

Creativity, Self-efficacy in Relation with Academic Performance of Ninth Standard students in Ernakulum District

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Abstract

The present study examines the creativity and self-efficacy in relation to the academic performance of ninth-standard students in Ernakulum District. Creativity and self-efficacy are considered essential psychological constructs that significantly influence students' learning processes and academic performance. The method used in the present study is Descriptive Survey Method. The researcher considered the sample consists of 800 students of standard IX selected from 19 Secondary Schools. The Sub population comprises male & female, Rural and Urban, Government & private, English Medium and Malayalam Medium Ninth class students of the respective population. The objectives of the study (1) To find out the level of Creativity and Self-efficacy of Ninth standard students in Ernakulum district. (2) To investigate the relationship exists between Academic Performance of the students, Creativity and Self-efficacy. Standardized tools were used to measure creativity and self-efficacy. Creativity Assessment Questionnaire (CAQ) - Constructed and Validated by the Investigator with the help of the research guide (2023) and Self-efficacy Scale (Standardized) were used, while academic performance was assessed based on students' scholastic achievement records. The data was quantified as per the scoring procedure and analyzed using suitable statistical tools like mean, standard deviation, correlation, regression and stepwise regression analysis. The findings of the study reveal a significant and positive relationship between creativity and academic performance, as well as between self-efficacy and academic performance. The results indicate that students with higher levels of creativity and stronger self-efficacy tend to demonstrate better academic achievement. The study reveals the importance of fostering creativity and strengthening self-efficacy among students to enhance their academic performance. Educational implications and recommendations for teachers, curriculum planners, and school administrators are discussed in light of the findings.

Key words : Creativity, Self-efficacy, Academic Performance, Secondary School Students.

INTRODUCTION

The secondary stage of education is a pivotal phase in a student's academic journey, as the achievements during this time are often seen as indicative of their potential for future success. Decisions about which academic stream to choose, the subjects to study, and the school to attend are frequently influenced by the performance and outcomes during this stage. Several factors pedagogical, psychological, social, and cognitive play a role in shaping a student's academic achievement at this level. Academic success in secondary school not only reflects the effectiveness of the teaching-learning process but also serves as a barometer for further educational opportunities. Therefore, improving academic achievement remains a key focus, and this necessitates an exploration of the various factors that influence it.

Creativity

Creativity is the capacity to produce ideas that are both new and useful through divergent thinking. **According to Oxford dictionaries.com:** The use of imagination or original ideas to create something; inventiveness. Creativity is the process of bringing something new into being. Creativity requires passion and commitment. It brings to our awareness what was previously hidden and points to new life.

Creativity is fundamental for the secondary school curriculum and can be defined as a procedure to create original things. School teachers should provide children with materials to trigger their imagination, should provide opportunities to imagine and to explain their ideas, should appreciate children's individuality, and should encourage their different viewpoints. They also should encourage children to participate in creative games, should care about children's new products, and value them. Moreover, children's creativity should be appreciated, and children should be given confidence.

Studies related to Creativity and Academic Achievement

Surapuramath (2014) conducted a study of Relationship between creativity and academic achievement of secondary school pupils in Karnataka State. The result showed that there is slightly positive relationship between creativity and academic achievement of 8th standard students between boys and girls, rural and urban students and government and aided school students.

Arya and Suman (2016) has been conducted a study in G.B. Pant University campus, Pantnagar Udham Singh Nagar district of Uttarakhand on Creativity and Academic Achievement among School going children. The purpose of the study was to assess association between creativity, intelligence and academic achievement of children. Data was analyzed in terms of frequency and percentage. It was found that there is no significant association between creativity, intelligence and academic achievement.

Mali and Kumar (2017) conducted study on creative thinking of secondary school students in relation to their school type and residential background in Jammu city. The findings revealed that there were no significant difference among male and female secondary school students studying in private and government schools coming from urban and rural areas on overall creative thinking and no interaction was found between gender and residential background, school type and residential background, and no interaction was found among school type, gender and residential background.

Senel and Bagceci (2019) conducted a study on development of creative thinking skills of students through journal writing in the province of Gaziantep. The result shows creative thinking and writing activities have a positive effect on students' development of creative thinking skills. Majority of the students think the program was entertaining while it is seen that female students are more willing than male students.

Adeyemi and Oladele (2020) conducted a study on creative thinking ability and academic performance in core subjects of lower primary school pupils in Ondo State, Nigeria. The study concluded that significant difference existed in academic performance of pupils with different levels of creative thinking ability. And also, that creative thinking ability of lower primary school pupils is a determined fact in their academic performance.

Self-efficacy

Self-efficacy is a person's belief in his or her ability to succeed in a particular situation. Bandura described these beliefs as determinants of how people think, behave, and feel. Based on that, self-efficacy, or your belief in your own abilities to deal with various situations, can play a role in not only how you feel about yourself, but also on whether or not you successfully achieve your goals in life.

Self-efficacy is grounded in the larger theoretical framework of social cognitive theory. This theory postulates that human functioning results from interactions among personal factors (e.g., cognitions, emotions), behaviors, and environmental conditions (Bandura, 1986, 1997). From this perspective, self-efficacy affects one's behaviors and the environments with which one interacts, and is influenced by one's actions and conditions in the environment.

Studies related to Self-efficacy and Academic Achievement

Dr. K.P. Meera and Jumana. M. K conducted a study on SELF-EFFICACY AND ACADEMIC PERFORMANCE IN ENGLISH. This study reviews the relevant self-efficacy related literature, a central point of social cognitive theory, in the area of language learning. Role of self-efficacy in academic performance of learners is also considered. In the global world, English language has become the

fundamental means of international affairs and communication. As a consequence researchers tried to find out the relationship between self-efficacy and academic performance in English of secondary school students. The current research tested the research hypotheses using a sample group of 520 secondary school students. Scale of self-efficacy and academic performance test in language are used as instruments. The result revealed that there is a significant difference in the academic performance in English and self-efficacy of rural and urban students. In the case of gender and type of management there were no significant difference found.

Khageswar Bhati1 , Rajashree Baral , and Venkateswar Meher conducted a study to investigate academic self-efficacy and academic performance of undergraduate students in relation to gender and streams of education. The subjects of the study consisted of 120 undergraduate boys and girls enrolled in the Arts, Commerce, and Science streams of education. Primary data were collected using an academic self-efficacy scale. The results revealed a significant positive relationship between the student's academic self-efficacy and academic performance. The results also indicated a significant influence of academic self-efficacy on the academic achievement of students.

Yaman Köseoğlu conducted a study on **Self-Efficacy and Academic Achievement – A Case From Turkey** .The issues of motivational inclinations, cognitive and meta-cognitive approaches and resource management abilities of university students are considered in predicting academic achievement. First-year University students filled in the Motivated Strategies Learning Questionnaire, completed the Implicit Theories of Intelligence Scale, answered the Achievement Goal Inventory Scale, and self-reported their grade point averages. A multivariate analysis of co-variance (MANCOVA) indicated that students with low self-efficacy were inclined to believe that intelligence is inherent and cannot be changed. It also indicated that students with high self-efficacy preferred mastery goals, which entailed challenges and new knowledge, as well as performance goals that comprised good grades and surpassing others. Additionally, a hierarchical multiple regression analysis revealed that effort-regulation, self-efficacy, and help-seeking explained 21% of the variance in GPA. It was also found that the relationship between self-efficacy and GPA was partially mediated by effort-regulation.

OBJECTIVES OF THE STUDY

The present study has the following objectives:

1. To find out the level of Creativity and Self-efficacy of Ninth standard students in Ernakulam district.
2. To investigate the relationship exists between Academic Performance of the students, Creativity and Self-efficacy

HYPOTHESIS

The hypotheses of the study based on the major objectives were formulated as follows:

1. There is no significant level of creativity and self-efficacy among ninth-standard students in Ernakulam district.
2. There is no significant relationship between academic performance and creativity, and between academic performance and self-efficacy of ninth-standard students in Ernakulam district.

SCOPE AND LIMITATIONS OF THE STUDY

The present study is intended to find out the effectiveness of creativity, self-efficacy with academic achievement of Ninth grade students. The result obtained will help the investigator to know the effectiveness of the variables. The findings will help the teachers to improve their approach in dealing with children. The Limitations of the study are:-

1. The study is confined to the students studying in Ninth grade only.
2. Sample of the study was limited to One District with 800 students from 19 schools only. It is difficult to generalize the result as worldwide.
3. The study is restricted to the schools affiliated to Central Board of School Education (CBSE) & Kerala Board of School Education only.

METHODOLOGY

Sample : Sampling is necessary here because studying the whole population in order to arrive at generalization would be impractical. The sample of this study consists of 800 students of standard IX selected from 19 Secondary Schools of Ernakulam District by stratified random sampling method.

Tools Used : The tools used for the study are :-

1. Creativity Assessment Questionnaire (CAQ) - Constructed and Validated by the Investigator with the help of the research guide (2023)
2. Self-efficacy Scale (Standardized)
3. Academic Performance in the School Examination (Score of Students)

Statistical Techniques Used : The following statistical techniques have been used for the analysis of data in the present study.

1. Test of Significance of difference between means of large independent sample.
2. Standard Deviation
3. Pearson's Product moment co-efficient of correlation.
4. Percentage variance
5. ANOVA Analysis

TENABILITY OF THE HYPOTHESES

Hypothesis – 1

The First hypotheses states that “There is no significant level of creativity and self-efficacy among ninth-standard students in Ernakulam district”.

Variable	Mean	Std. Deviation	Minimum	Maximum	Skewness	Kurtosis
Academic Performance (AP)	57.35	19.41	14	96	-0.05	-0.90
Creativity	40.85	5.72	23	55	-0.64	-0.19
Self-Efficacy (SE)	82.72	11.13	52	116	0.64	0.86

Interpretation of Descriptive Statistics

The descriptive statistics provide an overview of the distribution and central tendencies of the major variables under study—**Academic Performance, Creativity and Self-Efficacy**.

Academic Performance (AP) shows a mean score of **57.35** with a relatively high standard deviation of **19.41**, indicating considerable variability in students’ academic achievement. The scores range from **14 to 96**, reflecting wide differences in performance levels. The skewness value (**-0.05**) suggests an almost perfectly symmetrical distribution, while the negative kurtosis (**-0.90**) indicates a platykurtic distribution, implying that the scores are more evenly spread and less peaked than a normal distribution.

Creativity has a mean score of **40.85** and a standard deviation of **5.72**, suggesting moderate dispersion among students. The scores range from **23 to 55**. The negative skewness (**-0.64**) indicates that the distribution is moderately skewed to the left, with more students scoring at the higher end of creativity. The kurtosis value (**-0.19**) is close to zero, suggesting an approximately normal distribution.

Self-Efficacy (SE) records a relatively high mean score of **82.72** and a standard deviation of **11.13**, showing moderate variability among students. The scores range from **52 to 116**. The positive skewness (**0.64**) indicates a right-skewed distribution, suggesting that a majority of students have moderate self-efficacy levels with fewer students scoring very high. The positive kurtosis (**0.86**) reflects a leptokurtic distribution, indicating a more peaked distribution with scores clustered around the mean.

Overall, the descriptive statistics reveal that the distributions of all variables are approximately normal, as evidenced by skewness and kurtosis values within acceptable limits. This suggests that the data are suitable for further parametric statistical analyses, such as correlation and regression, to examine the relationships among academic performance, creativity, communication skills, and self-efficacy.

Based on the above analysis, the hypotheses states that “There is no significant level of creativity and self-efficacy among ninth-standard students in Ernakulam district” is rejected.

Hypothesis – 2

The Second hypotheses states that “There is no significant relationship between academic performance and creativity, and between academic performance and self-efficacy of ninth-standard students in Ernakulam district”.

Predictor	B	SE	β	T	P
(Constant)	15.131	7.193	—	2.104	.036
Creativity	0.601	0.095	0.220	6.316	<.001
Self-Efficacy (SE)	0.164	0.065	0.096	2.502	.013

- **Creativity** emerged as the most robust predictor of academic success ($\beta = 0.22, p < 0.001$), suggesting that students who exhibit higher divergent thinking and cognitive flexibility are significantly more likely to achieve higher academic outcomes.
- **Self-Efficacy** was also identified as a significant positive predictor ($\beta = 0.10, p = 0.013$), aligning with Social Cognitive Theory, which posits that a student’s belief in their capability is fundamental to their actual achievement.

Thus, objective (2) which stated as To investigate the relationship exists between Academic Performance of the students, Creativity and Self-efficacy has been realized. Therefore, hypothesis (2)- “There is no significant relationship between academic performance and creativity, and between academic performance and self-efficacy of ninth-standard students in Ernakulam district” is rejected.

IMPORTANT FINDINGS

The findings of the study reveal a significant and positive relationship between creativity and academic performance, as well as between self-efficacy and academic performance. The results indicate that students with higher levels of creativity and stronger self-efficacy tend to demonstrate better academic achievement. The study reveals the importance of fostering creativity and strengthening self-efficacy among students to enhance their academic performance. Educational implications and recommendations for teachers, curriculum planners, and school administrators are discussed in light of the findings.

EDUCATIONAL IMPLICATIONS

1. The study reveals the importance of fostering creativity and strengthening self-efficacy among students to enhance their academic performance. Educational implications and recommendations for teachers, curriculum planners, and school administrators are discussed in light of the findings.
2. To foster a growth mindset culture, educators can establish clear expectations that abilities develop through effort, responsiveness to feedback and persistence in learning strategies.
3. The study emphasizes that academic achievement is not solely dependent on cognitive abilities but is also influenced by important psychological factors such as creativity and self-efficacy. Therefore, fostering a learning environment that encourages creative thinking and strengthens students' self-belief can lead to improved academic performance.

CONCLUSION

The present study was undertaken to examine the relationship between creativity, self-efficacy, and academic performance of ninth-standard students in Ernakulam District. The findings of the study reveal that the students possess a moderate to high level of creativity and self-efficacy. The analysis further indicates that both creativity and self-efficacy have a significant and positive relationship with academic performance. Students who demonstrated higher creativity and stronger beliefs in their own abilities were found to achieve better academic outcomes compared to their counterparts.

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