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RESEARCH ARTICLE

Comparison of Fluency Dimension of Creativity

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Corresponding Author*Dr. Sunil Kumar Trivedi****Abstract**

The work entitled *Comparison of fluency dimension of creativity* focuses on measuring the Creativity in terms of its fluency dimension. The present study is undertaken to find that how the levels of creativity varies in the male & female students on the basis of gender, locale & educational stream.

In this study, fluency dimension of creativity is taken as a variable to be measured with the help of self- made tool. Mean, Standard deviation & t-test was applied as the most appropriate statistics in order to reach meaningful conclusions.

The present study revealed that the male students shaped better in comparison to their female counterparts in the fluency dimension of creativity questionnaire but on the whole there was no significant difference observed in their performances. Therefore, it can be concluded that the difference in the performance of the male & female students is due to the chance variations or any other factors affecting their level of creativity & not because of the gender, locale & educational stream considered in the study.

Summary: Creativity is an individual characteristic and varies in its occurrence. Creativity of a person helps him to make his/her approach in the different areas of work for his growth. Creativity may also have different aspects. A person may be creative at one aspect and not on the other. Furthermore, creativity can be above gender, locale & stream of an individual.

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Introduction:-

Every individual is a unique creation, but does not possess the same unique creative ability as his peers. Some of us are endowed in high creative talents and contribute to advancement in the fields of Art, Literature, Science, Business, Teaching and other spheres of human activity and are responsible for propounding new ideas and bringing about educational, social & cultural changes. Mahatma Gandhi, Abraham Lincoln, Homi Bhabha, Newton, Shakespeare, Leonardo da Vinci were some of the creative individuals who left their mark in their chosen fields. Though they were undoubtedly gifted with creative abilities, the role of environment in the terms of education, training and opportunities in their development cannot be ignored. Good education, proper care and provision for opportunities for creative expression inspire, stimulate and sharpen the creative mind. Teachers, parents & society play a very important role for moulding the students as well as help them to explore their creativity which may further assist in enhancing the problem solving. They are required to help the children in nourishing and utilizing their creative abilities to solve their problems which act as hindrances in reaching their goals. Thus, we can say that creativity makes a significant contribution in problem solving. This paper examines the creativity level of students in terms of the fluency dimension of creativity which lays focus on the number of relevant & unrepeatable ideas which the individual produces.

Literature review:-

The present research work entitled Comparison of fluency dimension of creativity aims at finding difference in the creativity level of male & female students from urban/rural areas & science/arts stream. To support this study, survey of different researches with regard to the topic Comparison of fluency dimension of creativity were taken into account by the authors.

Studies conducted by Bhattacharya, S.B. (1978) stated the fact that literary quantitative production was significantly & positively related to composite creativity & all its components such as fluency, flexibility & originality. One of the study conducted by Jhag, D.S. (1979) revealed in its findings that Creative students were significantly better in abstract thinking, emotional stability, independence, self-sufficiency, self-concept, intelligence, venturesome & relaxed. Further, study conducted by Padhan, G. (1990) stated that fluency aspect of creativity had a significant relationship with Socio-economic status of the individuals.

More studies which were conducted with regard to the fluency aspect of creativity were that of Rajagopalan (1998) revealing the fact that fluency factor discriminates between the highest creative groups & lowest creative groups. Reddy, S.V.B. (2008) investigated the creativity of the student teachers of college of education & the conclusions were that the male & female student teachers do not differ significantly with regard to their verbal creativity.

Batey, M., Furnham, A. and Safiulina, X. (2010): conducted a study on, "Intelligence, General Knowledge and Personality as Predictors of creativity". This study sought to examine the contribution of fluid intelligence, general knowledge and big five personality traits in predicting four indices of creativity: Divergent thinking (DT) fluency, Rated (DT), Creative achievement and self-rated creativity and a combined total creativity variable. When creativity was assessed in terms of achievement or self-rating, personality variables were consistently predictive. Zhu, C. and Zhang, L.F. (2011): conducted a study on, "Thinking Styles and Conceptions of Creativity among University Students". This research aimed to understand university students' thinking styles and the relationship with their views of creativity. The Thinking Styles Inventory - II Revised was to measure 13 thinking styles as defined in Sternberg's theory of mental self-government and the Conceptions of Creativity Scales was used to inquire students' views about the conditions for evaluating creativity from six aspects: intelligence, knowledge, style of thinking, personality, motivation, and learning environment. Significant relationships were identified between conceptions of creativity thinking styles, and bring insights for educators about educational innovations, as one of the key objectives of educational innovations is to develop creativity of the younger generation.

Thus, after viewing the above literature, questions such as: Whether the creative skills elevate or upgrade a student's performance at work? Does creativity differs on gender basis? Are urban students superior to rural students in terms of creativity? Does creativity differs in male and female students on the basis of their streams (science or arts) opted for studies framed into the mind of the researchers. Hence, variable Creativity being measured in this study was defined operationally in the following way:

Creativity:-

Here in this research study is represented by the number of relevant & unrepeated ideas which the individual produces. Relevance is judged on the appropriateness of the response, when considered in relation to the test problem. An unrepeated idea is the one which has been expressed only once under the given problem.

Objectives:-

1. To study comparatively the fluency dimension of creativity in male & female students from the urban area in science stream at intermediate level.
2. To study comparatively the fluency dimension of creativity in male & female students from the urban area in arts stream at intermediate level.
3. To study comparatively the fluency dimension of creativity in male & female students from the rural area in science stream at intermediate level.
4. To study comparatively the fluency dimension of creativity in male & female students from the rural area in arts stream at intermediate level.

Hypotheses:-

1. There is no significant difference in the fluency dimension of creativity in male & female students from the urban area in science stream at intermediate level.

2. There is no significant difference in the fluency dimension of creativity in male & female students from the urban area in arts stream at intermediate level.
3. There is no significant difference in the fluency dimension of creativity in male & female students from the rural area in science stream at intermediate level.
4. There is no significant difference in the fluency dimension of creativity in male & female students from the rural area in arts stream at intermediate level.

Methodology:-

Method:-

The researchers used the “Survey method” for the present study.

Sample:-

The size of the sample covers 200 students in all. Out of these 200 students (100 are male & 100 are female). These were sampled using semi-probability technique from the Intermediate Colleges of Jhansi District from U.P.

Tools Used:-

Creativity questionnaire: constructed by the researchers was used for measuring the fluency dimension of creativity.

Statistical techniques:-

Mean, Standard Deviation & t-test was used for the analysis of data collected.

Results:-

The study indicates that the level of creativity in male & female students is not confined to their gender, locale and educational stream. The male & female students have performed more or less in a similar way on the various aspects of creativity. Therefore, the parents as well as the teachers should promote the male & female students equally in their studies and also in other creative jobs which includes various curricular activities.

Discussion section:-

In order to reach to the correct & valid conclusions data analysis & interpretation was done which brought forward the following findings:

1. Comparison of the male & female students from urban area & science stream on the fluency dimension of creativity at intermediate level.

One of the objectives of the present work is -To study comparatively the fluency component of creativity in male & female students from the urban area in science stream at intermediate level. The difference of the mean scores of male and female students from urban area in science stream at intermediate level on fluency dimension of creativity is calculated & shown in the table below:

Mean S.D. & t-values of the male & female students from urban area & science stream on the fluency dimension of creativity at intermediate level are shown in the **Table No. 1**

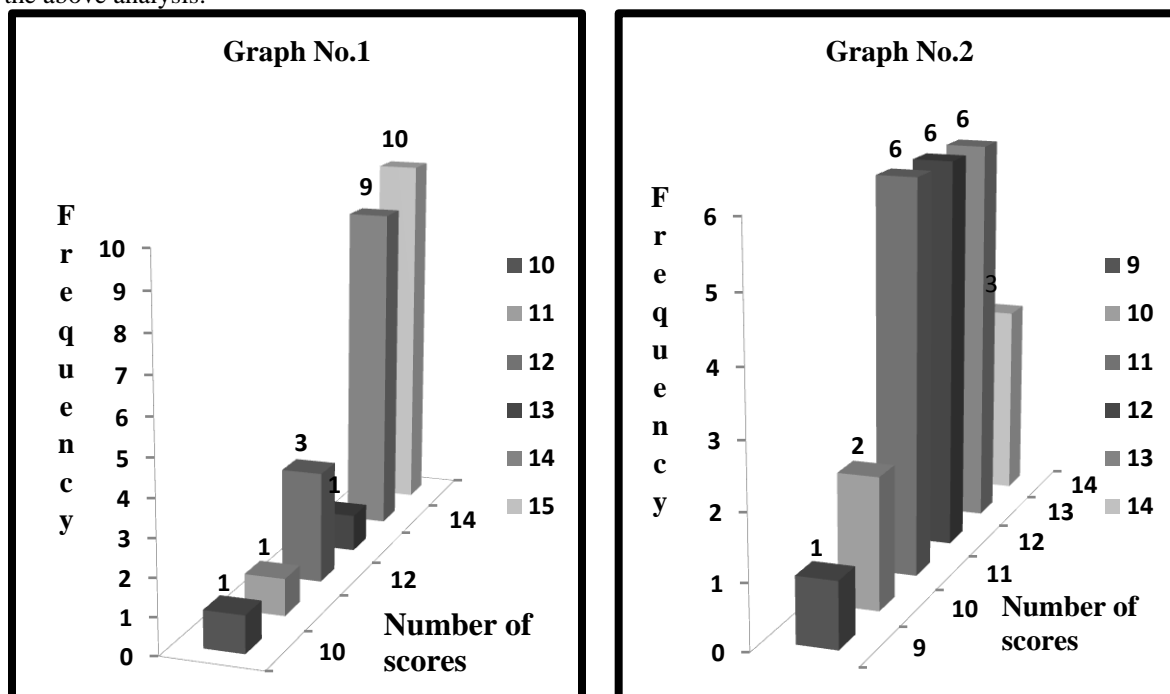
Table No.1

Group	Locale	Stream	Mean	S.D.	d	σ_d	t	Level of significance	
FEMALE	URBAN	SCIENCE	11.96	1.280	1.88	0.38	4.947	0.05	2.01
MALE			13.84	1.378				0.01	2.68

Thus on the basis of the data in Table 1 the hypothesis that there is no significant difference in the fluency dimension of creativity in male & female students from the urban area in science stream at intermediate level is rejected with reference to both the levels of significance.

This indicates that the potential of giving various relevant ideas in the form of the responses on a particular item on the fluency dimension of creativity is more in the male students in comparison to the female students of the same area & stream.

Graphical presentation (**Graph No.1 & Graph No.2**) of the frequency of scores obtained in the fluency dimension of creativity from the male & female students from urban area in science stream at intermediate level also supports the above analysis:



2. Comparison of the male & female students from urban area & arts stream on the fluency dimension of creativity at intermediate level:

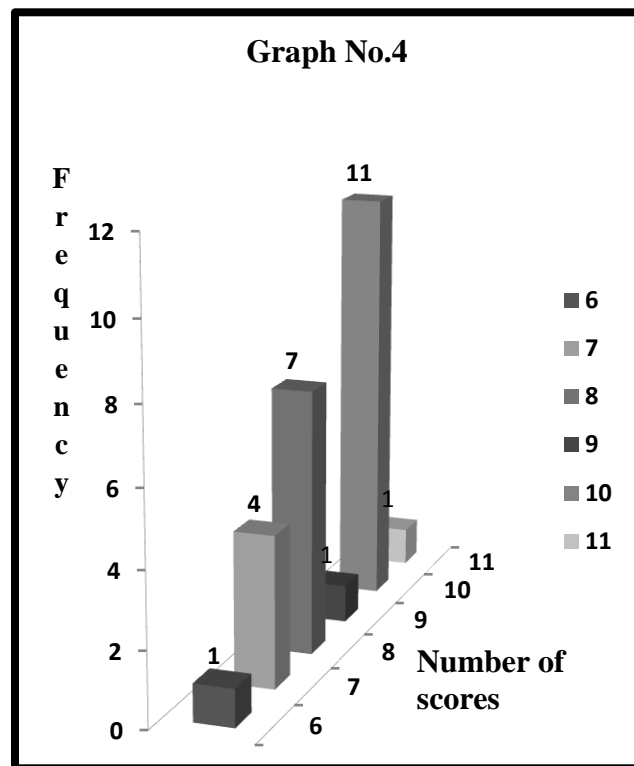
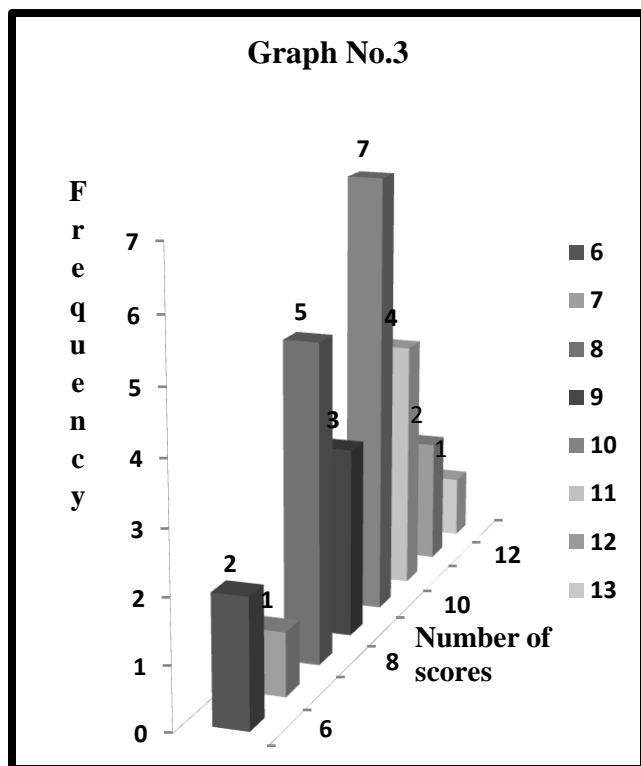
On comparing the mean scores of male & female students of urban area arts stream it was found that there exists no difference on the fluency dimension of creativity & is shown below in **Table No.2**

Table No. 2

Group	Locale	Stream	Mean	S.D.	d	σ_d	t	Level of significance	
Female	URBAN	ARTS	8.2	2.966	1.28	0.704	1.818	0.05	2.01
Male			9.48	1.769				0.01	2.68

On the basis of the statistical values revealed in the Table No. 2 the hypothesis that - There is no significant difference in the fluency dimension of creativity in male & female students from the urban area in arts stream at

intermediate level is accepted. And thus, it can be concluded that there exist no difference in creativity on the basis of gender form but is due to the chance variation. The above interpretation is supported by the graphs given below: Graphical presentation (**Graph No.3 & Graph No.4**) of the frequency of scores obtained in the fluency dimension of creativity by the male & female students from urban area in arts stream at intermediate level:



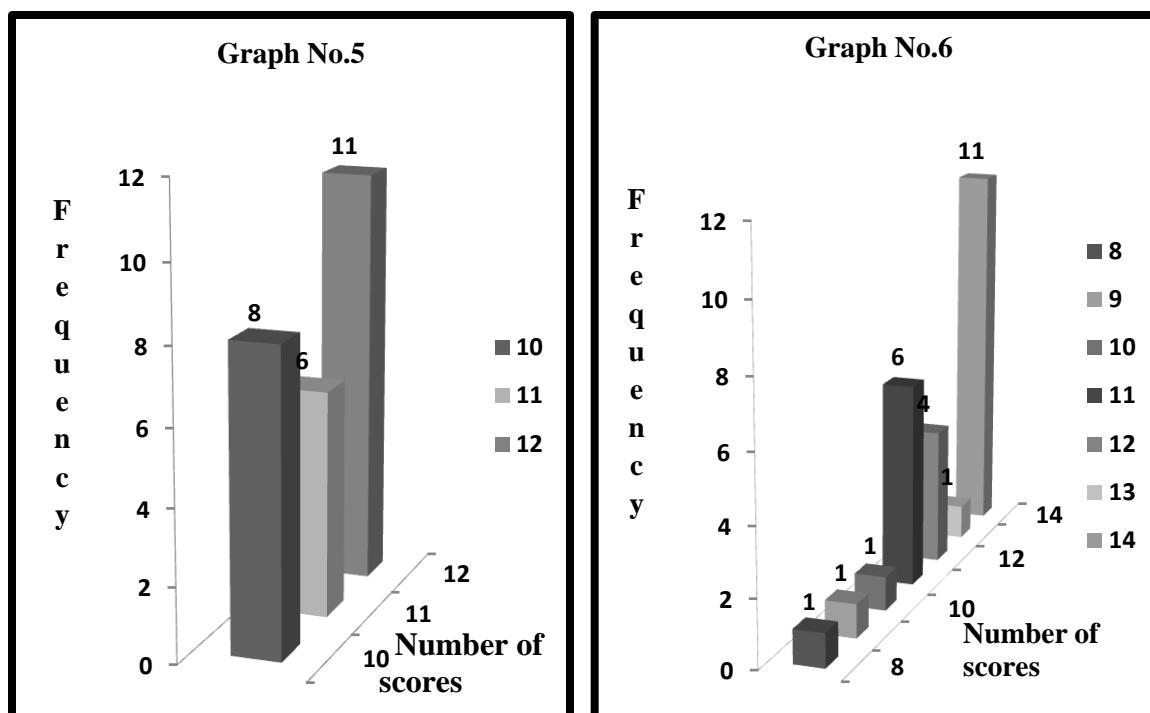
3. Comparison of the fluency dimension of creativity in male & female students from the rural area in science stream at intermediate level:

Data derived is shown in the **Table No.3** below & it is concluded that female students from rural area science stream are better on the fluency dimension of creativity in presenting their responses on the related items in comparison to the male students from rural area in science stream. Thus the hypothesis that there is no significant difference in the fluency dimension in creativity in male & female students from the rural area in science stream at intermediate level is rejected.

Table No.3

GROUP	LOCALE	STREAM	MEAN	S.D.	D	σ_D	t	Level of Significance	
FEMALE	RURAL	SCIENCE	12.32	1.760	1.2	0.4	3	0.05	2.01
MALE			11.12	0.866				0.01	2.68

Graphs (No.5 & No.6) shown below presents the comparative study between the male & female students from rural area & science stream.



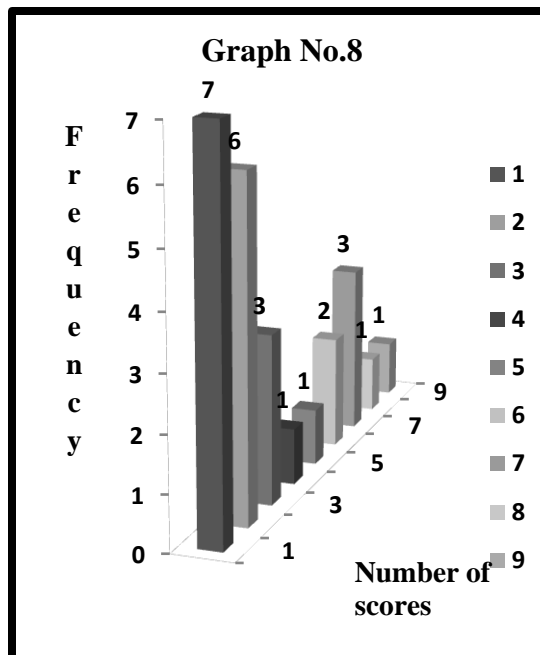
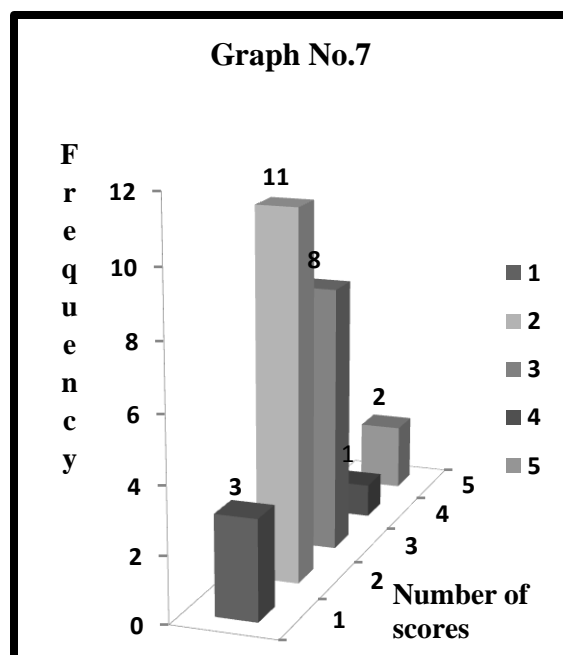
4. Comparison of the fluency dimension of creativity in male & female students from the rural area in arts stream at intermediate level:

The data provided in the table No.4 reveals the fact that the creativity is neither gender nor locale based. It varies from individual to individual. Here, in responding on various activities individual thinking, ideas have surfaced effectively. The fact is truly sustainable and is fully substantiated from the data shown in the table below:

Table No.4

Group	Locale	Stream	Mean	S.D.	d	σ_d	t	Level of significance	
FEMALE	RURAL	ARTS	3.48	2.531	0.96	0.55	1.745	0.05	2.01
MALE			2.52	1.024				0.01	2.68

Here, it can be concluded that male & female students in comparison to other groups taken in this study have not shaped well in the fluency dimension of creativity. The reason behind this may be that these students may not be possessing flexibility in thought, perception & action in comparison to the other groups taken into the study. Therefore, the hypothesis that -There is no significant difference in the fluency dimension of creativity in male & female students from the rural area in arts stream at intermediate level is accepted. Graphical presentation (**Graph No.7 & Graph No.8**) of the above comparison shows the difference of scores obtained by the male & female students from rural area & arts stream.



Conclusion:-

- Male students dominated over their female counterparts from the urban area in science stream in the fluency dimension of creativity.
- Male students showed superiority over their female counterparts from urban area & arts stream only in performance but overall there is no significant difference in the fluency dimension of creativity.
- There was significant difference between the male & female students from the rural area in the science stream in the fluency dimension of creativity.
- No significant difference was observed in the male & female students of the rural areas in the arts stream at intermediate level in the fluency dimension of creativity.

References:-

1. Agarwal, P.C. (1974). A study of the achievement motive, Unpublished Ph.D. thesis, Education, K.U.K.
2. Azmi, A.A. (1974). A study of relationship between Creativity, Culture & Intelligence among Middle School Rural Children, Unpublished Master's Thesis A.M.U.
3. Best, J.W. and Khan, J.V. (1986). Research in Education (10thEd.) NewJersey: Prentice Hall.
4. Bhatnagar, A.B.; Bhatnagar Meenakshi & Bhatnagar Anurag (2011). Development of learner and Teaching Learning Process: Vijay Rakheja Publishers.
5. Bhan, R.N.(1972). Social factors in Creative Potentiality, Journal of Education & Psychology, 29,263-67
6. Bipin, Asthana (2011). Research Methodology: Agarwal Publications.
7. Chadha, M.K. (1987).Creativity as a function of intelligence, Personality, Scholastic achievement: An Empirical Study. Indian Educational Review XXII(1) 61-64.
8. Dhir, S. (1973). Performance of High School students on Verbal & Figural test of Creative Thinking. Master's thesis, Punjab University.
9. Dutt, G. (1982) Sex Difference in Creativity among the tribal of Meghalaya, Journal of Institute of Educational Research.
10. Hota, A.K. Creativity: Cultural Perspective, Discovery Publishing house, New Delhi.
11. Gakhar, Sudesh K.(1981). Intellectual & Personality Correlates of Creativity. Indian Dissertation Abstract, v. (344) 332-34.
12. Gulati, Sushma(1982). A Study of the Analysis & Synthesis of Creativity. Indian Educational Review, 17(1), 104-08.
13. Gupta, S.P. (2013). Statistical Methods in Behavioural Sciences, Sharda Publishers & Distributors, Allahabad.