Chapter V

Main Findings, Conclusions, Discussion of Results, Educational Implications and Suggestions for Further Research
CHAPTER-V
MAIN FINDINGS, CONCLUSIONS, DISCUSSION
OF RESULTS, EDUCATIONAL IMPLICATIONS
AND SUGGESTIONS FOR FURTHER
RESEARCH

In previous chapter analysis and interpretation of the results based on the
data have been presented. This chapter includes findings, results and discussion,
educational implications and suggestions for further research. The present study
intended to see Creative Thinking among Senior Secondary School Students in
relation to Psychological Factors and Organizational Climate. This study has been
conducted on a sample of 300 senior secondary school students selected randomly
from 30 schools of Rohtak District. The main findings of the study are given below:

MAIN FINDINGS

1. A significant negative correlation was found between creativity and anxiety.
The higher the anxiety, the lower the creativity and vice-versa.

2. A significant negative correlation was found among creativity and
personality factors A and B. It means the students who were reserved,
detached, critical, aloof, stiff and less intelligent were found to be less
creative. Further a significant positive correlation was found among
creativity and personality factors C, F, H, I, L M, N, Q1, Q2, Q3, Q4. It can be
concluded that highly creative students were found to have higher ego
strength and dominance. They are happy-go-lucky, venturesome sensitive,
suspicious, Imaginative, socially aware, experimenting, self-sufficient
controlled, and tense. No significant correlation was found between
creativity and personality factors E, G and O.

3. A significant positive correlation was found between creativity and
organizational climate & some of its dimensions viz., disengagement, espirit,
intimacy, production emphasis, humanized thrust, consideration. It means
creativity is positively affected by organizational climate and its dimensions except aloofness and psycho-physical hindrance. These two factors were not significantly related to creativity. Teacher's behaviour affects the creative potential of students. Highly creative students have been found to be disengaged with the task in hand as they have their own independent way of thinking. Creativity is positively affected by the organization where teachers feel that their social needs are being satisfied and they enjoy a sense of accomplishment in their job. They have friendly mutual relations. Principal motivates the staff to move the organization smoothly through his own task-oriented behaviour, he is thrustfully bureaucratic in nature, and task-oriented by providing guidance and secretarial services to achieve common goals.

A significant difference was found between male and female senior secondary school students on fluency as a dimension of creative thinking. Female students were found to possess more fluency as compared to male students.

A significant difference was found between male and female senior secondary school students on flexibility as a dimension of creative thinking. Female students were found to possess more flexibility as compared to male students.

A significant difference was found between male and female senior secondary school students on originality as a dimension of creative thinking. Female students were found to possess more originality than their male counterparts.

A significant difference was found between male and female senior secondary school students on creativity as a whole. Female students were found to be more creative than male students.

No significant difference was found between rural and urban senior secondary school students on fluency as a dimension of creative thinking.

No significant difference was found between rural and urban senior secondary school students on flexibility as a dimension of creative thinking.
10. No significant difference was found between rural and urban senior secondary school students on originality as a dimension of creative thinking.

11. No significant difference was found between rural and urban senior secondary school students on creativity as a whole.

12. Espirit (as a dimension of organizational climate) turned out to be the most important predictor of creativity. Personality Factor C (affected by feelings Vs emotionally stable) turned out to be the second important predictor of creativity. Anxiety turned out to be the third important predictor of creativity. Personality factor Q₄ (Released Vs Tense) turned out to be fourth important predictor of creativity. Humanized-thrust (a dimension of organizational climate) turned out to be the fifth important predictor of creativity. Personality factor Q₃ (undisciplined Vs controlled) turned out to be the sixth important predictor of creativity. Personality factor A (Reserved Vs outgoing) turned out to be the seventh important predictor of creativity. Urban/rural (residential background) turned out to be the eighth important predictor of creativity. Production-emphasis (dimension of organizational climate) turned out to be the last important predictor of creativity.

13. Espirit (a dimension of organizational climate) turned out to be the most important predictor of fluency. Personality factor C (affected by feelings Vs emotionally stable) turned out to be the second important predictor of fluency. Personality factor Q₄ (Relaxed Vs Tense) turned out to be the third important predictor of Fluency. Organizational Climate turned out to be the fourth important predictor of fluency. Production-emphasis (a dimension of organizational climate) turned out to be the fifth important predictor of fluency. Anxiety turned out to be the sixth important predictor of fluency. Personality factor O (Placid Vs apprehensive) turned out to be the seventh important predictor of fluency. Personality factor A (Reserved Vs Out going) turned out to be the eighth important predictor of fluency. Personality factor B (Less intelligent Vs more intelligent) turned out to be the ninth important predictor of fluency. Rural/urban (residential background) turned out to be the
tenth important predictor of fluency. Personality factor Q₃ (undisciplined Vs controlled) turned out to be the least important predictor of fluency.

14. Espirit (a dimension of organizational climate) turned out to be the most important predictor of flexibility. Personality Factor C (affected by feelings Vs emotionally stable) turned out to be the second important predictor of flexibility. Anxiety turned out to be the third important predictor of flexibility. Humanized-thrust (a dimension of organizational climate) turned out to be the fourth important predictor of flexibility. Personality factor Q₄ (Released Vs Tense) turned out to be fifth important predictor of flexibility. Personality factor Q₃ (undisciplined Vs controlled) turned out to be the sixth important predictor of flexibility. Urban/rural (residential background) turned out to be the least important predictor of flexibility.

15. Espirit (a dimension of organizational climate) turned out to be the most important predictor of originality. Anxiety turned to be the second important predictor of originality. Personality factor Q₄ (Relaxed Vs Tense) turned out to be the third important predictor of originality. Personality factor C (affected by feelings Vs emotionally stable) turned out to be the fourth important predictor of originality. Personality factor A (Reserved Vs outgoing) turned out to be the fifth important predictor of originality. Humanized-thrust (a dimension of organizational climate) turned to be the sixth important predictor of originality. Production-emphasis (a dimension of organizational climate) turned out to be the seventh important predictor of originality. Rural/urban (residential background) turned out to the eighth important predictor of originality. Personality factor B (Less intelligent Vs more intelligent) turned out to be the least important predictor of originality.

CONCLUSIONS

On the basis of above findings following conclusions have been drawn by the investigator:

The study shows a significant negative correlation between anxiety and creativity which indicates that the higher the anxiety the lower the creativity and vise-versa. Further it can be concluded that students who scored less on personality
factors A and B were found to be less creative. Students who were reserved, detached, critical, aloof, stiff and less intelligent were found to be less creative. Organizational climate and its dimensions except aloofness and psycho-physical hindrance were found to be positively correlated with creativity. Students possess higher creative thinking abilities in organizational climate where social needs are fulfilled, sense of accomplishment have been enjoyed, friendly mutual relations among teachers have been established and motivation boosts up the morale to achieve common goals.

DISCUSSION OF RESULTS

As evident from the above stated findings, girls have been found to be more creative, more fluent, more flexible and more original than boys. These results of the present investigation are in consonance with the findings of Singh (1978); Mishra K.S. (1982); Raina, M.K. (1986); Richardson (1986) and Stimpson (1986). These studies revealed that girls possess higher level of word fluency, expressive fluency, spontaneous flexibility and originality than boys. Girls excelled boys in overall scientific creativity Boys were observed to be less creative than girls.

This study investigated relationship between creativity and personality factors and found that personality factors C,F,H,I,L,M,N, Q1, Q2, Q3, Q4, were significantly positively related to creativity. Personality factors E,G,O have no relationship with creativity and the two personality factors A and B have negative relation with creativity. The findings of Rama Devi, M and Subrahmanyam (1994) are consistent with these findings. They concluded that creativity and personality factors B, E, F, H and Q4 were positively correlated with each other.

The present study also established significant positive correlation between creativity and organizational climate. This finding is in agreement with the findings of Mishra, K.S. (1982), Dubey Sushma(1986), Rajgopalan, S (1988), Pardhan, C (1991) and Thabor, R (2004) by stating that significant relationship exists between school environment and originality among boys, school education environment was found to have significant positive main effects on creative thinking among students, further it was confirmed by them that high classroom climate was found effective on the high creative level of students, school organizational climate
was found to be significantly affecting the student's score of creativity, a significant difference was found among students belonging to schools with different organizational climates in their creative thinking ability.

**Studies in Contradiction**

One of the findings of the present investigation revealed that female students scored higher on creativity as compared to male students. This finding is in contradiction with finding of Arora G.L. (1978) which states that males and females did not differ significantly on creative thinking. Sex did not contribute significantly to the variance in creativity scores. Sharma, A.K. and Singh, Gurpal & Jarial (1981) also have contradiction with this finding by stating that no significant differences were found by them in the total creativity score of male and female students. This study found significant negative relationship between creativity and anxiety. The study of Badola, S (1991) found positive and significant relationship between high creativity and anxiety in respect of creative students. Sharma, R.V. (1985) investigated and found the same by stating that high creative teachers were found to be significantly more anxiety ridden than the low creative ones. Further this study found positive and significant relationship between creativity and organizational climate. The study of Sharma, K (1982) contradicts this finding by stating that organizational climate of the school was not found to be related to creativity in students.

**EDUCATIONAL IMPLICATIONS**

Creativity is an essential human phenomenon it is important process for the progress and major advance in every field. All the advances are made as a result of new ideas or creative process. The scientific and technological advancement as today is a long journey from stone age to the space age. Creativity is one of the most highly valued qualities of human beings. In the present day we have to deal with day to day problems. Old solutions are not working. To explore creative potential is the necessity of the day.

This study will prove beneficial for teachers, parents school administrators, policy planners, teacher educators, researchers as well as for curriculum developers.
Parents at home and the teachers in classroom situations always have the opportunity for nurturing the creativity in students. They may channelize a child’s creative energy into constructive dimension. They should not block their divergent thinking. But they should act as facilitators for the same. Student’s unusual ideas must be welcomed at home as well as in classrooms, rather their unusual ideas should be kept in record. Teachers and parents should give such type of environment to children so that they can touch the edge of their imagination. Their original responses should be welcomed and they should be encouraged to bring the solutions or ideas which have not been expressed by someone else. Their curiosities should be satisfied. In classrooms students should be free to ask any question from the teacher. Parents should also try to satisfy every unusual query of the child. They should not snub child’s curiosity in the name of discipline. Classroom situations should be made free from rigid plannings. Let the children be free from anxiety and to play with their imaginations. Boys should be encouraged to be divergent in their thinking.

Because man is created by God in his own image there exists some creative attributes in him which enable him to possess the capacity and capability to think and act creatively. Every child is creative to some or the large extent this is evident from the findings of this study. To nurture creativity in students there is a need to have educational system where aims, curriculum, instructional material, methods of teaching, system of promotions are based upon divergent thinking in combination with convergent thinking. Creative potential among students in our schools has been suppressed due to rigid and hectic academic programmes. Students in classes do not have freedom to respond which is very much essential for creative expression. Teachers and parents themselves are not creative because their creativity was not allowed to express at their school time. Unless and until teachers use creativity in their teaching, may be in methods or aids, it will be difficult for them to accept importance of inculcation of creativity in students.

This study showed significant negative correlation between creativity and anxiety. Our education system in schools should be like a place where students are free from anxiety. So our aim of education, curriculum, methods of teaching and especially examination system should be reformed. Organizational climate is
significantly correlated with creativity which is evident from the results of this study. So it should also be a matter of emphasis while considering whole educational system. Moreover, spirit of teachers as a dimension of organizational climate proved to be a significant predictor of creativity in students. It should be ensured in school system that teachers feel that their social needs are being satisfied and at the same time they are enjoying a sense of accomplishment in their job. Only after the reframed educational system with the provisions of differential promotions, provision of special classes and special schools, enriched, interesting and diversified curriculum, new and innovative methods of teaching like heuristic approach, project method and scientific inquiry techniques be adopted keeping in view in the individual differences in specific creative talent.

SUGGESTIONS FOR FURTHER STUDY

1. The study needs to be replicated on a large sample from different parts of the country and at different age levels to confirm the findings of the present investigation.

2. Study may be conducted on personality factors of award winners in the field of music, classical dance, painting, architecture, science and mathematics.

3. A Study may be undertaken to explore the personality factors of creative teachers and non-creative teachers.

4. A study may be undertaken to explore the influence of type of organizational climate affecting creativity.

5. A longitudinal study may be conducted to chart the level of anxiety affecting creativity among adolescence.

6. A study may be undertaken to find out the role of motivation in enhancing creative thinking among adolescents.

7. A study may be conducted to observe the role of appreciation and social recognition to foster creativity among students.

8. A study may be conducted to observe the role of intuition and imagination in enhancing creativity.
9. A study can be undertaken to probe the difference of the level of anxiety between creative and non-creative students.

10. A study may be undertaken to observe the effectiveness of pampering behaviour of parents on child's creativity.

11. A cross-cultural study may be conducted on creative thinking in relation to socio-cultural factors and role of heredity.

12. A study may be undertaken to probe the difference of problem solving ability of creative and non-creative students in relation to psychological factors.

13. Effect of Teacher's creative thinking on students learning behaviour and achievement may be observed.

14. A study may be undertaken to observe creative thinking and social adjustment among students.

15. A study may be conducted on creativity and personality factors of drama writers.

16. A study may be conducted on creativity in relation to leadership behaviour and parental style of child rearing.

17. Effect of type of organizational climate on teachers' creative thinking may be observed.

18. Role of opportunities and classroom freedom given to students to enhance their creative thinking may be observed.

19. Social adjustment of high creative school dropouts may be observed.

20. A study may be undertaken to record the correlates of creativity and truancy.

21. A study may be conducted to see whether it is possible to enhance reasoning abilities of students through intensive training programmes aimed to cultivate creative potential of the students. Experimental studies may be taken up to evaluate the effectiveness of such training programmes.