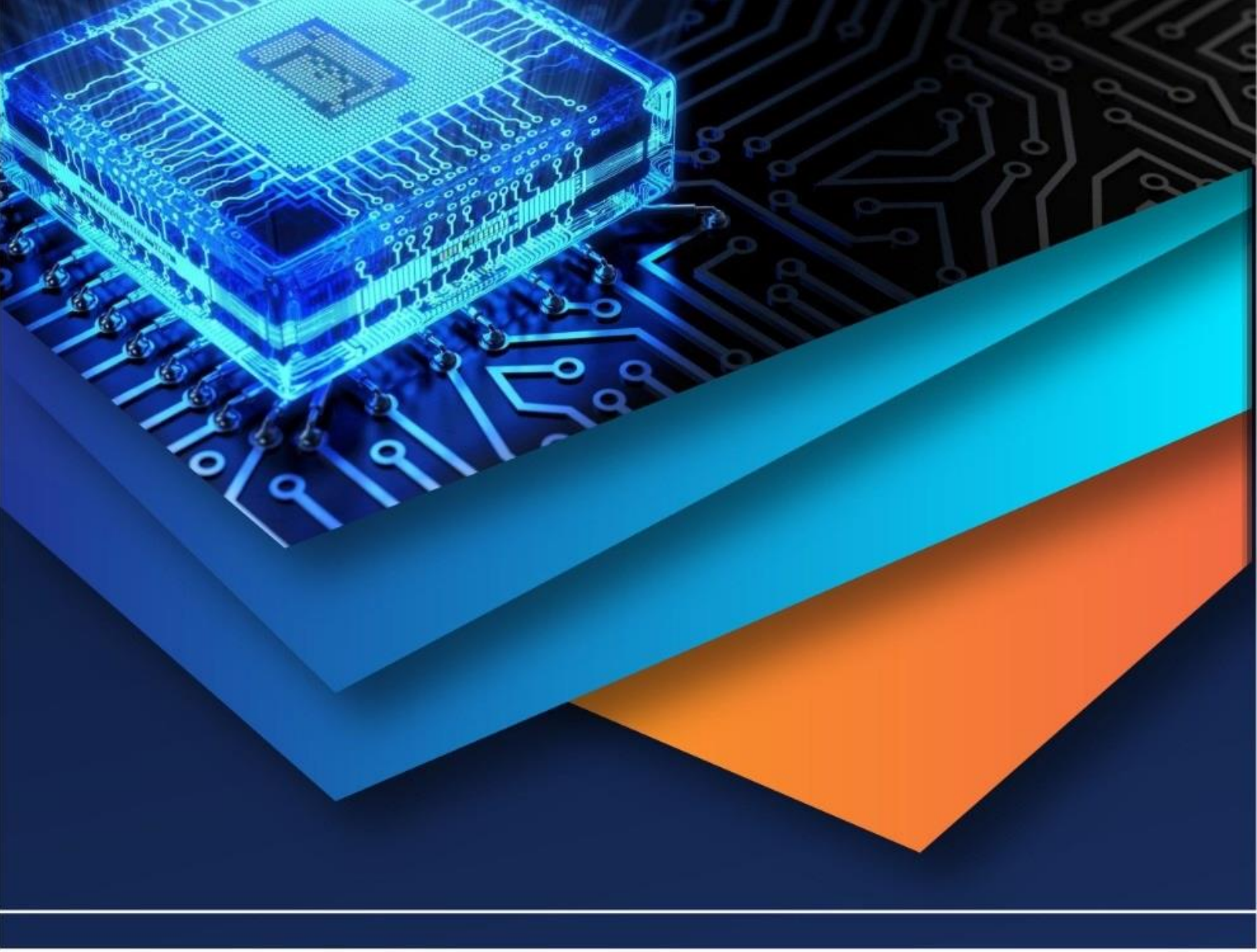
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