

A Comparative Study of Creativity and Academic Achievement of Secondary School Students

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Keywords - Creativity, academic achievement and secondary students etc.

Abstract

This study examined the academic achievement of senior secondary school students in relation to their creativity. The study adopted a descriptive survey method of research. Participants were 60 senior secondary school students randomly selected from four schools in Ratlam district of Madhya Pradesh state (35 boys & 25 girls) belongs from urban and rural areas. For the study, the students from XI, and XII standards were selected.Creativity Scale constructed and standardized by Anbumuthu, K. and Annadurai, R (2016).Academic achievement was assessed by the total marks of students in their Matriculation Examination.There is a no significant difference in academic achievement of male and female senior secondary school students in relation to their Creativity. There is a significant difference in academic achievement of Hindu and Muslim senior secondary school students.It was found that there is significant positive relationship between creativity and academic achievement.

Introduction

Every day, we face new changes in all aspects of life and creativity is not only ameans for adapting with changes but also a stimulus for producing knowledge indifferent fields of study. Moreover, creativity as one of the key factors in academicachievement is required especial attention. But the contradiction in the results of the researches pertaining to the more influential type of creativity in academicachievement necessitates researchers and experts to focus more accurately oncognitive and trait creativity and their impacts on academic achievement.

Creativity is viewed in terms of problem solving behaviour.Creativity is that characteristic of human behaviour that seems to be themost mysterious and yet most critical to human advancement. It is the capacity to solve problems in a new ways and to produce works that are novel, appropriate and socially valued.

Sternberg & Lubart (1996) describes creativity as the confluence of intellectual activity, knowledge, motivation, thinking style, personality and environment.

Akinboye (2003) without creativity a person is not able to access the fullness of information and resources available but is locked in old habits, structures, patterns, concepts and perceptions.

The achievement of the students is seen by the scores that student gain in their academic work. from the academic achievement the student come to know about themselves that where they stand in their studies. Higher the achievement more is the openings of students for better job in all fields. The average students in the class are always doing their work with stress and don't take interest in the studies. This effects on the academic achievement of the students and the students show average or poor result in academic performance.

Academic achievement is the core of the wider term i.e. educational growth. The importance of academicachievement in one's life cannot be over emphasized. Life in generaland for a student in particular has become highly competitive in currentscenario. In this context, parents, teachers and all in surrounding alwaysensure child's by providing conducive environment in terms of bestschool, favourable learning environment at home, for good academicachievement, But efforts made by parents,

teachers and others cannotbe always influencing factor for determining of academic achievementamong children either due individual differences in children or anyfactor.

Review of Literature

Chauhan (2014) Several scientific investigations have reported a significant relationship between creativity and academic achievement .On the basis of this, it may be suggested that divergent thinking in the form of fluency, flexibility and originality might contribute and interact with convergent thinking in understanding academic achievement.

Satish kumar (2011) carried out a study on Mental Health and school satisfaction of Truant and Non-Truant Secondary students. Findings showed that there was no significant difference in the mental health of Truants of rural and Urban areas; further the same was with Non-Truants but in the case of school satisfaction there was a significant difference between Truant and Non –Truant students. But there was no significant difference in school satisfaction of Truants depending upon their locale.

Singh (2010) Studied mental health in relation to spiritual intelligence, altruism, school environment and academic achievement of senior secondary students and found that male students had significantly higher level of academic achievement than female students; students residing in urban area had significantly higher academic achievement than students residing in rural area; academic achievement of students studying in aided schools was significantly higher than students studying in government schools; academic achievement of students studying in government school; academic achievement of students studying in aided schools was significantly higher than students studying in unaided schools was significantly higher than students studying in unaided schools was significantly higher than students studying in unaided schools was significantly higher than students studying in unaided schools.

Chauhdary, V. (2008) studied to find out the correlation between academic achievement and creativity of the creative and non-creative students. The results shows that the value of the correlation coefficient for the two variables as creativity and academic achievement among creative students was found to be 0.234 and among non-creative students 0.14 respectively. A significant correlation was found between these two variables of creative students. It reveals that creative students who scored higher of creativity measures, would also score higher on academic achievement and vice versa. On the other hand no significant correlation was found between those two variables among the non-creative students. It is concluded that the relationship between creativity and academic achievement is positive and significant in case of higher achievers orcreative students but negligible in case of non-creative.

Objectives of the Study

- 1. To measure the creativity among the secondarystudents.
- 2. To measure the academic achievement among the secondary students.
- 3. To find out the relationship between creativity and academicachievement among the secondary students.

Hypotheses of the Study

- **H01:** There exists no significant difference in creativity of secondaryschool students with respect to gender.
- **H02:** There exists no significant difference in creativity of secondaryschool students with respect to domicile.
- **H03:** There exists no significant difference in creativity of secondary students with respect to, religion.
- **H04:** There exists no significant difference in creativity of secondary students with respect to, food habit.
- **H05:** There exists no significant difference in creativity of secondary school students with respect to, family type.
- **H06:** There exists no significant difference in creativity of secondary school students with respect to, major subject.
- **H07:** There exists no significant difference in creativity of secondary school students with respect to, medium of study.
- **H08:** There exists no significant difference in academic achievement of secondary school students with respect to gender.
- **H09:** There exists no significant difference in academic achievement of secondary school students with respect to domicile.
- **H010:** There exists no significant difference in academic achievement of secondary school students with respect to, religion.

- **H011:** There exists no significant difference in academic achievement of secondary school students with respect to, food habit.
- **H012:** There exists no significant difference in academic achievement of secondary school students with respect to, family type.
- **H013:** There exists no significant difference in academic achievement of secondary school students with respect to, major subject.
- **H014:** There exists no significant difference in academic achievement of secondary school students with respect to, medium of study.
- **H015:** There exists no significant correlation between creativity and academic achievement of secondary school students.

Methodlogy

The study carries Descriptive Research Design. The present research is characterized by the prior formulation of specific research questions and hypotheses. In this study examined the academic achievement of senior secondary school students in relation to their creativity. Primary data were collected through a well-structured qualitative questionnaire, Creativity Scale and Academic achievement was assessed by the total marks of students in their Matriculation Examination from the selected secondary school students.

Sample and Sample Size

A stratified representative sample of 60 secondary students constituted from04 secondary schools in Ratlam districts with due representation given to variables, viz. gender, domicile, religion, food habit, marital status, family type, educational qualifications and medium of study.

Statistical Tool

The following tools were used in the present study: -

1. General Information sheet structured by the investigator.

2. Creativity Scale constructed and standardized by Anbumuthu, K. and Annadurai, R(2016).

3. Academic achievement was assessed by the total marks of students in their Matriculation Examination.

Variables of the Study

Dependent Variables

- 1. Creativity
- (i). Openness
- (ii). Perseverance
- (iii). Divergent thinking
- (iv). Intuition
- (v). Curious
- (vi).Assertiveness
- (vii). Constructiveness
- (viii). Speculation
- (ix). In-toto
- 2. Academic Achievement

Independent Variables

- 1. Gender: Male/Female
- 2. Domicile: Rural/Urban
- 3. Religion: Hindu/Muslim
- 4. Food Habit: Vegetarian / Non-vegetarian
- 5. Family type: Joint family/Nuclear family
- 6. Major subject:Commerce/ Science / Others
- 7. Medium of Study: Hindi / English

Analysis and Interpretation

<u>Table No. 01</u>

| | GENDER | R | | | | |
|--------------------|---------|-------|--------|------|----------|----------|
| VARIABLE | | | | | | |
| | MALE (N | J=35) | FEMALE | | | |
| | | | (N=25) | | t- value | p- value |
| | MEAN | S.D. | MEAN | S.D. | | |
| Openness | 21.30 | 1.88 | 22.79 | 2.15 | 2.8505 | 0.0060 |
| Perseverance | 19.11 | 1.65 | 20.32 | 1.08 | 3.2050 | 0.0022 |
| Divergent thinking | 22.08 | 2.83 | 19.44 | 3.17 | 3.3883 | 0.0013 |
| Intuition | 18.74 | 2.96 | 19.02 | 3.05 | 0.3567 | 0.7226 |
| Curious | 21.75 | 1.24 | 20.08 | 1.49 | 4.7272 | 0.0001 |
| Assertiveness | 23.65 | 2.40 | 22.98 | 2.50 | 1.0478 | 0.2991 |
| Constructiveness | 18.22 | 2.52 | 16.54 | 2.61 | 2.5084 | 0.0149 |
| Speculation | 20.43 | 2.38 | 20.12 | 3.45 | 0.4123 | 0.6817 |
| In- toto | 23.52 | 3.45 | 25.78 | 3.84 | 2.3864 | 0.0203 |

Significance Difference between the Mean Scores of Creativity: Gender-Wise

The t' tests indicate that there is no significant difference between Maleand Female secondary school students in each of the three dimensions viz. Intuition, Assertiveness and Speculation of Creativity.But it is observed that there is a significant difference between Male and Female students in Openness, Perseverance, Divergent thinking, Curious, Constructiveness dimensions as well as in-toto of Creativity.

Table No. 02

Significance Difference between the Mean Scores of Creativity: Domicile-Wise

| | DOMICI | LE | | | | |
|--------------------|---------|-------|--------------|------|----------|----------|
| VARIABLE | RURAL (| N=20) | URBAN (N=40) | | | |
| | MEAN | S.D. | MEAN | S.D. | t- value | p- value |
| Openness | 14.32 | 1.43 | 14.88 | 1.78 | 1.2219 | 0.2267 |
| Perseverance | 16.43 | 2.87 | 14.71 | 1.36 | 3.1633 | 0.0025 |
| Divergent thinking | 15.25 | 1.40 | 18.02 | 2.52 | 4.5637 | 0.0001 |
| Intuition | 18.94 | 3.82 | 18.46 | 3.98 | 0.4462 | 0.6571 |
| Curious | 17.45 | 2.29 | 17.11 | 2.65 | 0.4892 | 0.6265 |
| Assertiveness | 21.14 | 1.66 | 20.89 | 1.81 | 0.5180 | 0.6064 |
| Constructiveness | 20.54 | 3.08 | 17.88 | 3.42 | 2.9322 | 0.0048 |
| Speculation | 18.65 | 2.49 | 21.18 | 2.71 | 3.4994 | 0.0009 |
| In- toto | 23.51 | 1.96 | 22.79 | 1.69 | 1.4746 | 0.1457 |

The t' tests indicate that there is no significant difference between ruraland urban secondary school students in each of the four dimensions viz. Openness, Intuition, Curious, Assertiveness as well as In-toto of Creativity.

But it is observed that there is a significant difference between rural andurban secondary school students in each of the four dimensions viz. Perseverance,Divergent thinking, Constructiveness and Speculation of Creativity.

| Muslim)-Wise | | | | | | | | | | |
|--------------------|---------|-------|--------|----------|----------|----------|--|--|--|--|
| | RELIGIO | N | | | | | | | | |
| VARIABLE | | | | | | | | | | |
| | HINDU (| N=45) | MUSLIN | 4 (N=15) | | | | | | |
| | | | | | t- value | p- value | | | | |
| | MEAN | S.D. | MEAN | S.D. | | _ | | | | |
| Openness | 23.12 | 1.12 | 23.34 | 1.47 | 0.6079 | 0.5456 | | | | |
| Perseverance | 18.65 | 1.19 | 18.09 | 1.05 | 1.6224 | 0.1102 | | | | |
| Divergent thinking | 27.55 | 2.45 | 28.04 | 2.56 | 0.6635 | 0.5096 | | | | |
| Intuition | 24.18 | 2.85 | 23.87 | 2.70 | 0.3694 | 0.7132 | | | | |
| Curious | 22.77 | 3.33 | 22.11 | 3.62 | 0.6507 | 0.5178 | | | | |
| Assertiveness | 25.43 | 1.86 | 26.01 | 1.95 | 1.0336 | 0.3056 | | | | |
| Constructiveness | 21.49 | 1.59 | 20.85 | 1.55 | 1.3582 | 0.1796 | | | | |
| Speculation | 26.22 | 2.66 | 25.70 | 2.93 | 0.6394 | 0.5251 | | | | |
| In- toto | 29.76 | 3.72 | 29.13 | 3.89 | 0.5617 | 0.5765 | | | | |

Table No. 03 Significance Difference between the Mean Scores of Creativity: Religion (Hindu Vs Muslim)-Wise

The tests indicate that there is no significant difference between Hinduand Muslim students in each of the eight dimensions viz. Openness, Perseverance, Divergent thinking, Intuition, Curious, Assertiveness, Constructiveness, Speculation as well as In-toto of Creativity.

| Significance Differer | a hotwoo | $\frac{1}{1}$ | oan Score | of Croa | tivity: Food | Habit Wice |
|-----------------------|-----------------|---------------|-------------|----------|--------------|------------|
| Significance Differen | ice betwee | | eall Scoles | o o Clea | livity: Food | nabit-wise |
| | FOOD H | ABIT | | | | |
| VARIABLE | | | | | | |
| | VEGETARIAN NON- | | | | | |
| | (N=30) | VEGETARIAN | | t- value | p- value | |
| | , , | | (N=30) | | | - |
| | MEAN | S.D. | MEAN | S.D. | | |
| Openness | 24.32 | 2.96 | 23.62 | 3.13 | 0.8900 | 0.3771 |
| Perseverance | 17.64 | 3.28 | 17.07 | 2.94 | 0.7088 | 0.4813 |
| Divergent thinking | 19.68 | 2.44 | 20.28 | 2.68 | 0.9067 | 0.3683 |
| Intuition | 20.21 | 1.44 | 19.82 | 1.21 | 1.1357 | 0.2608 |
| Curious | 18.88 | 2.95 | 19.30 | 3.01 | 0.5458 | 0.5873 |
| Assertiveness | 23.59 | 1.53 | 23.96 | 1.63 | 0.9065 | 0.3684 |
| Constructiveness | 21.67 | 2.62 | 22.32 | 2.39 | 1.0039 | 0.3196 |
| Speculation | 19.34 | 3.04 | 18.87 | 3.08 | 0.5949 | 0.5543 |
| In- toto | 32.67 | 3.48 | 32.11 | 3.92 | 0.5851 | 0.5607 |

Table No. 04

The t' tests indicate that there is no significant difference betweenVegetarian and Nonvegetarian students in each of the eight dimensions viz.Openness, Perseverance, Divergent thinking, Intuition, Curious, Assertiveness, Constructiveness, Speculation as well as In-toto of Creativity.

Table No. 05

| | FAMILY | TYPE | | | | |
|--------------------|---------|------|----------|-------|----------|----------|
| VARIABLE | | | | | | |
| | NUCLEAR | | JOINT (N | V=10) | | |
| | (N=50) | | | | t- value | p- value |
| | MEAN | S.D. | MEAN | S.D. | | |
| Openness | 12.83 | 1,67 | 10.12 | 1.05 | 4.9210 | 0.0001 |
| Perseverance | 16.18 | 1,85 | 15.68 | 1.38 | 0.8085 | 0.4221 |
| Divergent thinking | 19.23 | 1.42 | 18.81 | 1.06 | 0.8848 | 0.3799 |
| Intuition | 11.42 | 1,81 | 14.10 | 2.24 | 4.1082 | 0.0001 |
| Curious | 12.35 | 2.16 | 13.04 | 1.98 | 0.9338 | 0.3543 |
| Assertiveness | 18.66 | 2.51 | 14.78 | 3.21 | 4.2574 | 0.0001 |
| Constructiveness | 21.49 | 2.33 | 21.97 | 2.52 | 0.5870 | 0.5595 |
| Speculation | 15.55 | 1.70 | 13.22 | 1.01 | 4.1715 | 0.0001 |
| In- toto | 28.13 | 1.86 | 25.72 | 1.12 | 3.9403 | 0.0002 |

Significance Difference between the Mean Scores of Creativity: Family Type-Wise

The t'tests indicate that there is no significant difference between Nuclearand Jointfamily students in each of the four dimensions viz. Perseverance, Divergent thinking, Curious and Constructiveness of Creativity.

But it is observed that there is a significant difference between Nuclearand Jointfamily students in each of the four dimensions viz. Openness, Intuition, Assertiveness, Speculation as well as In-toto of Creativity.

Table No. 06

Significance Difference between the Mean Scores of Creativity: Major Subject (Commerce and Science)-Wise

| VARIABLE | MAJOR SU | JBJECT | | | | |
|--------------|----------|--------|--------|------|----------|----------|
| | COMMER | ECE | SCIENC | E | | |
| | (N=30) | | (N=30) | | t- value | p- value |
| | MEAN | S.D. | MEAN | S.D. | | |
| Openness | 18.87 | 2.26 | 16.22 | 2.61 | 4.2041 | 0.0001 |
| Perseverance | 19.05 | 2.39 | 18.68 | 2.17 | 0.6278 | 0.5326 |

| Divergent thinking | 23.31 | 3.17 | 22.78 | 3.01 | 0.6641 | 0.5093 |
|--------------------|-------|------|-------|------|--------|--------|
| Intuition | 22.18 | 1.80 | 21.60 | 1.60 | 1.3191 | 0.1923 |
| Curious | 27.42 | 1.26 | 27.07 | 1.22 | 1.0930 | 0.2789 |
| Assertiveness | 25.11 | 3.64 | 24.93 | 2.96 | 0.2101 | 0.8343 |
| Constructiveness | 17.81 | 2.91 | 18.25 | 3.08 | 0.5688 | 0.5717 |
| Speculation | 16.28 | 1.77 | 16.72 | 1.85 | 0.9413 | 0.3505 |
| In- toto | 29.31 | 3.43 | 29.11 | 2.90 | 0.2439 | 0.8082 |

The t tests indicate that there is no significant difference between commerceandScience students in each of the seven dimensions viz. Perseverance, Divergentthinking, Intuition, Curious, Assertiveness, Constructiveness, and Speculation as wellas In-toto of Creativity.

But it is observed that there is a significant difference between commerceandScience students in Openness dimension of Creativity.

Table No. 07

Significance Difference between the Mean Scores of Creativity: Medium of Study -Wise

| | MEDIUN | A OF STU | | | | |
|--------------------|----------|--------------|-------|------|----------|----------|
| VARIABLE | | | | | | |
| | HINDI (I | HINDI (N=45) | | Н | | |
| | | | | | t- value | p- value |
| | MEAN | S.D. | MEAN | S.D. | | |
| Openness | 15.63 | 1.38 | 16.04 | 1.02 | 1.0560 | 0.2953 |
| Perseverance | 17.28 | 1.56 | 15.32 | 1.09 | 4.5013 | 0.0001 |
| Divergent thinking | 14.44 | 1.42 | 12.12 | 1.01 | 5.8392 | 0.0001 |
| Intuition | 13.16 | 2.11 | 13.89 | 2.49 | 1.1091 | 0.2720 |
| Curious | 17.06 | 2.77 | 17.40 | 2.91 | 0.4066 | 0.6858 |
| Assertiveness | 19.35 | 2.50 | 16.86 | 1.51 | 3.6306 | 0.0006 |
| Constructiveness | 16.87 | 1.88 | 17.16 | 2.01 | 0.5087 | 0.6129 |
| Speculation | 17.79 | 1.99 | 18.05 | 1.45 | 0.4654 | 0.6434 |
| In- toto | 22.43 | 2.91 | 19.66 | 1.75 | 3.4714 | 0.0010 |

The t tests indicate that there is no significant difference between Hindiand English medium students in each of the five dimensions viz. Openness, Intuition, Curious, Constructiveness, and Speculation of Creativity.

But it is observed that there is a significant difference between HindiandEnglish medium students in each of the three dimensions viz. Perseverance, Divergent thinking, Assertiveness as well as In-toto of Creativity.

Table No. 08

Significance Difference between the Mean Scores of Academic Achievement: Gender-Wise

| VARIABLE | SUB VAR | IABLES | t- value | p- value | | |
|----------|---------|--------|----------|----------|--------|--------|
| | MALE (N | 1=35) | FEMALE | E (N=25) | | |
| | Mean | S.D. | Mean | S.D. | | |
| GENDER | 28.49 | 2.33 | 27.98 | 2.82 | 0.7655 | 0.4471 |

The calculated t value is less than the table value at 0.05level of significance (p>0.05). This shows that there is no significant difference betweenMale and Female students in the possession of Academic Achievement. It can be inferred from the above finding that the Gender does notinfluence on secondary school students' academic achievement.

Table No. 09

Significance Difference between the Mean Scores of Academic Achievement: Domicile-Wise

| VARIABLE | SUB VAR | IABLES | t- value | p- value | | |
|----------|-----------|--------|----------|----------|--------|--------|
| | Rural (N= | =20) | Urban (N | =40) | | 1 |
| | Mean | S.D. | Mean | S.D. | | |
| DOMICILE | 18.41 | 3.22 | 18.83 | 2.71 | 0.5312 | 0.5973 |

The calculated t value is lower than the table value) at 0.05 levelof significance (p>0.05). This shows that there is no significant difference between Ruraland Urban students in the possession of Academic Achievement.

It can be inferred from the above finding that domicile does not influencedon secondary school students academic achievement.

<u>Table No. 10</u> Significance Difference between the Mean Scores of Academic Achievement: Religion (Hindu V/S Muslim) - Wise

| | SUB VAR | IABLES | | | | |
|----------|-----------------|--------|--------|------|----------|----------|
| VARIABLE | HINDU (N=45) | | MUSLIM | | t- value | p- value |
| | | | (N=15) | | | |
| RELIGION | Mean | S.D. | Mean | S.D. | 2.8997 | 0.0053 |
| | 27.19 | 2.66 | 25.04 | 1.84 | | |

The calculated t value is higher than the table value at 0.05level of significance (p<0.05). This shows that there is a significant difference betweenHindu and Muslim secondary school students and in the possession of AcademicAchievement.

It can be inferred from the above finding that Hindu students possessmore academic achievement than Muslim secondary school students.

Table No. 11

Significance difference between the Mean Scores of Academic Achievement: Food Habit –Wise

| | SUB VAR | IABLES | | | | |
|------------|----------------------|--------|------------------------------|------|----------|----------|
| VARIABLE | VEGETARIAN (N=30) | | NON- VEGETARIAN (N=30) | | t- value | p- value |
| FOOD HABIT | Mean | S.D. | Mean | S.D. | 0.3107 | 0.7571 |
| | 23.38 | 1.94 | 23.51 | 1.22 | | |

The calculated t value is lower than the table value at 0.05level of significance (p>0.05). This shows that there is no significant difference betweensecondary school students who are vegetarian and non-vegetarian in possession of Academic Achievement.

It can be inferred from the above finding food habit does not influence onSecondary school students 'academic achievement.

Table No. 12

Significance Difference between the Mean Scores of Academic Achievement: Family Type –Wise

| | SUB VARIABLES | | | | | |
|-------------|-------------------|------|----------|-------|----------|----------|
| VARIABLE | NUCLEAI (N=50) | R | JOINT (1 | N=10) | t- value | p- value |
| FAMILY TYPE | Mean | S.D. | Mean | S.D. | 3.5128 | 0,0009 |
| | 19.59 | 1.86 | 17.24 | 2.28 | | |

The calculated t value is higher than the table value at 0.05 level of significance (p<0.05). This shows that there is a significant difference between secondary school students who belonging to joint families and nuclear families in possession of Academic Achievement.

It can be inferred from the above finding that secondary school students who belonging to nuclear families possess more academic achievement than the secondary school studentswho belonging to joint families.

Table No. 13

| | SUB VARIABLES | | | | | |
|---------------|---------------------|------|-------------------|------|----------|----------|
| VARIABLE | COMMERECE (N=30) | | SCIENCE (N=30) | | t- value | p- value |
| | Mean | S.D. | Mean | S.D. | | |
| MAJOR SUBJECT | 19.85 | 2.89 | 22.46 | 2.02 | 4.0544 | 0.0002 |

Significance difference between the Mean Scores of Academic Achievement: Major Subject (Arts Vs Science) -Wise

The calculated t value is higher than the table value at 0.05 level of significance (p<0.05). This shows that there is a significant difference between secondary school students who are belonging to arts and science subjects in possession of Academic Achievement.

It can be inferred from the above finding Science subjects secondary school studentspossess more academic achievement than Commerce subject secondary school students.

Table No. 14

Significance difference between the Mean Scores of Academic Achievement: Medium of Study-Wise

| | SUB VARIABLES | | | | | |
|-----------|---------------|------|---------|----------|----------|-------|
| | | | | t- value | p- value | |
| VARIABL | HINDI | | ENGLISH | | | |
| Е | (N=45) | | (N=15) | | | |
| MEDIUM OF | Mean | S.D. | Mean | S.D. | | |
| STUDY | 26.31 | 2.64 | 25.89 | 3.17 | 0.5072 | 26.31 |

The calculated t value is lower than the table value at 0.05level of significance (p>0.05). This shows that there is no significant difference betweenHindi and English medium students in the possession of Academic Achievement.

It can be inferred from the above finding medium of study does notinfluence on secondary school students 'academic achievement.

Relationship between Creativity and Academic achievement

Table No. 15

Correlation Coefficient between Creativity and Academic Achievement

| DIMENSIONS | ACADEMIC ACHIEVEMENT |
|--------------------|----------------------|
| Openness | 0.877* |
| Perseverance | 0.694* |
| Divergent thinking | 0.597* |
| Intuition | 0.782* |
| Curious | 0.759* |
| Assertiveness | 0.623* |
| Constructiveness | 0.819* |
| Speculation | 0.710* |
| In- toto | 0.503* |

* Significant at 0.05 level

It is evident from table 14 that there is significant positive relationshipamong the each of the eight dimensions and in-toto of creativity and academicachievement of the secondary school. students as indicated below:

- 1. Openness and Academic Achievement (r=0.877)
- 2. Perseverance and Academic Achievement (r=0.694)
- 3. Divergent thinking and Academic Achievement (r=0.597)
- 4. Intuition and Academic Achievement (r=0.782)
- 5. Curious and Academic Achievement (r=0.759)
- 6. Assertiveness and Academic Achievement (r=0.623)

- 7. Constructiveness and Academic Achievement (r=0.819)
- 8. Speculation and Academic Achievement (r=0.710)
- 9. In-toto of creativity and Academic Achievement (r=0.503)

Findings

- 1. Out of five creativity dimensions as well as in-toto, the female group hasmore creativity in openness, perseverance, constructiveness and in-toto, whereas the male group possess more creativity in divergent thinkingand intuition. It is important to cultivate creativity among all the secondary school students in order to develop their teaching activities interestingly in future.
- 2. Regarding the domicile of secondary school students, the study has revealed that outof four creativity dimensions, rural students has more creativitybehaviours in divergent thinking and speculation and urban studentspossess more creativity in perseverance and constructiveness dimensions. Hence appropriate capsule course in creativity related activities should be organized while the secondary students are undergoing their course.
- 3. Family type is an important variable in the study. Joint families'studentshave more creativity habits in openness, assertiveness, speculation andin-toto of creativity where as nuclear family students possess morecreativity in intuition dimension. The authorities of education should bearranged special coaching and camps for developing creativity skillsamong nuclear families 'students.
- 4. Commerce secondary students have more creativity in openness and assertiveness dimensions. It should be kept in mind that, creativity isimportant to all the subject teachers. Due importance should be given to all the subject students and hence complete creativity awarenessOrientation programmes should be arranged.
- 5. Rural secondary students have more creativity in openness, assertiveness where as urban secondarystudents possess more creativity indivergent thinking; mixed college students have more creativity inopenness, assertiveness and in-toto of creativity and unique secondary

Students have more creativity in divergent thinking; General Status secondary students have possessed more creativity in speculation dimension. Encouragement

and motivations on the part of secondarystudents todevelop creativity habits and also awards/rewards should be providedwherever and whenever possible. For this innovative and creativebehaviour should be cultivated among the secondarystudents.

- 6. Hindi medium students possess more creativity than Englishmedium students in perseverance, divergent thinking, assertivenessdimensions and in-toto of creativity. Due importance should be given toEnglish medium students to develop their creativity behaviour.
- 7. Twelve variables out of twenty are found influencing the academicachievement of secondarystudents. These variables which are influencingacademic achievement are more crucial and important among the secondarystudents. The other variables also should be considered for suitabletraining programmes in order to enhance the academic achievementamongsecondary students.

Limitations of the Study

- The present study has involved only twenty independent variables. Butthere may be a large number of other variables which could be related to thecreativity of secondarystudents and their academic achievement. Hence theconsideration of the twenty independent variables alone is a delimitation of the present study.
- 2. This study has categorized creativity into eight dimensions viz. openness, perseverance, divergent thinking, intuition, curious, assertiveness, constructiveness and speculation only. There are other classifications and categories on creativity they were not considered in this study. Hence, this isanother delimitation of the study.
- 3. This study has covered the Ratlam district only. Other districts in Madhya Pradesh were not covered for the study. Hence this is the yet another delimitations of the present study.

Conclusion

- The Creativity among secondary students is found above the average level in each of the eight dimensions, viz. openness, perseverance, divergent thinking, intuition, curious, assertiveness, constructiveness, speculation as well as in-toto.
- 2. Openness dimension of Creativity among secondary students is found more among thefollowing groups:

- Who are female than male
- Who belong to joint families than nuclear families.
- 3. Perseverance dimension of Creativity among secondarystudents is found more among the following groups:
 - Who are female than male
 - Who belong to urban domicile than rural
 - Who belong to Tamil medium students than English medium
- 4. Divergent thinking dimension of Creativity among secondarystudents is foundmore among the following groups:
 - Who are male than female
 - Who belong to rural domicile than urban
 - Who belong to Hindi medium students than English medium
- 5. Intuition dimension of Creativity among secondarystudents is found moreamong the following groups:
 - Who belong to nuclear families than joint families
- 6. Curious dimension of Creativity among secondarystudents isfound more among the following groups:
 - Who are male than female
- 7. Assertiveness dimension of Creativity among secondarystudents is foundmore among the following groups:
 - Who are female than male
 - Who belong to joint families than nuclear families
 - Who belong to Hindi medium students than English medium
- 8. Constructiveness dimension of Creativity among secondarystudents is foundmore among the following groups:
 - Who are female than male
 - Who belong to urban domicile than rural
 - Who are unmarried than married

- 9. Speculation dimension of Creativity among secondarystudents is found moreamong the following groups:
 - Who belong to urban domicile than rural
 - Who belong to joint families than nuclear families
- 10. In-toto of creativity among secondarystudents is found more among thefollowing groups:
 - Who are female than male
 - Who belong to joint families than nuclear families
 - Who belong to Hindi medium students than English medium
- 11. The academic achievement of secondarystudents is above the average level.
- 12. The academic achievement of secondarystudents is found more among thefollowing groups:
 - Who belong to Hindu than Christian students
 - Who belong to nuclear families than joint families
 - Who belong to science subjects than arts subjects
- 13. There is a positive relationship among each of the eight creativity dimensions as well as in-toto.
- 14. There is a positive relationship between each of the eight creativitydimensions as well as in-toto and academic achievement.

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