

A Study of Creativity in the Context of Achievement Motivation, Fatalism and Risk-taking Behaviour of Class Xth School Goers

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ABSTRACT

The present investigation was an attempt to determine the influence of academic achievement motivation, locus of control and risk-taking behaviour and their various interactions on the verbal creativity of the students. A sample of 274 students studying in Class X was taken randomly from 7 higher secondary schools of Patna town of Bihar (84 boys and 190 girls). Three verbal subtests namely, the seeing problems test, the unusual uses test and the consequences test of the battery of 'Tests of Creativity' standardized by B.K. Passi, Academic Achievement Motivation Test developed by T.R. Sharma, Locus of Control Scale developed by Roma Pal and a Verbal Measure of Risk Taking developed by N.P. Chaubay were administered on the sample for data collection. 2x2x2 Factorial Design ANOVA was employed where in creativity was taken as the dependent variable and two levels for the independent variables such as, academic achievement motivation, locus of control and risk-taking behaviour were determined on the basis of their median scores. Academic achievement motivation and locus of control were found to exert significant influence on the creativity of the students whereas, risk-taking behaviour and interactions between academic achieving motivation and locus of control, academic achieving motivation and risk-taking behaviour, locus of control and risk-taking behaviour and interaction among all the three independent variables were not found to have significant influence on the verbal creativity of the subjects.

Keywords: *Creativity, Achievement Motivation, Fatalism, Risk-taking Behaviour, Class Xth School Goers*

Creativity is a unique attribute of humankind. Getzels & Jackson (1962) stated that human creativity is one of the most highly valued qualities. Toynbee (1964) considered creativity as "man's greatest asset". Torrance (1969) also viewed creativity as one's most valuable resources in coping with life's daily stresses. However, creativity is believed to be both constructive as well as destructive. It can lead the entire world towards development, progress and prosperity. On the other hand, misuse of it can pose a great threat to the peaceful

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Received: February 27, 2017; Revision Received: May 28, 2017; Accepted: June 29, 2017

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co-existence of nations in the world and to the survival of humanity. Thus it is not only important for the individual but also for the nation, and the society as well.

Rationale of The Study

In view of the importance of creativity, great efforts have been made since many years to explore more scientifically the nature of creativity, its measurement and possible developments as Well as relationship with other attributes of human beings.

A review of related research studies indicated that there is lack of agreement with regards to the relationship of achievement motivation, locus control and risk taking behaviour with creativity. Moreover, not a single study is available attempting to determine influence of academic achievement motivation, locus of control and risk-taking behaviour and their various interactions on creativity. In view of the above considerations, the present study was undertaken.

Hypotheses

The following null hypotheses were formulated for the study:

- Ho1: There is no significant influence of academic achievement motivation on creativity of the students.
- Ho2: There is no significant influence of locus of control on creativity of the students.
- Ho3: There is no significant influence of risk-taking behaviour on creativity of the students.
- Ho4: There is no significant influence of interaction between academic achievement motivation and locus of control on creativity of the students.
- Ho5: There is no significant influence of interaction between academic achievement motivation and risk-taking behaviour on creativity of the students.
- Ho6: There is no significant influence of interaction between locus of control and risk-taking behaviour on creativity of the students.
- Ho7: There is no significant influence of interaction among academic achievement: motivation, locus of control and risk-taking behaviour on creativity of the students.

Objectives

The objectives of the present study were:

1. To find out influence of academic achievement motivation, locus of control and risk-taking behaviour on creativity, and.
2. To find out influence of interaction of academic achievement motivation, locus of control and risk-taking behaviour on creativity of the subjects (students).

METHODOLOGY

Sample

The study was undertaken on a randomly selected sample of 274 students (84 boys and 190 girls) studying in Class IX of 7 Higher Secondary Schools of Patna town of Bihar state.

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Tools

The first 3 subsets of the battery of "Tests of Creativity", developed and standardized by Passi(1979), namely the seeing problem test, the unusual uses test and the consequences test; Academic Achievement Motivation Test by Sharma (1984), Fatalism by Sinha (1973) and A Verbal Measure of Risk-Taking by Chaubay (1975) were employed for collection of the desired data.

Procedure:

After administering of the tools on the sample, the scoring was done as per the description given in respective manuals. Then the variables such as, Academic Achievement Motivation (AAM), Locus of Control (LOC) and Risk-Taking Behaviour (RTB) were dichotomized into High Academic Achievement Motivation and Low Achievement Motivation, External Locus of Control and Internal Locus of Control and High Risk-Taking Behaviour and Low Risk-Taking Behaviour respectively on the basis of Median. Then the scores of students on the first 3 subsets of the battery of "Tests of Creativity" relating to fluency, flexibility and originality components were combined to have composite verbal creativity scores of the students. A three-way ANOVA with 2x2x2 factorial design was employed to find out the influence of the 3 independent variables such as academic achievement motivation, locus of control and risk-taking behaviour and their interactions on the criterion variable, i.e. composite verbal creativity of the students.

RESULTS & DISCUSSIONS

Results of analysis relating to the influence of academic achievement motivation, locus of control and risk-taking behaviour and their interactions on the composite verbal creativity of the students are shown in Table-1 and Table 2.

Table-1: Summary of 2x2x2 Factorial Design ANOVA for Composite Verbal Creativity

| Source of Variance | df | Sum of Squares | Mean sum of square | F-Value |
|--------------------|-----|----------------|--------------------|---------|
| AAM (A) | 1 | 1594.57 | 1594.57 | 4.412* |
| LOC (B) | 1 | 1394.94 | 1394.94 | 3.860 |
| RTB (C) | 1 | 84.943 | 84.943 | 0.235 |
| AxB | 1 | 448.507 | 448.507 | 1.241 |
| AxC | 1 | 380.38 | 380.38 | 1.052 |
| BxC | 1 | 529.017 | 529.017 | 1.463 |
| AxBxC | 1 | 879.707 | 879.767 | 2.434 |
| Within Error | 266 | 96120.8 | 361.356 | |
| Total | 273 | 101403 | | |

* Significant at 0.05 level

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Table-2 : Mean Scores of Different Groups on Composite Verbal Creativity

| Groups | High Academic Achievement Motivation (A1) | Low Academic Achievement Motivation (A2) | Internal Locus of Control (B1) | External Locus of Control (B2) | High Risk-Taking Behaviour (C1) | Low Risk-Taking Behaviour (C2) |
|--------------------|---|--|--------------------------------|--------------------------------|---------------------------------|--------------------------------|
| Mean Scores | 53.371 | 47.736 | 54.169 | 49.815 | 49.659 | 53.451 |

It is observed from Table-1 that obtained F-Value for academic achievement motivation is 4.412 which is significant at 0.05 level with $df=1/266$. It shows that the mean verbal creativity score of the students having high academic achievement motivation differs significantly from that of the students having low academic achievement motivation. This is to say, academic achievement motivation is found to have significant influence on composite verbal creativity of students. Therefore, the null hypothesis H_01 : "There is no significant influence of academic achievement motivation on creativity of the students is rejected. Further from Table-2 it is known that the mean verbal creativity score of the students having high academic achievement motivation is 53.371 which is significantly greater than the students having low academic achievement motivation which is 47.136. It may, therefore be said that students having high academic achievement motivation are more creative than those having low academic achievement motivation.

The F-value for locus of control is 3.860(vide Table-1) which is found significant at 0.05 level with $df = 1/266$. Again the mean scores (vide Table-2) show that the students belonging to internal locus of control are more creative than the students belonging to external locus of control. Thus locus of control is found to have significant influence on verbal creativity of the students. The null hypothesis H_02 : "There is no significant influence of locus of control on creativity of the students" is therefore, rejected. The obtained F-Value for risk-taking behaviour is 0.235 which is not significant. This reveals that there is no influence of risk-taking behaviour on creativity of the students. Therefore, the null hypothesis: H_03 is retained. It is further revealed (vide Table-2) that the mean difference is only 3.792 and is in favour of low risk-taking behaviour. It is imperative to state here that risk-taking behaviour indicates the extent to which conflict with varying degrees of time perspective are approached rather than avoided. In the present case, it seems that there was less opportunity for the conflict to arise and, therefore, the question of the resolution did not arise. The subjects of the present, study might be having average risk-taking behaviour and no extreme cases might have been obtained. Thus, in the absence of extreme cases, the risk-taking might not have been found to influence verbal creativity of the students.

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The F-values for interactions between academic achievement motivation and locus of control, academic achievement motivation and risk-taking behaviour, locus of control and risk taking behaviour, and among academic achievement, locus of control and risk-taking behaviour are not significant (vide Table-1). This reflects that there is no influence of interactions between academic achievement motivation and locus of control, academic achievement motivation and risk taking behaviour, locus of control and risk-taking behaviour and among academic achievement motivation, locus of control and risk-taking behaviour on creativity of the students. Thus the null hypotheses Ho4, Ho5 and Ho7 are retained.

CONCLUSIONS

1. The main influence of academic achievement motivation on verbal creativity of the students is significant and the students having high achievement motivation are more creative than those having low academic achievement motivation.
2. The main influence of locus of control on verbal creativity of students is significant and the students belonging to internal locus of control group are more creative than the students of high locus of control.
3. The influence of risk-taking behaviour on the verbal creativity of the students is not significant.
4. The influence of interactions between academic achievement motivation and locus of control, academic achievement motivation and risk-taking behaviour, as well as locus of control and risk-taking behaviour on creativity of the students is not significant.
5. The influence of interaction among academic achievement motivation, locus of control and risk-taking behaviour on creativity of the students is not significant.

Acknowledgments

The author appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interests: The author declared no conflict of interests.

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How to cite this article: Kishore K (2017), A Study of Creativity in the Context of Achievement Motivation, Fatalism and Risk-taking Behaviour of Class Xth School Goers, *International Journal of Indian Psychology*, Vol. 4 (3), DIP:18.01.246/20170403