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A STUDY OF CREATIVITY AND ALIENATION
IN ARTS AND SCIENCE STUDENTS

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A STUDY OF CREATIVITY AND ALIENATION IN
ARTS AND SCIENCE STUDENTS

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A B S T R A C T

The present study attempts to find out the differences on creative thinking abilities and level of alienation between the students of Arts and Science Streams. The Verbal Test of Creative Thinking and Alienation-Scale were administered on 400 boys (200 each of arts and science streams) of Intermediate classes.

The data indicate significant differences on creativity scores with superiority of science over arts students. No significant differences on alienation scale have been found between the students of the two educational streams.

The coefficients of correlation between creativity and alienation are also not found to be significant either in arts or science as well as in combined group of students.

Creativity is an ability of an individual to think in different ways to produce new and useful ideas to solve day-to-day problems effectively. It is creativity that sets a man apart from other beings. The world in which we live in, and the world of future demands new ideas, new processes and products, new inventions in medicines and other fields, which could be probably supplied by one power, one tool - creative thinking.

Guilford (1956) was the first to attempt experimentally to show the creativity as a function of the intellect. He classified divergent thinking as a function of mental operation in which we think in different directions, and related it to certain well known ability factors - fluency, flexibility and originality.

MacKinnon (1962) says, "True creativity involves a response or an idea that is novel or at the very least statistically infrequent (that) ... must to some extent be adaptive to, or of, reality. It must serve to solve a problem, fit a situation, or accomplish some recognizable goal. And ... (It) ... involves a sustaining of the original insight, an evaluation and elaboration of it, a developing of it to the full."

Alienation is defined as, "an estrangement or separation between parts of the whole of the personality and significant

aspects of the world of experience" (Lang, 1964). Mannheim (1970) suggested that alienation arises from differences in the qualitative features distinctive to certain stages of the life-cycle. Seeman (1959) divided alienation into five components: (i) powerlessness, (ii) meaninglessness, (iii) normlessness, (iv) self-estrangement, and (v) isolation. Mackey (1978) emphasizes that alienation is characterized by three independent dimensions: (i) a feeling of personal incapacity, (ii) a rejection of conventional rules, and (iii) a rejection of conventional criteria for success.

Rotter, Chance and Phares (1972) suggest that the alienated individual feels unable to control his own destiny. In a study of creative engineering students, Buhl (1961) found that the highly creative engineer has a distinct desire to have warm and close personal relationships, to share his ideas with others. So he want to be only an average student, apparently because he is afraid that excelling will alienate him from such relationships. Torrance (1962) also has reported that the many highly creative children find that the use of their creative talents alienates them from their friends. These findings suggest that the poor recognition of high creativity may cause alienation and vice-versa.

The present study investigates the differences between arts and science students on creativity and alienation and the relationship between the two variables.

Methodology:

Tools:

(i) The Verbal Test of Creative Thinking developed by Dr. Baqer Mehdi (1973) was used to measure creativity. It includes four sub-tests, namely, consequences test, unusual uses test, new relationships test, and product improvement test. The responses on all the four sub-tests are scored for fluency, flexibility and originality. The total raw scores of fluency, flexibility and originality have been converted into 'T' scores and then added to get the total creativity scores.

(ii) The Alienation Scale or A-Scale developed by Dutt and Kureshi (1976) has been used to measure the alienation. The scale consists of 21-items with four alternative responses: always, mostly, occasionally and never, for each item. This factor analysed scale includes the following dimensions:

(i) Despair, (ii) Disillusionment, (iii) Psychological vacuum, (iv) Unstructured Universe, and (v) Narcissism.

Sample: The two tests available in Hindi, were administered on 400 boys (200 each of arts and science streams) of Intermediate classes of different institutions of Azamgarh district

of U.P. State. The age range of sample was between 15 to 17 years.

Table 1

Creativity Scores

Group	N	M	Mdn	S.D.	C.R.	p
Arts Boys	200	141.06	141.50	24.25	3.44	.01
Science Boys	200	154.09	153.63	23.61		

Table 2

Alienation Scores

Group	N	M	Mdn	S.D.	C.R.	p
Arts Boys	200	50.52	50.85	5.54	1.84	NS
Science Boys	200	49.52	49.19	5.36		

Table 3

Correlation between Creativity and Alienation Scores

Group	N	r	p
Arts Boys	200	-.1248	NS
Science Boys	200	.1008	NS
Combined data	400	-.0402	NS

. D I S C U S S I O N

Table 1 indicates that the mean creativity score of arts boys is lower than the mean score of science boys. The median also indicates a similar trend. The result indicates a significant difference on creativity measure with superiority of science over arts (C.R. = 3.44; $\leq .01$). Srivastava and Jha (1977) confirm the finding. The more creative science student is reported to be more of a participant than the less creative (Garwood, 1961), while the more creative art student has been reported to be more of an observer than a participant in what is going on (Hammer, 1961). The active participation may cause more motivation and recognition leading the increase of creativity in science students.

The mean alienation score of arts boys is greater than the science students. The median is also in the same direction. However, there is statistically no significant difference between the two groups on alienation measure. It indicates that both the arts and science students have equal opportunities and recognition in the class as well in the school.

The correlation between creativity and alienation in arts boys is low and negative but at the same time not significant. However, it indicates that alienation and creativity are inversely related.

In case of science boys, coefficient of correlation is very low and not significant. The correlation for combined group also is not significant. Thus these results indicate that alienation and creativity operate independently and do not affect each other.

In summary, the science students are superior to arts students on the measure of creative thinking but on alienation scale, both do not show significant difference. Creativity and alienation do not show significant relationships either in arts or science as well as in combined group of students.

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