

## RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND CRITICAL THINKING OF PROSPECTIVE TEACHERS

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### ABSTRACT

*Emotional intelligence with respect to education is define as learning mechanisms, student academic performance, social behavior practiced by students, as well as teachers' efforts in practicing learning effectively. In other words emotional intelligence is a tool used an individual to master or control his own behavior, train himself in interpersonal relationships, and adjust himself in the environment. Critical thinking is specified by students' to think clearly and rationally, understanding the logical connection between ideas. Critical thinking involves deep thinking processes, exploring information, and to solve problems systematically. Critical thinking skill is a higher-level thinking skill such as assumption, analysis, inference, deductive, interpretation and reasoning. Emotional intelligence allows an individual to think critically because it helps the person to be aware of and deal with his or her emotions. Present research was conducted aiming at investigating relationship between emotional intelligence and critical thinking of male and female prospective teachers. Survey method was used and 50 male and 50 female prospective teachers of Jabalpur were selected as a sample by random sampling method. Emotional Intelligence Test (Likert type 5 point Scale) consisting 50 statements based on Goleman's competence based theory of Emotional Intelligence and Self-made Critical Thinking Questionnaire consisting of 20 questions based on assumptions, inferences, deductions and interpretations were used as tools to collect the data. Pearson Correlation test revealed that there is positive correlation between emotional intelligence and critical thinking in case of both male and female prospective teachers.*

**Keywords:** *Emotional Intelligence, Interpersonal Relationship, Critical Thinking, Higher Level Thinking.*

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### Introduction

Education is the most powerful tool to change world. Enlightenment and empowerment of human being is possible only through effective system of education which up to a large extent depends upon the efficient teachers. No education system can flourish without the resourceful and effective teachers. Teachers to become effective need to develop their own emotional intelligence as well as the thinking power. Effective teachers are those who achieve the goals they set for themselves. In the words of Anderson an effective teacher should have and must be able to use the knowledge and skills required to achieve the goals. The role of teacher has changed in new era. These prospective teachers have to work as a facilitator, as a role model for the coming generation. Today's adolescents are facing more challenges, they are having more stress and teachers have to work for their mental health and well-being. There is a great need for educators to reconceptualise education in the 21<sup>st</sup> century. If these prospective teachers want to help their future students to be emotionally strong and critical thinkers, they should have to develop these qualities in themselves first.

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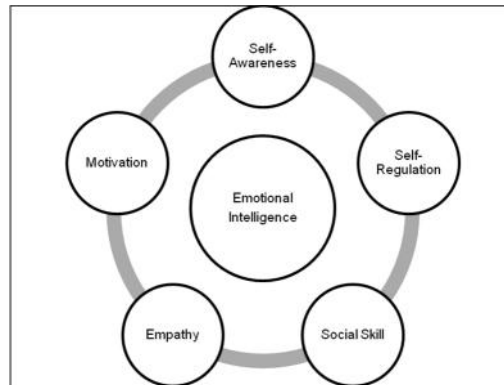
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### Emotional Intelligence

Emotional intelligence is the ability to sense and perceive your own emotions and the emotions of the others. It is generally said to include three skills: Emotional awareness which is the ability to sense your own emotions and those of others; Regulation which is the ability to control emotions and apply them to tasks like thinking and problem solving; and the dealing with emotions which means the ability to manage your own feelings, and the ability to cheer up or calm down another person. In other words, Emotional intelligence is defined as the capacity to reason with emotion in four areas: to perceive emotion, to integrate it in thought, to understand it and to regulate it.

### Five Dimensions of Emotional Intelligence



**Fig.1: Five dimensions of emotional intelligence**

- **Self-awareness**  
Self-awareness is the skill of being aware and of understanding your emotions as they occur and as they evolve. When you are self-aware, you see yourself as others see you, and have a good sense of your own abilities and limits.
- **Self- Regulation**  
The skill of self- regulation relates to managing the emotions appropriately and proportionately. Self- management skills relate to the emotions you are feeling at any given time or in any given situation and how well you manage them.
- **Motivating oneself**  
Self-motivation includes our personal drive to improve our commitment to our goals, initiative or readiness to act on opportunities. This ability enables you to take the initiative and to carry on in the face of obstacles and difficulties.
- **Empathy**  
It is an awareness of the needs and feelings of others and being able to see things from the point of view of others. It includes understanding others, developing others, having a service orientation and political awareness. Self-awareness is important for having empathy with others. If you are not aware of your own emotions, you will not be able to read the emotions of others.
- **Social Skill**  
It refers to the skills needed to handle and influence other people's emotions effectively. It includes communication skill, leadership skill, conflict management skill and skills needed for cooperation and collaboration.

### Critical thinking

Critical thinking skill plays a significant role in determining a person's cognitive development. It is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action. According to **Kurfiss,1988** Critical thinking is the ability to make correct judgments in difficult, real- world situations based on available facts and a clearly worked out value system. **Glaser,1941** defines critical thinking as a constant effort to examine and conclude any belief or supposed form of knowledge in the light of evidences.

- Critical thinking includes cognitive processes such as:
- Looking at proof and seeking validation.
- Selecting relevant information.
- Differentiating between relevant and irrelevant information.
- Analyzing the reliability of the source of information.
- Establishing the strong point of an argument.
- Recognizing relationships and alternatives
- Discriminating examples and counterexamples.
- Deducing suitable conclusions and inferences.

### **Relationship between Emotional Intelligence and Critical Thinking**

Emotions can influence the process of thinking, content of thinking, judgments and behaviors. Emotions facilitate the compatibility with both physical and social environment because it gives the impression of our feelings to others, adjust how they respond to us and facilitates our social interactions and ultimately social behavior. (Rio, 1995). Emotional Intelligence and Critical Thinking connect during the process of information gathered by "observation, experience, reflection, reasoning, or communication, as a guide to belief and action." We can blend the emotional intelligence elements of Self Perception, Interpersonal Relationships, and Decision Making in this information gathering process.

**Self-Perception** gives us confidence to ask the tough questions and an awareness to understand how the answers we receive impact us and the people around us.

**Interpersonal Relationships** gives us a foundation of trust with others so we can answer openly without hesitation or delay.

**Decision Making** as an element of EI includes the ability to navigate conflict understanding how emotions impact communication while viewing information from multiple perspectives.

Thus, a leader who can gather information with confidence & awareness from trust based relationships and who understands their own potential bias while communicating in resonant way will insure the quality of the information for their critical thinking process.

### **Review of Literature**

**Afshar, Hassan, Soodmand & Rahimi, Masoud (2014).** The Relationship among Critical Thinking, Emotional Intelligence, and Speaking Abilities of Iranian EFL Learners, (<http://creativecommons.org/licenses/by-nc-nd/3.0>).

This research tried to investigate the relationship among critical thinking, emotional intelligence and speaking ability of Iranian EFL learners. The study was conducted on 100 learners majoring in English at private language institutes in Sanandaj. The Bar-On (1997) emotional intelligence questionnaire, California Critical Thinking Skills Test (CCTST) Form B, and interview were used as tools of data collection. The results of the multiple correlation analyses revealed the significant correlation of speaking ability with emotional intelligence, followed by critical thinking. The results also revealed all components of emotional intelligence significantly correlated with learners' speaking ability. The results further showed there was a significant positive relationship between critical thinking and emotional intelligence. The results of multiple regression analyses shows that emotional intelligence was the strongest predictor of speaking ability followed by critical thinking.

**Ghanizadeh, Afsaneh and Moafian, Fatemeh (2011).** Critical Thinking and Emotional Intelligence: Investigating the Relationship among EFL Learners and the Contribution of Age and Gender, Iranian Journal of Applied Linguistics (IJAL), Vol. 14, No. 1, March 2011, 23-48.

This paper, examines the relationship between EFL university students' critical thinking (CT) and emotional intelligence (EI) and the roles of gender and age as moderating factors in the relationship between students' CT and EI are investigated. It also investigated the relationships between students' age and gender with their EI. 86 EFL students were taken as the sample. The tools used for study were "Watson-Glaser Critical Thinking Appraisal" (Form A) and the "Bar-On's EQ-i test". The result of the study indicated that there was a significant relationship between EFL learners' CT and their EI. Among the components of EI, flexibility and social responsibility were found to have the highest correlations with CT and were also shown to be positive predictors of CT. The results also revealed that age and gender did not moderate the relationship between CT and EI. Furthermore, it was found that neither age nor gender played any significant roles in learners' level of EQ.

**Hasanpour, Marzieh & Others (2018).** The relationship between emotional intelligence and critical thinking skills in Iranian nursing students, <http://mjiri.iiums.ac.ir>

This study was conducted to investigate the relationship between emotional intelligence and critical thinking in nursing students. This was a quantitative, descriptive–correlative Study. Participants were nursing students in different levels. Tools used were: California Critical Thinking Test (form B) and Bar-On Emotional Intelligence Questionnaire. Pearson correlation test showed no significant correlation between the total score of critical thinking skills and each of its components with the total score of emotional intelligence and its component, except for empathy in nursing students. The findings revealed a significant relationship between empathy and critical thinking skills in nursing students.

**Dr. Saremi, Hamid, Bahdori, Sosan, (2015).** The Relationship between Critical Thinking with Emotional Intelligence and Creativity among Elementary School Principals in Bojnord City, Iran, *International Journal of Life Science*, 9 (6) : 2015; 33 – 40, ISSN 2091-025

This study aimed at investigating the relationship between critical thinking with emotional intelligence and creativity among elementary school principals in Bojnord. The research method was descriptive. Sampling method was Simple random and the sample included 47 public elementary school principals in Bojnord. Critical thinking skills were measured in five subgroups by California Critical Thinking Skills Test (CCTST), emotional intelligence was measured by Shering's emotional intelligence questionnaire and creativity was measured by using Rand Sip creativity questionnaire. The results show that there is a positive significant correlation between critical thinking and emotional intelligence among principals suggesting that by increasing every dimension of evaluation, inference, inductive reasoning and deductive reasoning, emotional intelligence increases too.

**Leasaa, Marleny, (2018).** The correlation between emotional intelligence and critical thinking skills with different learning styles in science learning, <https://doi.org/10.1063/1.505453>

This study aims to reveal the correlation between emotional intelligence and critical thinking skills of students with different learning styles in science learning using the NHT model combined with meta-cognitive strategies. Tools used were Emotional intelligence questionnaires and critical thinking skills tests in both pretest and posttest forms. The results revealed that there was no significant relationship between emotional intelligence and critical thinking skills in students with auditory, read, and kinesthetic learning styles. The study shows that the level of emotional intelligence is not a determinant factor in increasing the critical thinking skills of students in terms of learning styles. Allegedly, learning model is more influential on improving emotional intelligence and critical thinking skills.

### **Discussion on Literature Reviewed**

In the above reviewed literature, researcher investigated the relationship among critical thinking, emotional intelligence and speaking ability of Iranian EFL learners (Afshar, Hassan & others 2014 and Ghanizadeh, Afsaneh and Moafian, Fatemeh (2011)) and found significant correlation between emotional intelligence and critical thinking and also revealed the fact that age and gender did not moderate the relationship between CT and EI. The same relationship has also been evaluated in nursing students (Hasanpour, Marzieh & Others 2018), a significant relationship between empathy and critical thinking skills has been reported. The Relationship between Critical Thinking with Emotional Intelligence and Creativity among Elementary School Principals in Bojnord City, Iran (Dr. Saremi, Hamid, Bahdori, Sosan, 2015) has also been analyzed and found that there is a positive significant correlation between critical thinking and emotional intelligence among principals. This relationship has also been tested with different learning styles in science learning (Leasaa, Marleny, 2018) and revealed the facts that there was no significant relationship between emotional intelligence and critical thinking skills in students with auditory, read, and kinesthetic learning styles.

We can conclude from the above mention studies that the emotional intelligence and critical thinking shared a positive relationship in many cases and negative relationship in few. It has also been seen that studies have been conducted in different population like EFL learners, Nursing and Science students and educators from Bojnord, Iran but no study have been yet been made on very important part of the society i.e. the prospective teachers in India. Teacher plays important role in shaping the pupils behavior. An emotionally, spiritually, intellectually balanced teacher is the need of the hour who can control his own emotions and attributes while participating in the teaching learning process. It is expected that the present findings of the study will throw light on prospective teacher's perspective towards self, students and the teaching learning process as well.

### Objectives

- To study the relationship between critical thinking and emotional intelligence of female prospective teachers.
- To study the relationship between critical thinking and emotional intelligence of male prospective teachers.

### Hypothesis

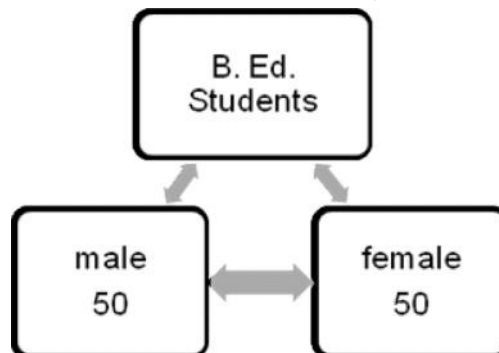
- There is no significant relation between emotional intelligence and critical thinking of female prospective teachers.
- There is no significant relation between emotional intelligence and critical thinking of male prospective teachers.

### Research Methodology

Survey method was employed to conduct the study. The survey was conducted on the population of prospective teachers of Jabalpur District.

#### Population & Sample

The sample consists of 100 B.Ed. (50 male & 50 female) students studying in B. Ed. Colleges of Jabalpur in the session 2019-2020. The sample was selected by random sampling technique.



#### Data & Sources of Data

Primary data is used in the present study for the analysis of relationship between emotional intelligence and critical thinking of prospective teachers.

#### Tools Used in the Study

- Emotional Intelligence Test (Likert type 5 point Scale) consisting 50 statements based on Goleman's competence based theory of Emotional Intelligence.
- Self-made Critical Thinking Questionnaire consisting of 20 questions based on assumptions, inferences, deductions and interpretations

#### Statistical Analysis

Mean; Standard Deviation and Pearson Product Moment of Correlation.

### Interpretation and Discussion of Result

**Table 1: Correlation between Emotional intelligence and Critical Thinking of Female Prospective Teachers**

Variable	N	r	Significance
Emotional Intelligence & Critical thinking	50	0.595	At 0.01 level

From Table 1, it can observe that the obtained value of r is greater than the value of significance at 0.01 level. Therefore, the correlation between Emotional Intelligence and Critical thinking is found to be significant at 0.01 level, which shows that the variables EQ and CT of female prospective teachers were significantly correlated and show positive relationship.

Thus, **Hypothesis 1**, "There is no significant relation between Emotional and Critical thinking of female prospective teachers." **is rejected**.

**Table 2: Correlation between Emotional intelligence and Critical thinking of Prospective male Teachers**

Variable	N	r	Significance
Emotional Intelligence & Critical thinking	50	0.292	At 0.05 level

From table 2, it can be seen that the obtained value of  $r$  is greater than the value of significance at 0.05 level. Therefore, the correlation between Emotional Intelligence and Critical Thinking is found to be significant at 0.05 level, which further reveals the fact that the variables EQ and CT of male prospective teachers were significantly correlated and show positive relationship.

Thus, **Hypothesis 2**, "There is no significant relationship between Emotional and Critical thinking of male prospective teachers." **is rejected**.

### Conclusion

On the basis of the result and its interpretation, it can be concluded that:

- There is significant correlation between Emotional Intelligence and Critical Thinking in case of female prospective teacher.
- There is positive relationship between Emotional Intelligence and Critical Thinking in case of female prospective teachers.
- There is significant correlation between Emotional Intelligence and Critical Thinking in case of male prospective teacher.
- There is positive relationship between Emotional Intelligence and Critical Thinking in case of male prospective teachers.
- Gender did not moderate the correlation between Emotional Intelligence & Critical Thinking as in both case positive correlation is seen between EI and CT.
- It can also be concluded that for the improving critical thinking, emotional intelligence of the prospective teachers should be improved.

### Recommendation

From the analysis of the data, it can be concluded that emotional intelligence and critical thinking are significantly correlated and so to develop critical thinking, emotional intelligence of prospective teachers need to be work upon. Prospective teachers need to fight from the evils like stress, anxiety, frustration that they may face while holding multiple responsibilities in the education system. Following recommendation has been given to enhance the emotional intelligence of the prospective teachers:

- Government should provide a guideline to the curriculum planners so that they take into account the link between EQ and CT while framing a curriculum.
- College holding B.Ed. should organize Seminars/workshop/conference and other activities for developing EQ of their prospective teachers as it contribute for the development of Critical Thinking.
- Research & studies to examine the effect of Learning style/ pattern on the development of EQ and CT in different subjects should also be motivated.
- Prospective teachers should learn the methods of proper development of social skills for better inter-personal relationships and communication with others.
- Prospective teachers should devote more time and efforts to develop not only the cognitive professional skills but also the affective skills.
- Prospective teachers should try to develop the trait of a good listener.
- To develop the critical thinking the prospective teachers should know how to assess their own personal weakness, strengths and preferences and their possible impact on decisions they take.
- Prospective teachers should try to practice the art of managing the feelings and emotions as adequately as possible.
- Prospective teachers should practice to be more self aware of their own emotions so that they will be able to understand what they feel at particular time and can help their future students in doing the same.
- Prospective teachers should try to develop their scientific attitude and should try to find out the reason of everything to foster their critical thinking.

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- ~ Note: the primary data was collected before COVID-19.

