

A Study of Relationship Between Creativity and Academic Achievement of Secondary School Pupils

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Abstract

A Study of Creativity and Academic Achievement of Secondary School Pupils has been dealt with in this paper. The sample consisted of 100 students of different High schools in Kollegala Taluk. The basis of was Government- 50 Unaided-50 students. Research tool used in the study was “Bekar mahadiyar creativity test” the research tool has 3 types of activities. Coefficient of correlation and ‘t’-test’ technique was adopted for data analysis. There is slightly positive relationship between creativity and academic achievement of 8th standard students and there is no significant difference creativity of 8th standard students between boys and girls, rural and urban students and government and aided school students.

Keywords: Creativity, academic achievement and secondary school pupils

Introduction

Every day, we face new changes in all aspects of life and creativity is not only a means for adapting with changes but also a stimulus for producing knowledge in different fields of study. Moreover, creativity as one of the key factors in academic achievement is required especial attention. But the contradiction in the results of the researches pertaining to the more influential type of creativity in academic achievement necessitates researchers and experts to focus more accurately on cognitive and trait creativity and their impacts on academic achievement. Therefore, the key purpose of this study is to compare the results of six researches with cognitive and trait views to creativity and their correlation with academic achievement. The results indicate cognitive creativity is so far more correlated with academic achievement than trait creativity.

According to the report of Sursock *et al.* (2007) from European University Association, creativity has attracted the attention of experts and responsibilities so that it has been concerned as their main policy in their planning. However, professionals in the area of psychology view creativity from two perspectives.

Some specialists focus on creativity as mental capacity while other groups know it as a skill which is rooted in personality. For instance, Guilford identifies creativity as cognitive procedures while Sternberg believes that creativity is combination of “intelligence”, mental methods, “personality” and “motivation”.

The mental aspect of creativity points out to the capacity to recognize the problem and defining it. While in the definition of Boden, creativity refers to creating the new opinions that should be attractive and understandable. Moreover; Court knows creativity as human mental capacity which assists people to apply their thinking and originate opinions and resolution (Simpson, 2012).

The other insight to creativity highlights the different aspects of this concept. According to the declaration of San'chez- Ruiz (2011) creativity is a multidimensional phenomenon with many influential factors consisting of personality characteristics, cognitive capacities, cognitive methods and “motivation” and it is appeared in social relationship however it is a personal issue. Moreover, she cites from Kim that the results of experimental studies have estimated just 20%-40% correlation between divergent thinking and It's of eleven reviewed studies confirmed the relationship between divergent thinking and creative personality as the main indicators of creativity. On the other hand, cognitive capacities have the lowest affiliation with creativity.

The results of a study with the social insight to creativity demonstrated that emotions such as “anger”, “pleasure”, “boredom” and behavioral capacities like “communication skills” and “social network skills” are the prepositions of creative function (Lee *et al.*, 2008). In addition, findings of a distinguishing analysis procedures on undergraduate students done by San'chez-Ruiz *et al.*(2011) demonstrated that two criteria for creativity consisting of divergent thinking and creative personality are not related to cognitive creativity while personality traits correlated with two contributors of creativity.

Review of Related Literature

The study which had a great impact on psychologists in the field of education and which had set off a boom in research into the area of creativity was the study of 449 high school children in Chicago, published by J. W. Getzels and P. W. Jackson in 1962. They compared a group of middle-class adolescent pupils who had scored well on intelligence tests with pupils who scored well on creativity tests designed by Guilford. They found that highly creative children were superior in scholastic achievement to pupils with high I.Q., although the high creative's had 20 I.Q. points lower than the high I.Q. students - indicating a positive relationship between creativity and academic ability. The high creative's, although having an average I.Q. 5 points less than their school population taken as a whole performed better in school achievement.

Other researchers like Ahrens (1962), Jacobson (1966), Lucht (1963), Feldhusen, Treffinger and Elias (1970) have come out in support of the Getzels and Jackson phenomenon. Researchers who used the Grade Point Average as a measure of academic achievement, namely, Taylor (1958), Nuss (1961), Parker (1979), Wilson (1968) and Cline, Richards and Needham (1963) have also reported results consistent with the findings of Getzels and Jackson.

Objectives of the study

The following objectives were framed for the present study

1. To study the relationship between creativity and academic achievement of 8th standard students.
2. To study the creativity of 8th standard boys and girls students
3. To study the creativity of 8th standard Rural and Urban students.
4. To study the creativity of 8th standard Government and Private schools students.

Hypotheses

In pursuance of the objectives 1- 4 following Null Hypotheses were set up.

1. There is no significant relationship between creativity and academic achievement of 8th standard students.
2. There is no significant difference creativity of 8th standard students. Between boys and girls
3. There is no significant difference creativity of 8th standard students between Rural and Urban.
4. There is no significant difference creativity of 8th standard students Between Government and Private schools.

Sample of the study

Sample is a true representative of the population. In the present study researcher has used the random sampling technique for drawing the sample. The sample consisted of 100 students of different High schools in Kollegala Taluk. The basis of was Government- 50 Unaided-50 students.

Tool Used For Collection of Data

Research tool used in the study was “Bekar mahadiyar creativity test” the research tool has 3 types of activities. The reliability of the tool value 0.83 which above the normal value and the test is said to have high reliability. The investigator collects

the annual examination marks of the students for academic achievement of the students.

Statistical Technique Used

Coefficient of co-relation test was used to find the relationship between creativity and academic achievement of students and ‘t’ –Test significance of the gender, types of school and location.

Major findings

Table 1: Coefficient of co-relation between Creativity and Academic Achievement of students

variable	N	Mean	SD	‘r’-value	sign
Creativity	100	28.87	3.737	0.376	S
Academic Achievement	100	30.48	3.753		

The above table reveals that the obtained ‘r’-value 0.376 is greater than the tabled value (0.254) at 0.01 levels of significance. Therefore null hypothesis in this regard is rejected. It means that there is slightly positive relationship between creativity and academic achievement of 8th standard students.

Table 2: ‘t’ Test for Difference creativity in Boys and Girls of 8th standard students

variable	N	df	Mean	SD	t-value	p-value	sign
Boys	62	98	40.612	5.499	0.835	>0.05	NS
Girls	38		39.684	5.225			

The above table reveals that the obtained t-value 0.836 is less than the tabled value (1.96) at 0.05 levels of significance. Therefore null hypothesis in this regard is accepted. It means that there is no significant difference creativity of 8th standard students between boys and girls.

Table 3: ‘t’ Test for Difference creativity in Rural and Urban schools of 8th standard students

variable	N	df	Mean	SD	t-value	p-value	sign
Rural	21	98	40.202	5.357	0.35	>0.05	NS
Urban	79		40.476	5.635			

The above table reveals that the obtained t-value 0.35 is less than the tabled value (1.96) at 0.05 levels of significance. Therefore null hypothesis in this regard is accepted. It means that there is no significant difference creativity of 8th standard students between rural and urban.

Table 4: 't' Test for Difference creativity in Government and Unaided schools of 8th standard students

variable	N	df	Mean	SD	t-value	p-value	sign
Government	40	98	27.59	4.652	0.58	>0.05	NS
Unaided	60		26.33	6.742			

The above table reveals that the obtained t-value 0.58 is less than the tabled value (1.96) at 0.05 levels of significance. Therefore null hypothesis in this regard is accepted. It means that there is no significant difference creativity of 8th standard students between Government and unaided.

Conclusion

This paper provides empirical support for the positive relationship between creativity and academic achievement and the finding that this relationship appears to differ across the intelligence continuum. This relationship appears to be positive until an intelligence threshold of around 140 above which it appears to diminish. Further studies need to be carried out to confirm the nature of this relationship for other measures academic achievement and across other cultures to establish the generalize ability of this finding.

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