

## **A Study of Originality among Secondary School Students in Relation to Locale, Ethnicity, Types of Institutions and Sex**

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### **Abstract**

*Originality is one of the dimensions of Divergent Thinking, i.e., Creativity. In one sense originality is the real creativity as it is the dimension related to newness, novelty or peculiar response of the students. Considering the importance of originality the researchers have undertaken this work. 600 (Six hundred) students from secondary schools of Ranchi district of Jharkhand state have taken as sample by employing Stratified Random Sampling technique. Objectives of the study are- (i) To Identify Originality of Secondary School Students and (ii) To Compare the Originality of (a) Urban-Rural, (b) Non-tribal-Tribal, (c) Government- Private and (d) Female- Male Secondary School Students. Hypotheses of the study are- (i) There is No Significant Difference between the Originality of (a) Urban- Rural, (b) Non- tribal-Tribal, (c) Government- Private and (d) Female and Male Secondary School Students. The study yields conclusions as Urban, Non-tribal, Government and Female students group are significantly superior to Rural, Tribal, Private and Male students group respectively.*

### **Keywords**

Originality, Students, Secondary Schools (Government and Private, Tribal and Non-tribal, Urban and Rural)

### **Background**

Out of all the resources available in the universe human resource is the supreme, it looks even more important when we come to know that all other resources are being managed and utilized by the human resource. Human resource needs to be educated, trained, enriched and to be skilled to manage other available resources like — Material, Natural, Temporal, and even the human resource itself. Identification and nurturance of human talent is the essential element in this entire episode of resource management and resource utilization for a better human society. Human talent is of many kinds, but the most important human talent is divergent thinking or creative abilities. Raina, MK (1988) speaks in this regard, "Talents do not spring forth full-blown, but must be discovered and nurtured. The subject of nurture has been,

and will continue to be, the prime concern." So far as types of talent are considered psychologists, educationists, related scholars and researches in the field have identified many types of talent, and of course creative talent has been spelt out in almost all the discussion. Quoting Sumption and Luecking Chandhari, US (1988) talks of six types of talent, "Sumption and Luecking enumerate six common types of giftedness or talent: (1) academic giftedness, (2) creative giftedness, (3) leadership giftedness, (4) scientific giftedness, (5) artistic giftedness, and (6) mechanical giftedness. Unlike Marland's list it includes "Scientific talent" as a separate category and excludes the mention of "general intellectual ability". Perhaps, Sumption and Luecking have subsumed the intellectual ability under academic giftedness. Mentioning Abhinava Gupta, Rudrat and Rajshekhar, Choudhary again speak about talent and its category, "Abhinava Gupta has made a mention of two types of talent (or Pratibha) : Akhya or the poetic genius of the poet and Upakhya, or the genius of the critic Rudrat Classifies talent into Sahaya (or inborn) and Uppadhya or evolved through scholarship. Rajshekhar, again, described two types of talent : Karvitri (creative) and Bhavyitri (receptive)." Gupta, Rudrat and Rajshekhar all talk of creative talent in some way or other. Gulati, Sushma (1988) quoting Taylor has mentioned six types of talent and creative talent is one of them, "Taylor (1964) listed six talents –academic, creative, evaluative, decision- making, planning, forecasting and communication. This multiple talent approach signifies creativity as one of the talent areas to consider when assessing and developing abilities." It is sad to say that intellectual talent or IQ is being considered & preferred by the mass and in some cases by the academicians superior to creative talent. Miyan, Mohd (1988) also thinks in the same manner when he concludes, "Besides employing suitable methods and subject material to foster talent, it is also necessary to create a general atmosphere for the manifestation of talent. Teachers generally prefer student with high IQ levels to highly creative, students because the highly creative are overly energetic, highly independent, somewhat rebellious and emotionally expressive. For manifestation of creativity, psychological safety and psychological freedom are very important general conditions (Ragers, 1960)."

Creativity is a vital dimension of talent and its identification, nurturance and gathering of more and more information about it through various researches is an essential & vital human agenda to manage human resources especially for a beautiful & powerful world with required human characteristics. Creativity is useful research area and so the researchers have chosen the area to explore something meaningful through their work. It is worthwhile to quote Singh, RJ (1988) here, "No justification is needed to train and develop creative thinking abilities among our present and future generations. As Wolf (1954) writes, "the brains of its citizens constitute a nation's greatest asset. From the mind of men will come the future scientific discoveries, future works of art and literature, future advances in statesmanship, technology and social organization; in short, all future progress. Since there can be no argument over this proposition, the practical problem becomes one of devising the best means of nurturing the talent which exists in the population." Hence, an increasing concern for identifying and developing creative talents (Guilford, 1950; Torrance, 1969; Saxena, 1976). Indeed, this concern gets added importance for a developing country like ours which is yet to find solutions to such basic

problems as mass illiteracy, unemployment, and food for its wildly growing population, before it can think of coping with the highly developed countries of the world in scientific and technological fields."

Barron has defined creativity to make new combinations from already existing objects and elements. Novelty, newness or originality is the heart of the creativity as a concept. Fluency, Flexibility, Originality and Elaboration are some of the qualities that are being taken into consideration with regard to creativity. All these qualities are dimensions of creativity studied separately and their sum total is being taken as creativity or composite creativity. From measurement point of view Originality is the most difficult and in many sense most important aspect of creative talent. In the present study the researchers have under taken the originality as their problem or area of study. Kumar, Lalit (2012) finds originality as the culmination point of the concept creativity. In order to understand creativity and its relationship with its important component– ORIGINALITY it is worthwhile to quote Kumar, Lalit (2012) where he concludes, " K. Benett has done research on the meaning of creativity. According to him creativity is multidimensional and its meaning is not same for all people. It does not have a universally accepted definition, though there is similarity in various definitions of it. There are some properties commonly related to it, such as Fluency, Flexibility, Divergent thinking, Originality, Inventiveness, etc. Taylor identifies five types of creativity each with its own psychological process. These are : (1) Expressive creativity, in which originality and quality of production is unimportant; (2) Technical or productive : This is concerned with skill rather than novelty; (3) Inventive: This form consists mainly of ingenuity leading to the production of a novel and appropriate product; (4) Innovative : This brings further development to an established body of meaning; and (5) Emergentive, the final and the most complex form of creativity. It is individualistic and results in highly generative insights." Measurement of creativity reflects the importance of Originality where we come to know that students obtain some score on Fluency, Flexibility and also on Elaboration, but very few students get score for Originality aspect of creativity. Considering originality as the true creativity in terms of novelty the researchers have identified the problem to study in terms of originality dimension of creativity only. In most of the studies related to creativity all the dimensions have been taken into account along with composite creativity. Originality has been discussed as one of the part of creativity, but we find very few studies based on originality only. Review of those studies have given an insight to the researchers to identify only originality as the problem of the study.

## Review of Studies

Pandit, R (1976) found originality significantly related to the levels of adjustment, levels of socio-economic status and levels of scholastic achievement. Chauhan, NS (1977) revealed through his study that introversion trait of personality promotes originality. Jain, R (1977) observed that originality promotes the teaching proficiency. Muddu, V (1982) found

intelligence positively and significantly related to originality. Kundu, Dibakar (1987) found in his study that subjects higher on ego-strength have higher score on originality. Hussain, S & Kumar, A (1991) concluded that handicapped group is significantly superior in their originality to normal group and also to problem children group. He again concluded that normal group is superior in their originality to problem children group. Puri, Kamlesh (1993) stated through his study that originality is not significantly correlated with achievement motivation but fluency, flexibility & composite creativity are. Padhi, JS (1995) found high originality group significantly superior to low originality group in achievement scores of English, MIL, Mathematics, Science and Social Studies. Singh, SK (2011) found first born significantly higher in their originality to latter born. Nayak, RK and Senapaty, HK (2011) to measure the effect of constructivist approach of learning on creativity test of Fluency, Flexibility and Originality conducted study and found no significant difference in the pre-test mean score of originality along with fluency and flexibility among experimental group and control group. Significant difference between the mean score of experimental group and control group for post-test was found for fluency and flexibility, but not for originality. The study reveals the fact that the constructivist approach has significant effect in enhancing fluency and flexibility, but has no significant effect in enhancing the originality.

Awasthy, M (1979) ; Dharmangadan, B (1981); Jayaswal, VK (1977); Raina MK (1970); Raina, MK (1971); Bolen and Torrance (1978); Reddy (1990); Agarwal & Agarwal (1999); Singh, H (2004); Singh, S.K. (2011) and Verma, Kavita (2012) found in their studies that male students/ teachers significantly superior in their originality (Verbal & in some cases in non-verbal) to their counterparts. Jarial, GS & Sharma , AK (1981); Pandit, R (1976); Singh, R (1975) and Singh, RP (1978) found female group superior in their originality to male group. Chadha, NK & Sen, AK (1981); Gakhar, S (1974); Sharma, OP (1994); Kumar, L (1994) and Kumar, L & Alam, E (1914) found no significant difference in the originality of male and female students.

Gupta, AK (1978) found private school students significantly higher than the students of government schools in verbal & non- verbal originality. Kumar, Lalit (1994) and Kumar, L & Alam E (2014) found in the same way. Yadav, Meenu (1914) found government school students higher on mean creativity score in comparison to non- government school students. Kumar, Lalit (1994) found non- tribal group significantly superior to tribal group in their originality. Verma, Kavita (2012) also found in the same way. Kumar, L & Alam, E (2014) found Urban students significantly superior in their originality to Rural students like Verma , Kavita (2012) & Dharmangadan, B (1981). Above discussed studies and few other studies provided the researchers to undertake this study on originality with respect to the chosen variables like Sex, Types of Institutions, Ethnicity and Locale. The statement of the problem undertaken is "A Study of Originality among Secondary School Students in Relation to Locale, Ethnicity, Types of Institutions and sex".

### Objectives of the Study

- (O<sub>1</sub>) To Identify Originality of Secondary School Students
- (O<sub>2</sub>) To Compare the Originality of Urban and Rural Secondary School Students

- (O<sub>3</sub>) To Compare the Originality of Non-tribal and Tribal Secondary School Students
- (O<sub>4</sub>) To compare the originality of Government and Private Secondary School students
- (O<sub>5</sub>) To Compare the Originality of Female and Male Secondary School Students

### **Hypotheses of the Study**

- (H<sub>1</sub>) There is no significant difference between the originality of urban and rural secondary school students.
- (H<sub>2</sub>) There is no significant difference between the originality of non-tribal and tribal secondary school students.
- (h<sub>3</sub>) There is no significant difference between the originality of government and private secondary school students.
- (h<sub>4</sub>) There is no significant difference between the originality of female and male secondary school students.

### **Methodology**

Descriptive Survey Method has been employed in the study.

### **Sample**

By using Stratified Random Sampling Technique, 600 (Six Hundred) Secondary School Students were selected as sample.

### **Tool Used**

Verbal Test of Creativity developed and standardized by Baquer Mehdi was applied to find the originality (one of the dimensions of creativity) score of creativity.

### **Statistical Treatment of the Collected Data**

Raw scores were converted into T- Score to normalize the data. Converted scores (into T- Score) were used for analysis of the data. Analysis of data was done by using Mean, Standard Deviation and t- value.

### **Definitions of the Terms used in the Study**

- (a) Originality : Originality is one of the dimension of creativity and in one sense originality is the real creativity. In the present study responses given by less than or equal to 5% of the students have been treated as the originality score. In fact, originality is represented by uncommonness of given response. When out of 100 students only 5 students generated the same response each students were given 01. If only four students generated the

same peculiar response each were given 02 marks, for 3 students 03 marks were given to each, for 2 students 4 marks were given to each and for 1 student the marks given to the student was 5. Every peculiar response at every answer against every item and task were scored for originality. Sum of marks obtained on every peculiar response against all the attempted answer were treated as the originality score of an individual student. Obtained scores of the students were converted into T- Score before the final treatment of the originality score. It is evident, from the above discussion, that very few students will gain marks for originality and in this sence it is being treated as the real creativity.

- (b) (i) High Originality : 20% higher students on originality score are treated as High Originality group (20% of 300 =60)
- (ii) Low Originality : 20% lower students on originality score are treated as Low Originality group (20% of 300= 20).
- (iii) Total originality : Originality score of all the students of the group & its opposite group chosen by the stratified random sampling technique (Male- Female, Private-Government, Non- tribal- Tribal and Urban- Rural = 300-300) i.e, 300 each for both the groups to be compared.
- (c) Locale : Urban and Rural Secondary School students have been identified as two groups of Locale.
- (d) Ethnicity : Tribal and Non-tribal Secondary Students have been taken as two Ethnic groups.
- (e) Types of Institutions : State government schools and private schools (Secondary level) have been taken as two groups under types of institutions.
- (f) Sex : Female and Male Students of secondary schools have been identified as two groups to study the effect of Sex.

### Statistical Treatment

Obtained Originality raw score was converted into T- score to normalize the data and T- score was used to analyze the data. Mean, SD and t- value were calculated for the analysis of the data.

The following table shows that the obtained t- value between Urban and Rural students on originality is 7.62, which is significant at 0.01 level of significance (df = 598). Urban student is higher on mean value ( $M_1 = 52.97$ ) in comparison to rural student ( $M_2 = 47.03$ ).

**Table-1****Mean, SD and t- value between Originality of Urban and Rural School Students**

Groups	Category	Mean	SD	N	t-value	Level of significance
Originality	Urban	52.97	11.24	300	7.62	0.01
	Rural	47.03	7.46	300		
High Originality	Urban	71.00	11.34	60	7.08	0.01
	Rural	58.00	8.17	60		
Low Originality	Urban	41.53	1.47	60	7.89	0.01
	Rural	39.63	1.16	60		

Table-1 further reveals that the obtained t- values between Urban and Rural students for high originality group and low originality group are 7.08 and 7.89 respectively. All these values are significant at 0.01 level of significance (df=118). For both the high and the low groups urban student is higher on mean values ( $MH_1=71.00$ ,  $ML_1 = 41.53$ ) in comparison to rural student ( $MH_2 = 58.00$ ,  $ML_2 = 39.63$ ).

It indicates that Urban student is significantly superior in their originality in comparison to Rural student for all the three groups (Total, High and Low).

**Table-2****Mean, SD and t- value between Originality of Tribal and Non- Tribal School Students**

Groups	Category	Mean	SD	N	t- value	Level of significance
Originality	Non-Tribal	55.22	9.96	300	5.68	0.01
	Tribal	48.21	10.62	300		
High Originality	Non- Tribal	67.20	10.75	60	1.60	NS
	Tribal	63.55	13.97	60		
Low Originality	Non-Tribal	42.24	1.79	60	9.22	0.01
	Tribal	39.47	1.50	60		

Table- 2 reveals that the obtained t- value between Non-tribal and Tribal students on originality is 5.68, which is significant at 0.01 level of significance (df = 598). Non- tribal students is higher on mean value ( $M_1 =55.22$ ) in comparison to tribal student ( $M_2 = 48.21$ ).

Table-2 further reveals that the obtained t- values between Tribal and Non-tribal students for high originality group and low originality group are 1.60 and 9.22 respectively. t- value for low

originality group is significant at 0.01 level of significance (df =118). Non-tribal student is higher on mean value ( $M_1=42.24$ ) in comparison to tribal student ( $M_2 =39.47$ ).

It indicates that Non-tribal student is significantly superior in their originality in comparison to Tribal students for Total and Low group, but not for the High group.

**Table-3**

**Mean, SD and t- value between Originality of Government and Private School Students**

Groups	Category	Mean	SD	N	t- value	Level of significance
Originality	Government	53.41	10.93	300	8.90	0.01
	Private	46.59	7.55	300		
High Originality	Government	70.17	11.49	60	6.67	0.01
	Private	57.71	8.78	60		
Low Originality	Government	42.07	1.91	60	8.26	0.01
	Private	39.67	1.19	60		

Table- 3 reveals that the obtained t- value between Government and Private students is 8.90, which is significant at 0.01 level of significance (df= 598). Government student is higher on mean value ( $M_1= 53.41$ ) in comparison to private student ( $M_2=46.59$ ).

Table – 3 further reveals that the obtained t- values between Government and Private students for high originality group and low originality group are 6.67 and 8.26 respectively. All these values are significant at 0.01 level of significance (df-118). For both the high and the low groups Government student is higher on mean value ( $MH_1= 70.17, ML_1=42.07$ ) in comparison to Private student ( $MH_2=57.71, ML_2 =39.67$ ).

It indicates that Government student is significantly superior in comparison to Private student for all the three groups (Total, High and Low).

The following Table-4 reveals that the obtained t- value between Female and Male students on originality is 4.48, which is significant at 0.01 level of significance (df = 598). Female student is higher on mean value ( $M_1=51.80$ ) in comparison to Male student ( $M_2= 48.20$ ).

Table- 4 further reveals that the obtained t- value between Female and Male students for high originality group and low originality group are 5.45 and 5.50 respectively. All these values are significant at 0.01 level of significance (df=118). For both the high and the low groups female student is higher on mean value ( $MH_1 = 69.81, ML_1 = 41.00$ ) in comparison to male student ( $MH_2=59.75, ML_2 =39.80$ )



**Table-4**

**Mean, SD and t- value between Originality of Male and Female Students**

Groups	Category	Mean	SD	N	t- value	Level of significance
Originality	Female	51.80	11.38	300	4.48	0.01
	Male	48.20	7.99	300		
High Originality	Female	69.81	11.65	60	5.45	0.01
	Male	59.75	8.27	60		
Low Originality	Female	41.00	1.13	60	5.50	0.01
	Male	39.80	1.25	60		

It indicates that Female student is significantly superior in their originality in comparison to Male student for all the three groups (Total, High and Low).

### Findings of the study

- (i) For all the three groups —High, Low and Total, Urban students were found significantly superior in their originality in comparison to Rural students.
- (ii) For two groups — Low and Total, Non- tribal students were found significantly superior in their originality in comparison to Tribal students.
- (iii) For all the three groups— High, Low and Total, Government school students were found significantly superior in their originality in comparison to Private school students.
- (iv) For all the three groups— High, Low and Total, Female students were found significantly superior in their originality in comparison to Male students.

### General Conclusions

- 1. Urban students group is significantly superior in their Originality to Rural students group.
- 2. Non-tribal students group is significantly superior in their Originality to Tribal students group.
- 3. Government school students group is significantly superior in their Originality to Private school students group.
- 4. Female students group is significantly superior in their Originality to Male students group.

### Educational Implications

As know to us originality is the central element in divergent thinking or creativity. A good number of research findings suggest that students of one group is superior to another in fluency and flexibility (dimensions of creativity), but not in originality. This study is limited to

originality dimension only as in the present paper fluency and flexibility dimensions of divergent thinking have not been taken into account. The findings of the study reveal that in the study one group is significantly superior to another across all the three groups (High, Low and Total). Review of the study indicates that findings of the study is in accordance with the findings, of some studies, in the same time the study does not support the findings of some other studies. This state of contradiction suggests to undertake some other works on large sample to go near the generalization. The study also suggests to search the answer of the questions why Urban, Non-tribal, Government and Female students are superior to Rural, Tribal, Private and Male students respectively in their originality. Implication of the findings of the study by all practitioner groups of education, search for answers of generated questions through findings of the study and try to go near to general conclusions (to answer which group is superior in all situations, if possible) on the basis of a group of studies on large samples are the real implications of the study.

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