## A STUDY OF EMOTIONAL INTELLIGENCE OF ADOLESCENTS IN RELATION TO CREATIVITY

Dr. Suresh Aggarwal\* & Vidhi Bhalla\*\*

#### **ABSTRACT**

In recent years, overall effectiveness of a person is not only measured in terms of IQ, but emotional quotient, i.e. EQ also plays an equally important part. Parents seek to make the children emotionally intelligent so that they can utilize their emotions well, understand other's emotions and learn the basic social skills to make a constructive contribution in the society. Children, who are creative, are believed to be socially more mature and exhibit greater emotional intelligence than other children. The present study is an attempt to find out whether emotional intelligence is a function of creativity or not. It is conducted on a sample of 150 senior secondary school students. The main findings of this study signify that there is a strong positive correlation between emotional intelligence and creativity. The findings of this study are beneficial for parents, teachers and educationists for nurturing the students to utilize their creative potential to become emotionally intelligent.

Keywords: Emotional Intelligence, Creativity

#### INTRODUCTION

In the past decade, emotional intelligence has generated an enormous amount of interest both within and outside the field of psychology (Salovey & Grewal, 2005). Emotional Intelligence refers to the capacity for recognizing our own feelings and those of others, for motivating ourselves and for managing emotions well in ourselves and our relationships (Goleman, 1998). In simple terms, emotional intelligence implies how much we are aware of our own feelings and the feelings of other people. It denotes the capacity to control the emotions and also have an impact on other's emotions. Emotional restraint and empathy are the important characteristics of people who are said to be emotionally intelligent. People who are emotionally intelligent, deal with fluctuating emotions effectively and hence lead a much happier life than those who cannot control their emotions well. They are likely to suffer less stress and enjoy less volatility in their relationships with others (Moore, 2007).

## Emotional Intelligence consists of the following five dimensions:

#### 1. Recognizing and Expressing Emotions

It is the ability of a person to recognize their own

emotion state, i.e. what kind of feelings occurs at a particular time and why. It also denotes the ability to effectively express those emotions to other's in the exact form.

ISSN: 2230-9586

#### 2. Understanding Emotions of Others

Emotionally intelligent people not only understand their own emotions, but they are aware how and why people behave in a particular manner. They are able to understand the conditions under which people show different emotions and are able to react accordingly.

#### 3. Decision Making

Decision making is an important factor which decides the overall effectiveness of life of an individual. When he/she is confronted with problems, El helps them take logical decisions to come out of the problems.

#### 4. Managing Emotions

It denotes the ability to deal with the frequent emotional changes happening within or outside the individual. It helps us to be resilient, i.e. to come out of emotional setbacks quickly.

#### 5. Controlling Emotions

Sudden arousal of stress, anxiety, anger, fear, love etc. can lead to unusual behavior. Emotionally intelligent people deal with these situations effectively by controlling the emotions and delaying the reaction. It helps them to avoid unpleasant situations.

<sup>\*</sup>Assistant Professor, M.M. College of Education, Mullana, Ambala (Haryana)

<sup>\*\*</sup>Assistant Professor, M.M. College of Education, Mullana, Ambala (Haryana)

There are numerous factors which decide the EQ of an individual. During childhood, home environment, parenting style etc. decide the extent to which children will be emotionally intelligent. But when they grow up as adolescents, different factors have an impact on the EQ. These factors may be internal (including, interests, attitude etc.) or external (including peer relationships, social development, situations which he/she confronts etc.). One of the important factors that affect the emotional intelligence of adolescence is creativity.

Creativity is derived from a word 'create' which means to bring into being, originate or to produce as a new construction out of existing materials. Creativity is the ability to think flexibly, connect and rearrange knowledge to generate new and often surprising ideas. It includes flexibility, divergent thought, originality and the ability to organize perceptions & emotions. The unfolding of creativity affects all our developmental areas: Spatial, Mathematical/logical and Kinesthetic. The disposition of creative application is inherent in all human beings.

Creativity (or creativeness) is a mental process involving the generation of new ideas or concepts, or new associations between existing ideas or concepts. Sternberg (1991) defined Creativity as the ability to produce work that is both novel (i.e. original, unexpected) and appropriate (i.e. useful, adaptive concerning task constraints)

Seltzer and Bentley (1999) defined Creativity is the application of knowledge and skills in new ways to achieve a valued goal. To achieve this, learners must have 4 key qualities:

- 1. The ability to identify new problems, rather than depending on others to define them.
- The ability to transfer knowledge gained in one context to another in order to solve a problem.
- 3. A belief in learning as an incremental process, in which repeated attempts will eventually lead to success.
- 4. The capacity to focus attention in the pursuit of a goal, or set of goals.

In terms of creativity i.e. fluency, flexibility and originality and creative individuals having scored high on creativity are able to correlate well with real life achievements and are well adjusted. The results are in line with many studies which emphasized that emotional intelligence is a function of creativeness; highly creative do not suppress their inner feelings and means of expressing them constructively.

There are numerous studies which have tried to correlate El with creativity. Williams (2004) concluded that outstanding principles demonstrate a broad and deep repertoire of competencies related to emotional intelligence and problem solving ability. Ivcevic et. al. (2007) examined the relationship between emotional intelligence (EI) and emotional creativity (EC) and whether each construct was predictive of creative behavior. Self-report measures of EC significantly correlated with laboratory and selfreported creativity measures, while ability measures of EC only correlated with selfreported artistic activity. EI was uncorrelated with creative behavior. Sanchez-Ruiz et al., (2011) investigated the association between two creativity indicators: Divergent Thinking (DT) and Creative Personality (CP), and key aspects of cognitive ability, personality (Big Five), and trait emotional intelligence (trait El or trait emotional self-efficacy). Strong relationships were demonstrated between personality traits, including trait EI, and creativity, some of which varied significantly across subject domains. Ogoemeka & Helen (2011) studied emotional intelligence and creativity in teacher education. Emotional intelligence (EI) and creativity have emerged to be crucial components of emotional adjustment, personal well-being, life success, and interpersonal relationship in the past decade.

We see from the above studies that contradictory results are found regarding correlation between EI and creativity. Simultaneously, it is important to study the comparison of EI with creativity in adolescents because they must learn to utilize the creative potential to become emotionally intelligent.

#### STATEMENT OF THE PROBLEM

A Study of Emotional Intelligence of Adolescents in relation to Creativity

#### **OBJECTIVES**

- 1. To find whether significant differences exist in emotional intelligence of high and low creative adolescents.
- 2. To find whether significant gender differences exist in emotional intelligence among high creative adolescents.
- To find whether significant gender differences exist in emotional intelligence among low creative adolescents.
- 4. To find whether relationship exists between emotional intelligence and creativity of adolescents.

#### **HYPOTHESES**

- There is no significant difference between emotional intelligence of high and low creative adolescents.
- There exists no significant gender difference in emotional intelligence among high creative adolescents.
- 3. There exists no significant gender difference in emotional intelligence among low creative adolescents.
- 4. There exists no significant relationship between emotional intelligence and creativity of adolescents.

#### **METHOD**

The present investigation aims to study emotional intelligence of high creative and low creative adolescents. It is a descriptive research as it involves collecting data to test hypotheses concerning the current status of adolescents with regards to emotional intelligence and creativity. Moreover, the present study is of co-relational type because it seeks to study the comparison between emotional intelligence of high creative and low creative adolescents.

#### SAMPLE AND SAMPLING TECHNIQUE

The present study is conducted on senior

secondary school students of Govt. schools of Chandigarh (UT). The sample comprised of 150 senior secondary school students studying in class XI and XII, which was selected through random sampling technique. Out of 150 students, 81 were male and 69 were females.

#### **TOOLS FOR DATA COLLECTION**

For measuring emotional intelligence, a standardized questionnaire (Self-Report Inventory) was used (Schutte et. al., 1998). The inventory consisted of 33 items distributed in four dimensions, i.e. Optimism, Social skills, Utilization and Appraisal. A 5-point Likert scale was used to score the responses.

Torrance test of creative thinking (TTCT) (1962) were selected for measuring creativity. The choice in favour of these tests was guided by the considerations of their wide applicability in different cultural set ups including Indian conditions, and their research orientedness; richness and variety of tasks for evaluating both verbal and non-verbal creativity requiring kind of thinking involved in recognized creative achievements; ease of administration for their being group tests; and suitability of the tests for the age-group in the present study.

The battery of figural tests of creative thinking (non-verbal) form A, includes three activities with an overall administration time of 30 minutes. The first activity of 'Picture Construction' is designed to stimulate originality and elaboration. The two succeeding activities, namely 'Incomplete Figures' and 'Repeated Figures' elicit greater variability in fluency, flexibility, originality and elaboration.

Based on the scores obtained from TTCT, adolescents were divided into high and low creativity groups.

### RESULTS AND DISCUSSION Table 1

Mean Values of Emotional Intelligence and its Dimensions



Variables	Mean	S.D.	
Optimism	38.21	6.735	
Social skills	31.45	5.649	
Appraisal	27.98	4.725	
Utilization	24.45	3.819	
Emotional Intelligence	122.09	13.617	

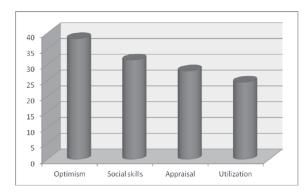


Fig 1: Mean Scores on Various Dimensions of Emotional Intelligence of Adolescents

The Table 1 and the bar graph given above depict the mean score of senior secondary school students on various dimensions of emotional intelligence. It is inferred that the students scored the highest in 'Optimism', followed by 'Social Skills', 'Appraisal' and 'Utilization. Adolescents face rapid emotional and social changes. They try to adjust with those changes. In case of successful resolution, they become optimistic and develop social skills. It is for this reason that adolescents scored more on these two dimensions. Appraisal of emotions and their utilization demands high degree of understanding of emotions. Adolescents struggle to evaluate the emotional changes resulting in their improper utilization. Therefore, the mean scores on these two dimensions are lesser than 'Optimism' and 'Social Skills'.

Table 2

**Comparison of Mean Emotional Intelligence** 

Variable	Group	N	Mean	SD	df	t- value	Significance
Emotional	Low creative	86	119.41	11.908	140	2.000	Significant at 0.01 level
Intelligence	High creative	64	125.70	14.971	148 2	2.868	

Table 2 given above shows the comparison of mean scores on emotional intelligence of adolescents with low and high creativity. The calculated value of 't', i.e. 2.868 is greater than the tabulated value for 148 degrees of freedom at 0.01 level of confidence. Therefore, there exists a significant difference between the emotional intelligence of adolescents with low and high creativity. Simultaneously, the mean score of emotional intelligence for highly creative adolescents is more than that of low creativity adolescents. This shows that being creative helps the adolescents to adjust well with the changes in emotions, understand emotions in a better way and appraise and utilize emotions for making life more effective. This highlights the fact that creativity is a determining factor of emotional intelligence. Hypothesis 1 is therefore rejected.

Table 3 **Comparison of Mean Scores of Emotional** Intelligence of Boys & Girls with High Creativity

Variable	Group	N	Mean	SD	df	t-value	Significance
Emotional	High creative boys	30	132.33	14.530	62	3.637	Significant at 0.01 level
Intelligence	High creative girls	34	119.85	12.927			

Table 3 given above shows the comparison of mean scores on emotional intelligence of adolescent boys with high creativity and adolescent girls with high creativity. The calculated value of 't', i.e. 3.637 is greater than the table value for 62 degrees of freedom at 0.01 level. Therefore, there exists a significant difference between the emotional intelligence of of Adolescents with Low and High Creativity adolescent boys with high creativity and

adolescent girls with high creativity. Also, the mean score for highly creative boys is greater than that of highly creative girls. This highlights the fact that gender also plays a role in determining the extent to which highly creative adolescents adjust with emotional changes and the emotions of others. Highly creative boys utilize their emotions in a better way and develop better social skills. Therefore, hypothesis 2 is rejected.

#### Table4

# Comparison of Mean Scores of Emotional Intelligence of Adolescents Boys with Low Creativity and Adolescent Girls with Low Creativity

Variable	Group	N	Mean	SD	df	t-value	Significance
Emotional	Low creative boys	51	112.06	9.626	84	10,369	Significant at
Intelligence	Low creative girls   35   130.11   4.384	01	10.505	0.01 level			

Table 4 given above shows the comparison of mean scores on emotional intelligence of adolescent boys with low creativity and adolescent girls with low creativity. The calculated value of 't', i.e. 10.369 is greater than the table value for 84 degrees of freedom at 0.01 level. Therefore, there exists a significant difference between the emotional intelligence of adolescent boys with low creativity and adolescent girls with low creativity. Also, the mean score for low creative girls is greater than that of low creative boys. It is interesting to note that girls with low creativity have scored more in emotional intelligence whereas boys of high creativity have scored more. Therefore, Hypothesis 3 is rejected.

## Table 5 Correlation between Emotional Intelligence and Creativity

Variable	Creativity
Emotional Intelligence	0.362**

<sup>\*\*</sup>Significant at 0.01 level

Table 5 given above shows the correlation between emotional intelligence and creativity of adolescents. The calculated value of coefficient of correlation, i.e. 0.362 is significant at 0.01 level of confidence. This shows a strong positive correlation between EI and creativity. Creativity of adolescents is definitely a factor which decides to what extent the adolescents will be emotionally intelligent. Therefore, hypothesis 4 is rejected.

#### CONCLUSION

Creative skills are pre-requisites to better emotional intelligence. Handling and understanding emotions is an art. The question is, can the teachers develop and nurture creativity in adolescents to make them emotionally stable? Teaching emotional intelligence has become a necessary task in the educational arena and most parents and teachers consider mastery of these skills a priority in the socio-emotional and personal development of their children and pupil (Fernandez-Berrocal & Ruiz, 2008). As outlined in the Mayer and Salovey model (Mayer and Salovey, 1997; Edward de Bono, 2001), young adolescents should be subjected to programmes which enhance creativity and emotional intelligence, so that they utilize their creativity in understanding, perceiving and regulating their emotions and the emotions of others. Effective teaching of these skills will require the teachers to make extra efforts and plan programmes. Adolescence is an age of rapid changes. Creative adolescents can come out of emotional setbacks by finding better alternative behaviors. This divergent thinking of adolescents has to be trapped by the teachers to make them adjust well with the society and become a contributing member.

#### **REFERENCES**

Follman, J (2005). 'Multivariate Analysis of the Relationship between Creativity and Intelligence.' Multivariate Behavioral Research, 11(1), 105-118.



Edward de Bono (2001). Basic Thinking Tools. Harper Collins Publishers Ltd.

Fernandez-Berrocal, P. & Ruiz, D. (2008). Emotional Intelligence in Education. Electronic Journal of Research in Educational Psychology, No. 15, Vol. 6(2), 421-436.

Goleman, D. (1998). Working with Emotional Intelligence. New York: Bantam.

Ivcevic, Z., Brackett, M.A. & Mayer, J.D. (2007). Emotional Intelligence and Emotional Creativity. Journal of Personality. 75(2), 199-236, Retrieved from http://www.unh.edu/emotional\_intelligence/EI%20Assets/Reprints...EI%20Proper/EI2007%20Ivcevic%20Creativity.pdf on 7-5-2012.

Kim, Kyung Hee (2005): Can Only Intelligent People Be Creative? A Meta-Analysis. Journal of Secondary Gifted Education, 16(2-3). 57-66.

Kusuma, A (1997): Creativity and Cognitive Style in Children. Ph.D (Edu.) Thesis Shri Venkateswara University, Tirupati.

Mayer JD, Salovey P (1997). What is emotional intelligence? In P.Salovey & d. Sluyter (eds.). Emotional Development and Emotional Intelligence: implications for educators. New York: Basic Books, pp.3-31

Moore, G. (2007). Emotional Intelligence, Innovation and Creativity. Retrieved from http://www.rawltd.com/files/EmotionalIntelligenceandCreativity07.pdf on 6-5-2012.

Ogoemeka & Helen, O. (2011). Emotional Intelligence and Creativity in Teacher Education. International Journal of Psychology and Counseling, 3(7), 124-129.

Salovey, P. & Grewal, D. (2005). The Science of Emotional Intelligence. Current Directions in Psychological Science. 14(6), 281-285.

Sanchez-Ruiz, M.J., Hernandez-Torrano, D., Perez-Gonzalez, J.C., Batey, M. & Petrides, K.V. (2011). The Relationship Between Trait Emotional Intelligence and Creativity across Subject Domains. Motivation and Emotions, 35(4), 461-473, Retrieved from http://www.psychometriclab.com/admins/files/TEI%20-%20M&E%20(2011).pdf on 7-5-2012.

Schutte, N.S., Malouff, J.M., Hall, L.E., Haggerty, D.J., Cooper, J.T., Golden, C.J., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. Personality and Individual Differences, 25, 167-177.

Seltzer, K and Bentley, T (1999): The creative age: Knowledge &skills for the new economy. Delnos, London.

Sternberg, R.J. (2001): What is common thread of creativity? Its dialectical relation to intelligence and wisdom. American Psychology, vol. 56, 360-362.

Torrance, E.P. (1962). "Guiding creative talent." Englewood cliffs. N.J. Prentice Hall.

Taylor, C.W. (1964): Creativity; progress and potentials. New York. McGraw Hill Book Company.

Vernon, P.E. (1989): 'The Nature-Nurture Problem in Creativity' in J.A. Glova, R.R. Ronning & C.R. Reynolds (Edu.). Handbook of Creativity: Perspectives on Individual Differences, Plenum Press, New York.