

A Study of Creativity In Relation To Academic Achievement of High School Students In Dimapur District Of The Naga Hill

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Abstract

In the present study, an attempt had been made by the investigator to study the creativity of the naga students and to correlate it with academic achievement. The investigator also tried to find out if there is sex difference in creativity. The study was done in Dimapur district of Nagaland. The sample consisted of 50 students taken randomly from ten high schools of Dimapur. The result of the study showed that majority of the students possessed average creativity and high and low creativity was possessed by a few students. There was high degree of positive correlation between creativity and academic achievement and there was no sex difference in creativity.

Introduction

Creativity is the new buzz word in Education. Though it was recognized even in early times as an entity or phenomenon, the connotation was mostly confined to novel expressions in art and music. It was generally perceived that creativity is the sole prerogative of a gifted few and the common people stayed clear of realizing their creative self. Pioneering works by eminent psychologists like J.P. Guilford, E.P. Torrance, Alex Osborne, J. Khatene, G. Kneller, M.K. Raina, Baquer Mehdi, B.K. Passi and others have radically changed that perception. It is now well accepted that we are all creative in our own ways in our day to day activities, always innovating ways and means to meet our daily needs as well as planning for our future. Of course, the degree and nature of creativity varies from individual to individual depending upon a number of factors. In most instances the spark of creativity dies a premature death for lack of nurture and avenue for expression. Only a privileged few find the proper environment for the growth and realization of their creative potential and thus attain fulfillment in life. It is therefore mandatory to create an ambient environment where creativity can be nurtured and nourished which will go a long way in preventing many of the ills that afflict the human society today.

Creativity in its refined form can be compared to a cut diamond with facets, each facet reflecting a particular aspect of this intriguing behavior. Different authors have given different definitions of creativity which can at best be termed as blind men's description of the elephant. However, in its

unrefined form, creativity is hardly distinguishable from other traits of human behavior and merely termed as non-conformist, divergent or rebellious behavior. From a fundamental stand-point, creativity can be described in simple terms as the ability to imagine or visualize and generate new ideas which lead to the development or production of something new or different. In other words, it is a process by which a novel idea or object is produced in a new fashion or arrangement. Characteristically, a creative action is novel, exploratory and venturesome spirit on the part of the individual. It means divergent thinking. Thus, creativity is an activity resulting in new products of definite social value.

Need to Appreciate Creativity

The need to appreciate and nurture creativity is twofold:

- (i) In terms of personal development and
- (ii) In terms of social development.

It has been emphasized again and again that creativity is a basic human behavior crying for expression. If this basic urge, present in all individuals irrespective of caste, creed and social status is forcefully suppressed, it leads to frustration and destructive tendencies. When the creative spark is recognized early and an atmosphere is created for its proper expression, it will lead to a sense of personal satisfaction. In turn it will wean people away from antisocial activities and channelize the rich human resources for social development.

Consistent creative efforts by man from time to time determine the progress of a civilization. It is

the creative ability to imagine and generate new ideas and its pursuit that enables the human being stand apart from all other living beings. The dynamic modern society is largely dependent upon science and technology for its sustenance and growth which would simply not be possible without the creative vision of its people. The purpose of education is not to turn every child into an Einstein or a Shelley or a Shakespeare. But through education, the spark of creativity in every child should be handled in such a way so that the task of learning becomes more exciting and meaningful for them. Therefore the teachers should work towards facilitation of creativity at all levels and should strive to see that the classrooms are not just meant for one way transmission of knowledge for students to passively accumulate, but are centers where each and every student in his own ways, can satisfy his curiosity, develop his ability and talents and pursue his interest to his best advantage.

Creativity And Academic Achievement

There has been controversial debate on the relationship between creativity and achievement in school and later vocational success. Some researchers have attempted to trace the relationship between the two in view of the divergent thinking and convergent thinking. In their view, the creative thinking abilities are apparently as important as those measured by traditional measures of IQ in educational achievement. They emphasized that divergent thinking and convergent thinking do not operate separately; they interact in achievement. In the opinion of others, creativity facilitates achievement by building on to convergent thinking and that a minimum level of IQ is necessary for high levels of achievement. However there is a large consensus on the positive role of creativity in facilitating academic achievement.

Creativity and the Nagas

In the context of Nagaland it can be said that, Nagas by nature are creative. Their creative potential is mostly seen in basketry, spinning and weaving, pottery and metal work, painting, music etc. For instance, with the process of modernization, the Naga work culture, a unique by product from the by gone mooring days, the creativity of the Nagas seem to suffer a setback. Till very recent past, the naga children of almost

all tribes were compulsorily the inmates of the morung up to a particular age. This morung membership gave them an exposure to the art of craftsmanship. And speaking anthropologically, the present generation of the Nagas especially in schools and colleges carry that legacy through genetic updating. This is a creativity that needs nurturing by the school management in general and the school directorate of the state government in particular. Moreover Nagas are equally advancing in the field of higher education. There are a number of engineers, doctors, scientists and politicians etc from Nagaland who are standing apart from others in their fields because of innovative ways of doing their work and are well known throughout the nation. Thus, these creative sparks present in the Nagas if recognized early and an atmosphere is provided for its proper expression, it will lead to a sense of personal satisfaction and channelize the rich resources of the Nagas for social development.

Programmes for Creative Children in Nagaland

Till very recently, Nagaland has no separate programmes for the education of the creative children. In some of the schools, double promotion is given to the exceptionally gifted children but there is no mention of enrichment curriculum for the creative children in particular anywhere. The state government provides stipends for some selected bright students throughout the state but except the distribution of the stipend, no other follow up work for their nurturance is seen. The National Council of Educational Research and Training under its national talent search scheme awards 750 scholarships for scheduled castes and scheduled tribes each year. The purpose of this scheme is to identify brilliant student at the end of class X and give them financial aid towards getting good education so that their talent may develop further and they may serve the country. Thus the education of the creative children is still in its grass root level. As a result of this, loss of creative manpower in the state is prevalent which has adversely affected on all round development of the society. Therefore, there is an urgent need to identify the gifted individuals at an early stage of educational development and to design educational programmes so that the creative children may

contribute significantly to the development of the society.

A nation whether big or small cannot underestimate the value and need of creativity in this age of competition. The advancement of a nation in this competition largely depends upon its creative minds. The creative act affects enormously not only scientific and technological progress, but society in general. Thus, creativity is regarded as the greatest asset of mankind. It is an ability that is most vital in shaping the future of a man. Therefore development and progress in various fields of national life depends on creative children. And as such efforts should be made to develop creativity in all children so that they may excel in their fields of interest and can lead the nation ahead. The educational system should aim at the development of creativity in school children to prepare leaders in different walks of life. Therefore the school should screen creative children and should promote them all possible facilities for the development of their talents. The study was an attempt to find out the incidence of creativity among the Naga students. As no study has been done so far in this area for the high school students in the Dimapur district of Nagaland, the investigator decided to take the topic. The study was also undertaken to find out the correlation between creativity and academic achievement and also to suggest measures for the development of creativity.

Statement of the Problem: *A study of creativity in relation to academic achievement of high school students in Dimapur district of the Naga hill.*

Objectives Of The Study

1. To study the creativity of Naga students in the high schools.
2. To find the co-relation between creativity and academic achievement.
3. To find the difference in the creativity of boys and girls.

Hypothesis

There is difference in the creativity of boys and girls.

Delimitation

The study is restricted to the secondary level students of class IX and X only.

Methodology

The study has been designed on semi-experimental method of research. It has been

conducted under controlled conditions wherein factors like age, sex, qualification, experience of the students that influence the outcome of the research have been carefully controlled to draw the inferences. Creativity serves as the independent variable which is determined by administering the verbal and non-verbal creativity test on the students. The dependent variable in the study is academic achievement of the students which is taken from the annual examination marks of the students.

Sample

In the study the high school students of Nagaland constitute the population. The sample consist 50 students selected through random sampling technique from ten schools of Dimapur district of Nagaland.

Tools Used For Data Collection

The following research tools have been used in the present study-

1. Dr. Baquer Mehdi's verbal test of creative thinking which consists of ten (10) items. Each response was scored on the basis of fluency, flexibility and originality.
2. Dr. Baquer Mehdi's non-verbal test of creative thinking which consists of twenty six (26) items. The response of each item was scored on the basis of originality and elaboration.
3. Annual examination marks of the students were collected from the schools for knowing the academic achievement.

Procedure for Data Collection

For the collection of data, the investigator contacted different school authorities for permission and personally visited the schools along with the tools. It is necessary to make a mention that there were healthy positive attitude and co-operation on the part of the school authorities, teachers and students. In order to obtain accurate responses from the students, it was necessary to establish rapport by motivating the students, creating and stimulating their interest. Then the tests were administered in the normal classrooms. At first, the investigator introduced her and explained the purpose of her visit. She then examined the physical classroom arrangement and helped in making the classroom a comfortable setting for the tests so that no respondent would make any complain during the test.

After the investigator satisfied himself with the personal interaction and arrangement, he explained the general instructions orally, followed by the distribution of test copies. Then the students were requested to read silently the instructions and examples given on the test copies so that they can clarify their queries. Finally, the students were requested to start responding to the verbal test items and complete all the items within a stipulated 48 minutes time. After the stipulated time was over, the verbal test booklets were collected. Then after a gap of 2 hours, the non-verbal test was administered which took 35 minutes, in addition to the time necessary for giving the instructions, passing out the booklets and collecting them back.

Statistical Techniques Used Mean, Standard deviation, Co-efficient of correlation and t-test were used for analyzing the data collected.

Analysis Of Data

The analysis of the creativity scores was done in accordance with the test manual for both the verbal and non-verbal tests. The total creativity score for each student was calculated by adding the scores of both the verbal and non-verbal creativity test. Accordingly the creativity scores were calculated separately for the boys and the girls. The students were grouped in three categories- low creative, average creative and high creative. For grouping the students in these three categories, firstly the mean scores were calculated separately for the boy and girl students and then the standard deviation was found. The number of boys was 24 and the number of girls was 26.

Table-1.1

The Following Table Shows The Process Of Calculating The Different Level Of The Creative Students:

High Creative	$M + 1 \sigma$
Low Creative	$M - 1 \sigma$
Average creative	Scores between the high and low creative were average creative.

Table-1.2

The Following Table Shows The Creativity Test Results Of The Male Students:

High Creative	3
Low Creative	4
Average creative	17

Thus, as given in table 1.2, we can see that out of the 24 male students, 3 boys were found to be highly creative, 4 boys were found to be low creative and 17 boys were found to be average creative. Thus 12.5% boys were found to be highly creative, 16.66% boys were low creative and 70.83% boys were found to be average creative.

Table-1.3

The following table shows the creativity test results of the female students:

High Creative	6
Low Creative	2
Average Creative	18

Again, as given in table 1.3, we can see that out of the 26 female students, 6 girls were found to be highly creative, 2 girls were found to be low creative and 18 girls were found to be average creative. Thus 23% girls were found to be highly creative, 7.69% girls were low creative and 69% girls were found to be average creative.

For finding the difference in the creativity scores of boys and girls “t-test” was applied and it was found to be 0.74. Since the tabulated “t” at 5% level of significance is 1.96 and it is more than the calculated “t”, there is no significant difference in the creativity of boys and girls. Hence, we reject the hypothesis.

Table1.4

The creativity and academic scores of the Naga students and the correlation:

Total Creativity scores	Total academic scores	Correlation(r)
22706	11391	0.96

The table 1.4 reveals that the correlation between creativity and academic achievement is 0.96. Therefore, there is high degree of positive correlation between creativity and academic achievement.

Table-1.5

The creativity and academic scores of the boys and girls and the correlation:

Boys	Total creativity scores	Total academic scores	Correlation(r)
	=11026	=5509	=0.98

Girls	Total academic scores =11680	Total academic scores=5882	Correlation(r) =0.96
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The above table reveals the correlation between the creativity and academic scores of boys and girls. It shows that there is high degree of positive correlation between creativity and academic achievement both for boys and girls.

Findings Of The Study

The findings of the study are as follows-

1. Finding related to the incidence of creativity among the high school students-

The study revealed that out of the 50 students, 9 students were found to be highly creative, 6 were found to be low creative and 35 students were found to be in the average group. Thus, 18% students were highly creative, 12% students were low creative and 70% students were average creative. Thus, the study revealed that majority of the students belong to the average group and very few are high and low creative.

2. Finding related to the comparative incidence of creativity of boys and girls-

Specifically, the study revealed that 12.5% boys were highly creative, 16.6% boys were low creative and 70.83% boys were in the average group. Whereas, 23% girls were

highly creative, 7.69% were low creative and 6.23% were average creative. However, the “t-test” result was 0.747 and it is less than 1.96, which shows that there is no significant difference in the creativity scores of boys and girls. Therefore we reject the hypothesis. Hence we can come to the conclusion that there is no sex difference in creativity.

3. Finding related to the correlation between creativity and academic achievement-

The study revealed a high degree of positive correlation between creativity and academic achievement and ‘r’ was found to be 0.96. Thus it can be said that students with high creativity are good in academic achievement also and vice versa.

4. Finding related to the correlation between creativity and academic achievement of boys-

Among the boys, there is high degree of positive correlation between creativity and academic achievements and ‘r’ was found to be 0.98.

5. Finding related to the correlation between creativity and academic achievement of girls-

Among the girls, the study revealed that there is high degree of positive correlation between creativity and academic achievements and ‘r’ was found to be 0.96.

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