

A STUDY OF EMOTIONAL INTELLIGENCE, CREATIVE THINKING AND ACADEMIC ACHIVMENT OF B.ED COLLEGE STUDENTS.

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Abstract:

This study was conducted to explore the relationship between emotional intelligence and creative thinking with academic achievement of B.Ed students. The mean scores of students were used as an index of academic achievement. Data were analyzed by descriptive statistics, independent t-test, Pearson correlation coefficient and multiple regressions using Spss software. There is no significant relationship between emotional intelligence and academic achievement, but the relationship between creative thinking and academic achievement was positive and significant. Among the components of emotional intelligence and creative thinking, the relationship between social awareness and fluency with academic achievement was significant. There was no significant difference between emotional intelligence and creative thinking scores of male and female students.

Key words: emotional intelligence, creative thinking and academic achievement

INTRODUCTION

Emotion originates from the Latin verb *emovare*, which implies continually changing and moving (Callahan & McCollum, 2002). Emotions assume a critical part in human natural selection and adjustment as they influence the way we see our environment, understand it, and respond to that awareness. They assume a key part in the advancement of learning since it is through our subjective emotional world that humans forge their personalities and implications out of reality. Due to the very important nature of emotions, scientists started studying the abilities and capacities of humans to reason and understand their own emotions, to effectively perceive emotions as well as to regulate and control them (Salovey & Mayer, 1990). They called it emotional intelligence and since then the term has reached almost every corner of the world. Emotional intelligence has turned out to be progressively mainstream as a measure for distinguishing individuals who are successful in life, and as an instrument for reaching this success. The idea of emotional intelligence clarifies why two individuals of a similar IQ can achieve inconceivably extraordinarily different levels of accomplishment in life (Goleman, 1998) as individuals are in some cases successful not due to their knowledge, but rather because of their capacity to interact with individuals socially and emotionally by utilizing charming temperament in their exchanges (St.Clair, 2004). Without any doubt, almost everyone's aim in life is related to the achievement and fulfillment of happiness. In order to succeed at this, no matter which area is being developed, emotional intelligence seems to play an important role and should therefore be taken into consideration. While encumbered by huge asset constraints,

military leaders need to make decisions rapidly in conditions described by instability and ambiguity. The Armed Forces needs its leaders to build firm groups, to develop trust, and to cultivate positive atmospheres. Military leaders must create and impart a common vision and set clear mission objectives for the company or unit to be effective responders of the calling and defenders of the country. They have an important duty to guarantee the present and future achievement of the military (Taylor -Clark, 2015). These necessities are less about the concrete abilities of cognitive intelligence, specialized information, and strategic capability and more about the delicate aptitudes of emotional knowledge that comes into play. The emotionally well-balanced individual will be capable of anticipating misfortune and its effects and, additionally, of suspecting the potential reaction of others to difficulty. This will enable him to react appropriately to obstacles and solve problems rapidly. Emotional intelligence has been suggested therefore as an indispensable asset to be considered in the military as it enables military members to understand their own feelings and also the feelings of others (Sewell, 2011), being more successful at leading the mission to success.

EMOTIONAL INTELLIGENCE:

The concept of emotional intelligence in the Indian context is embedded in its highly valued social concerns, virtues, religious traditions and cultural practices. India often treats individual inclination as consistent with duty or dharma. Indians develop a morality of caring which emphasizes broad and relatively known contingent interpersonal obligation- a familial view of interpersonal relationship and contextual sensitivity. The Indian tradition has form different systems of belief and practices that emphasized certain interdependent but interrelated concepts like stress and suffering. We cannot imagine a life worth living, beautiful and meaningful without positive emotions. All the growth and development in the world is the result of this powerful emotion. In Indian perspective different researchers tried to defined Emotional Intelligence-

Dalip Singh (2003): Emotional Intelligence constitutes three psychological dimensions: emotional sensitivity, emotional maturity and emotional competency, which motivate an individual to recognize truthfully, interpret honestly and handle tactfully the dynamics of human behaviour.

Mala Kapadia (2004): Emotional Intelligence from Vedic Psychology perspective can be described as transformation of mind, body and spirit to realize our true potential for the universal wellbeing and abundance of joy.

Vinod Sanwal (2004): Emotional Intelligence is the awareness of use of emotions and their utilization within the parameters of individual cognitive styles to cope with situations and problems.

N.K.Chadha (2005): All intelligence have an emotional base. Using your emotions as a source of energy to accomplish the self-defined goals is what emotional intelligence consists of.

Madhumati Singh (2006): Emotional Intelligence is the ability and freedom to grow from mistrust to trust, self-

doubt to self-empowerment, following to leading, incompetence to competence, isolation to synergy and despair to hope.

Developing Emotional Intelligence: Research shows that it is possible to develop emotional intelligence by unlearning bad emotional responses and deal such situation with required emotional competencies. However, teaching these skills depends on exercise and practice of emotional skills enabling them to be adaptive within a person's natural repertoire. Different studies support the effectiveness of specific training programmes in the emotional skills that make up emotional intelligence.

Cornerstones of Emotional Intelligence: In academic literature, various terms have been employed as a substitute for emotional intelligence. Such terms include emotional literacy, emotional competence, emotional creativity and emphatic accuracy. (Averill & Nunley, 1992; Goleman, 1995).

Emotional Literacy: This involves developing a clear and useful vocabulary for emotional literacy and recognizing, respecting and valuing the inherent wisdom of feelings. Emotional energy, emotional honesty, emotional feedback and practical institution contribute to emotional literacy.

Emotional Fitness: Trust is the key characteristics of emotional fitness. It includes authenticity, resilience, renewal and constructive discontent. Emotional fitness refers to those qualities that illuminate our personal values and character and the feelings that enliven and drive them.

Emotional depth: Emotional depth calls fourth one's core character, unique potential, and purpose of destiny. It is the manifestation of a person's commitment, drive, initiative, conscience and accountability. It shows one's integrity and increases his/her influence beyond authority, rank and title. Emotional depth can be developed by inculcating self-awareness, assertiveness, empathy, communication and by referring to role model.

Emotional Alchemy: It is a blending of forces that enables us to discover creative opportunities and transform lesser ideas into greater ones. It is emotional alchemy through which we extend our creative instincts and capacity to flow with problems and pressure and to fight for the future. It throws light on the range of hidden solutions and untapped opportunities.

CREATIVITY:

For centuries the common idea had been that only the exceedingly rare person is genuinely creative and that creativity is a divine gift. The etymological root of the word comes from the Latin 'Creatus' literally, means to have grown. "Creativity is the ability of an individual to respond to the need for creation, self- expression, and self-realization and to solve problems thereby improving the quality of life" (Torrance 1957). The International Center for Students in Creativity defined creativity as an effective resource that resides in all people and within all organization. It is essentially an ability to bring something new into existence purposefully through the person may

or may not be conscious of its process, nature and components. The new way of looking that individuals have varying degrees of quality possessed permit us to think that not only a few peculiarly gifted persons but individuals in general possess some degree of creative trait or traits. There are divergent views about the nature of creativity that embraces a wide range of cognitive styles, performances and outcomes. Guilford (1959) has discussed five primary traits of creative individual as ability to see problems, fluency in thinking, flexibility, originality and elaboration. There are four distinct approaches of creativity: 1) product, 2) person, 3) press and 4) process. Creative products are emphasized for elements of newness, freshness and inventiveness they have. The quality of originality is represented in these products involving fusion of perception in new way, finding new connections and relationships, producing new insights and moulding of experience in new organizations. (Barron 1988; Sternberg 1988; Torrence, 1981). The person approach has attempted to identify personality and motivational characteristics, cognitive abilities and behavioral or biographical dispositions associated with creativity. The press approach to creativity typically includes the total complex situation in which creative processes are initially stimulated and sustained through completion. Different definitions consider creativity both as a process and a product, the thought as well as its result, but the central condition of novelty or newness in the creation has not been overlooked by anyone. By incorporating all these viewpoints, creativity may be described as the capacity or ability of an individual to create, discover or produce a new or novel idea or object, including the rearrangement or reshaping of what is already known to him which proves to be a unique personal experience. (Sharma. R, 2009). Niu (2007) made a review of creativity in two angles such as individual mental process and environment. Examining the entire corpus of research literature on creativity, he finds that there is a lack of empirical investigation on the role of emotion in creativity as compared with the number of studies that investigated various individual factors such as intelligence and personality traits.

The recent trend is to accept creativity as a multi dimensional ability which is complex universal human attribute manifested by the cognitive empirical process and is differentially distributed among different people. Creative thinking is the kind of thinking that leads to new insights, novel approaches, fresh perspectives, and whole new ways of understanding and conceiving of things. In the present study, creativity is taken as a multidimensional attribute which includes the factors of elaboration and originality, flexibility and fluency. Social environment like family, school, community and culture also influence creativity (Kim, 2004). Some studies were earlier conducted to correlate age, sex, locality with creativity (NCERT, 2007). Jones (1980) studied the effects of creativity- training program for teachers and reported increase in each positive response category. Tafuri (1994) found significant relationship between teacher creativity and the amount of response opportunities, questions answers, terminal feedback and sustaining feedback they provided to students.

Emotional Intelligence, Innovation and Creativity:

Emotional intelligence allows us to think more creatively and use our emotion to solve problems. 'People with the competence of innovation and adaptability seek out fresh ideas from a wide variety of sources, entertain original solutions to problems, generate new ideas and take fresh perspectives and risks in thinking' (Goleman 1998 p 95). It is being open to novel ideas and approaches, and being flexible in responding to change. They can find original connections and patterns that others overlook. In the Genos 'Emotional Intelligence framework', it is acknowledged that creativity and emotional intelligence sustain each other. Emotional intelligence alone, unless worked upon by the shaping power of creativity, is not the only factor responsible for the greatness of artistic expression, although it is equally true that there cannot be any artistic expression without emotional intelligence. In the words of Goleman, there is a natural tension between orderly self-control and the innovative urge of the creative's. Coming up with a creative insight is a cognitive act, but realizing its value, nurturing it, and following through calls on emotional competencies such as self-confidence, initiative, persistence, and the ability to persuade. Besides, creativity demands a variety of self-regulation competencies, so as to overcome the internal constraints posed by emotions themselves. In their peer-reviewed journal article 'Examining the Relationship between Emotional Intelligence and Workplace Performance,' when exploring the role of emotional intelligence in creativity in the book *Emotional Intelligence in Everyday Life: A scientific inquiry*, by Ciarrochi, J., Forgas, J. & Mayer, J. (2001), the authors state "Positive moods are believed to facilitate creative idea generation, whereas negative moods focus attention and facilitate analytic processing." Goffman (1959) considered non-verbal communication to be particularly powerful component of self-presentation in critical situations such as job interviews, because while it tends to be taken by the observer as an ungovernable representation of the actor's 'true' self, a skillful actor may manipulate it strategically to create desired impressions. Goleman (1998 p 323) also said that the key to intuiting another's feelings is in the ability to read non-verbal channels like tone of voice, gester, facial expression. So, it seems there is a link between emotional intelligence and creativity.

Teacher and Creativity:

As teachers, we meet children in our day to day life, most of who go to school under compulsion. Majority needs to develop motivational skills to curb the drive of boredom. To be creative enough to enhance the interest of a child to love school and enjoy their life, creativity in education is likely the answer and to create such an environment requires determine, sensitive, innovative and knowledgeable teachers who is ready to create creative atmosphere in the classroom learning. One of the most powerful ways in which a culture encourages or discourages creative behavior is the way by which teacher and parents encourage or discourage, reward or punish certain personality characteristics as they develop in children or the behaviour which manifest those characteristics (Torrance, 1965). As no psychological traits function independently so also creativity, more or less treated with some of its correlates by either influencing or being influenced. In the present study, student creativity is considered to be the creative ability of students represented by their scores on various factors of non-verbal creativity such as

originality and elaboration as measured by Mehdi's (1973) non-verbal test of creative thinking. Nonverbal creativity scores were subjected to further analysis to find answers related to different background variables and also with emotional intelligence of the B. Ed students.

OBJECTIVES OF THE STUDY:

- ✓ To study the difference of emotional intelligence of the B. Ed. students of different levels of creativity.

VARIABLES IN THE STUDY: The variables of the present study are as follows:

Dependent Variable: Emotional intelligence as influenced by three independent variables mentioned below is taken as dependent variable in the study. The variable is dependent or response variable because its values depends upon the value of the independent variables.

Independent Variables: These variables have been taken as independent variables or stimulus variables because it can be measured, manipulated or selected by the investigator to determine the relationship with the dependent variable.

Creativity: The first independent variable is 'creativity'. It has been varied at two levels – High and Low creativity.

Stress: The second independent variable is 'stress' which has been varied at two levels - High and Low stress.

Academic Achievement: The third independent variable mentioned is 'academic achievement'. It has been varied at good and poor academic achievement. The study also takes into consideration other background variables that seem to be important in developing emotional Intelligence abilities, like – sex, area, management, academic background, educational qualification, age and type of training.

HYPOTHESES OF THE STUDY:

- ✓ There exists no significant difference in the mean score of emotional intelligence (EI) of B. Ed. students having high and low creativity.

SAMPLE OF THE STUDY: The investigator made use of simple random sampling method for obtaining sample from the universe. The existing student teachers in the last part of the academic years were considered to be having maturity about their feelings and experiences. A total sample, almost 800 B.Ed. students have been selected for the study from both Government and Private B.Ed. Colleges. However, only 500 B.Ed. students were finally selected as rest of the response sheets were found to be somehow incomplete.

TOOLS USED FOR COLLECTION OF DATA:

For the present study, the following tools are used:

1. An adapted Emotional Intelligence Scale for measuring Emotional Intelligence based on Goleman's competence based model of Emotional Intelligence.
2. Non-Verbal Test of Creative Thinking – by Baquer Mehdi.
3. Personal Problem Index Scale Measuring Stress.
4. The Academic Achievement score of the B.Ed. final examination of the B.Ed. students.
5. Personal Information Sheet.

PROCEDURE OF DATA COLLECTION: To collect the data, the investigator approached to the principals of the teacher training colleges for having necessary permission. The testing sessions were conducted in classroom setting of a group of 15-20 subjects. After self- introduction for necessary rapport, the purpose and objectives of the study was mentioned to the students in brief. The subjects were assured of maintenance of confidentiality of their responses. Clear and detail instruction were given about the data collection tools in both Assamese and English. After ensuring proper arrangement, the tools were administered in a phased manner. The data were thus collected in a group situation in one session of approximately one and half hour.

STATISTICAL TECHNIQUES USED FOR ANALYSES OF THE DATA: The following statistical techniques were used for analyzing the data as per the objectives of the study stated earlier.

- Descriptive analysis
- Differential analysis

DATA ANALYSES:

Difference in Emotional intelligence of the B.Ed. Students of different Creative thinking groups

To know, the effect of different levels of creativity on emotional intelligence of the B. Ed. students, hypotheses were formulated and tested that were presented in the following tables-

Objectives: To study the difference of emotional intelligence of the B. Ed. students of different levels of creativity.

Hypotheses: There exists no significant difference in the mean score of emotional intelligence (EI) of B. Ed.

students having high and low creativity.

Table -1: Significance of Difference in the Mean Scores of Emotional Intelligence of High and Low Creative B. Ed. students. (N=500)

Level of creativity	N	Mean	S.D.	t-value	Level of Significance
High	263	81.64	12.86	2.03	*
	237	79.24	13.38		
Low					

* Significant at .05 level

From the table 4.39, it is evident that the mean EI score of high creative B. Ed. students is 81.64 and that of low creative B. Ed. students is 79.24 and the calculated t' value is 2.03 which is more than the table value at .05 level. Hence the null hypothesis is rejected implying the difference between the two means is significant. However, the mean EI score of high creative is higher than the mean EI score of low creative.

Hypotheses: There exists no significant difference in mean scores of EI of the B.Ed. students of high creativity having high and low stress.

Table-2: Significance of Difference in the Mean Scores of Emotional Intelligence of the B. Ed. students of High Creativity having High and Low Stress (N=500)

High creative	Level of stress	N	Mean	S.D.	t-value	Level of Significance
	High	105	75.43	12.84	6.74	**
	Low	158	85.77	11.13		

** Significant at 0.01 level

From the table 4.40, it is evident that the mean scores of emotional intelligence of the B.Ed. students of high creativity having high stress is 75.43 and that of low stress is 85.77 and the calculated t' value is 6.74 which is more than the table value at 0.01 level. Hence, the null hypothesis is rejected at 99% level of confidence that means the difference between the two means is significant. The mean EI score of high creative B. Ed. students having high stress is lower than the mean EI score of high creative low stress.

Hypotheses: There exists no significant difference in the mean scores of EI of the B. Ed. students of low creativity having high and low stress.

Table-3: Significance of Difference in the Mean Scores of Emotional Intelligence of the B. Ed. students of Low Creativity having High and Low Stress (N=500)

	Level of stress	N	Mean	S.D.	t-value	Level of Significance
Low creative	High	131	76.78	12.14	3.16	**
	Low	106	82.28	14.24		

** Significant at 0.01 level

From the table 4.41, it is evident that the mean scores of emotional intelligence of the B. Ed. students of low creativity having high stress is 76.78 and that of low stress is 82.28 and the calculated t' value is 3.16 which is more than the table value at .01 level. The null hypothesis is rejected at 99% level of confidence. It means that the difference between the two means is significant. The mean EI score of low creative B. Ed. students having high stress is lower than the mean EI score of low creative low stress.

Hypotheses: There exists no significant difference in the mean score of EI of the B.Ed. students of high creativity having good and poor academic achievement.

Table- 4: Significance of Difference in the Mean Scores of Emotional Intelligence of the B. Ed. students of High Creativity having Good and Poor Academic Achievement. (N=500)

	Level of Academic Achievement	N	Mean	S.D.	t-value	Level of Significance
High creative	Good	153	83.16	11.26	2.27	*
	Poor	110	79.53	14.59		

* Significant at 0.05 level

From the table 4.42, it is evident that the mean scores of emotional intelligence of the B. Ed. students of high creativity having good academic achievement is 83.16 and that of poor academic achievement is 79.53 and the calculated t' value is 2.27 which is more than the table value at .05 level. So, the null hypothesis is rejected at .05 level of significance. It means that the difference between the two means is significant. The mean EI score of high creative B. Ed. students having good academic achievement is higher than the mean EI score of high creative poor academic achiever.

Hypotheses: There exists no significant difference in the mean score of EI of the B.Ed. students of low creativity having good and poor academic achievement.

Table-5: Significance of Difference in the Mean Scores of Emotional Intelligence of B.Ed. students of Low Creativity having Good and Poor Academic Achievement (N=500)

	Level of Academic Achievement	N	Mean	S.D.	t-value	Level of Significance
Low creative	Good	104	81.22	12.73	2.02	*
	Poor	133	77.69	13.71		

* Significant at .05 level

From the table 4.43, it is evident that the mean scores of emotional intelligence of the B. Ed. students of low creativity having good academic achievement is 81.22 and that of poor academic achievement is 77.69 and the calculated t' value is 2.02 which is more than the table value at .05 level. So, the null hypothesis is rejected at .05

level of significance. It means that the difference between the two means is significant. The mean EI of low creative B. Ed. students having good academic achievement is higher than the mean EI score of low creative poor academic achiever.

CONCLUSION:

In the new millennium the teachers are challenged to educate students at an ever higher level of literacy to meet the demands of an internationally competitive global society. Therefore teacher's role in the learning process as a facilitator, guide and role model becomes all the more challenging. Through relevant and meaningful teaching, students can be helped to understand their own emotions. This will improve their academic performance as well as success in the highly demanding competitive global society of today. Although traditionally family has been taking the responsibility of the emotional education of children, with growing modernization and urbanization and breaking of the joint family system, the family at present hardly offers a conducive environment for the emotional education for the children. Hence this responsibility has shifted to the schools. The good news about emotional intelligence is that it is virtually all learnt. A wide range of social and emotional learning (SEL) programmes are found to bring about a number of positive changes in student's lives i.e. better academics, less aggression and drug usage etc. It is hoped that the results of the study would prove to be quite useful for the selection and recruitment of teachers in secondary school. Training on emotional intelligence should be given to the student irrespective of sex and socio-economic status. From the secondary level itself training on emotional intelligence should be given both through curricular and co-curricular activities. Workshops, seminars, personality development camps, sports and games, different social service activities like N.S.S., N.C.C., Scouts and Guides should be organized and students should be encouraged to involve in these. All these will help in forming a positive attitude towards life, self, family, school and society as well which in turn helps in developing emotional intelligence of the students.

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