

## **A STUDY OF EMOTIONAL INTELLIGENCE OF PRE\_SERVICE TEACHERS IN RELATION TO GENDER AND DISCIPLINE**

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### **INTRODUCTION**

Previously it was general notion that only intelligence is responsible for achievement of students in all area of human life. But failing of intelligent students and passing with good marks of average students in examination was attracted attention of psychologist, educationists and other person associated with achievement of students. After this several researches have been conducted related demographic, affective and psychomotor variables in relation to achievement. These variables given several names (like non-cognitive/non-intellect/social-intellect, etc.). With end of the 20th, the human mind added a new dimension which is now being held responsible more for success than intelligence. This is termed as *Emotional Intelligence* and is measured as EQ (Emotional Quotient). Over the past several years the term emotional intelligence has received much attention as a factor that is useful in understanding and predicting individual's performance in all areas of life. Emotional Intelligence was first introduced by Mayer & Salovey (1990) and made popular by Daniel Goleman with publication of his book: "*Why it can matter more than IQ*" in 1995. After this more researches have been conducted related to emotional intelligence and several behavioural and other factors.

Emotions are personal experiences that arise from internal activities among physiological, cognitive and affective variables. Properly used emotions are an essential tool for successful life. But if emotions are out of control, it can produce aversive results. Emotions affect our relations with other people, our self-identity and our ability to complete a task. It is clear that emotional intelligence is connected to response, mood, feelings, and senses. Hence, emotional intelligence is the capacity to create positive outcomes in relationships with others and with oneself. Both the intellectual and emotional variables are responsible for controlling the human daily life behavior. Emotional intelligence refers to the capacity for recognising our own feelings and those of others, for motivating ourselves and for motivating emotions well in us and in our relationships. It is the ability to aware, appraise, express and manage emotions, generate feelings that facilitate thoughts and an ability to regulate emotions to promote growth. These two intelligences work efficiently and they alleviate human performance and mental abilities (Schilling, 1996). Goleman (1995) mentioned that although its complicated to tell which (emotional or mental intelligence) has the main role in the individual's success but many studies showed that mental intelligence represent only 20% of the overall individual's success and the 80% is represented by the Emotional Intelligence.

Several studies have been conducted related to emotional intelligence on different grade level of students. However, there are few studies on pre-service teachers' emotional intelligence have been conducted in India. Therefore, present study conducted on emotional intelligence of pre-service teachers in light of gender (male and female) and discipline (science and arts). Objectives and hypotheses of present study are given below.

## **OBJECTIVES**

Objectives of present study are:

1. To find out significant difference between male and female pre-service teachers on emotional intelligence.
2. To find out significant difference between arts and science student on emotional intelligence.

## **HYPOTHESES**

Objective wise hypotheses were formed in null form as follow:

1. There is no significant difference between male and female pre-service teachers on emotional intelligence.
2. There is no significant difference between arts and science student on emotional intelligence.

## **RESEARCHES RELATED TO EMOTIONAL INTELLIGENCE, GENDER AND DISCIPLINE**

Many researches on emotional intelligence in recent years have showed differences between male and female, arts and science students on emotional intelligence. Some studies also showing no gender difference on emotional intelligence. Abstracts of some recent researches given below.

Mayer & Salovey (1999) carried out a study which aimed at identifying the dimensional Emotional Intelligence as it represent a scalable capacity for individuals by applying a multi factor Emotional Intelligence standard, tested on 290 high school students, Aging 11 to 18 years old. The most important findings were : Girls exceeded boys in EI scores. Elder adolescents ( boy, girls) exceeded younger counterparts in the study.

Petrides, K.V. Furnham, A. (2000) conducted a study on two hundred and sixty predominantly white participants completed a measure of trait emotional intelligence (EI) and estimated their scores on 15 EI facets on a normal distribution with 100 points as the mean and 15 points as a standard deviation. Females scored higher than males on the "social skills" factor of measured trait EI. However, when the 15 facets of self-estimated EI were combined into a single reliable scale and the participants' measured trait EI scores were held constant, it was demonstrated that males believed they had higher EI than females.

Martha & George (2001) carried out a study of sex, school achievement, and race effects on emotional Intelligence. The study group comprised 319 students, (162 Males, 157 females) from a preparatory school in Mexico City. In this study, a modified EI check list (Tapia & Burrystuck, 1998) was used to scale four Dimensional EI, namely: empathy, feeling control, relationship management, and self control. The findings of the study indicate that males and females are differ significantly on relationship management and participation to educational achievement in favor of the male sample of the study. While at the same time this study found significant differences between males and females on self control and academic achievement in favor of females.

Radi (2001) studied emotional intelligence in relation to academic achievement and the ability to creative thinking for University Students. One goal the study sought was to determine any differences if exist between both sexes for university students. The study sample comprised 289 students of battalion 4 of the English Department in the education college aging between 19-20 years old. All gone through a questionnaire the researcher

prepared herself. The study yielded to significant statistical differences between males, females in relation to factors of Emotional Intelligence.

Saroja Bai (2011) studied emotional intelligence of Art, Science and Commerce Pre-University students. The study involves 500 Pre-University students selected from Bangalore Urban and Rural area who were studying in Science, Arts and Commerce stream by using stratified random sampling procedure. The study conducted on 269 male and 231 female students of Government, Private and BBMP (Bruhat Bangaluru Mahanagara Palike) Colleges. The present study reveals that: - The Arts, Science and Commerce students of Pre-University Colleges have significant difference in academic achievement, Anxiety Proneness and Emotional Intelligence. The Science students of Pre-University Colleges have higher academic achievement and Emotional Intelligence compare to Arts and Commerce students.

Tapia and Marsh (2001) found an overall significant main effect of gender and two-way interaction of gender - GPA on emotional intelligence. Study by Chu (2002) revealed that males have high level of emotional intelligence than that of females. The probable reason for the present finding might be due to the fact that emotional intelligence primarily deals with managing and expressing once emotions as well as social skills.

Katyal and Awasthi (2005) conducted a study on 150 adolescents (75 boys and 75 girls) aged 15 years, studying in X class in three randomly selected Government Model Senior Secondary Schools of Chandigarh. Emotional Intelligence Test by Codaty (2001) was used as a tool for collecting data. For analyzing the data, percentage distribution was used to find out percentage distribution of subjects with regard to emotional intelligence. 't' test was applied to find out gender differences in emotional intelligence. Results of this study reveal that majority of boys, girls and the total sample had good (61.33%, 64% and 62.66%, respectively) followed by low emotional intelligence (26.66%, 20% and 23.33%, respectively). A small percentage of subjects fell in the category of superior emotional intelligence in all the three type of samples. Results also show differences between mean scores of boys and girls with regard to emotional intelligence, with girls having higher emotional intelligence than that of boys. However, the difference touched only 0.10 level. Thus, the above finding may not be conclusive but suggestive of the trend.

Aljundi (2006) carried out a study aimed to identify differences of emotional intelligence between gifted students and ordinary counterparts, its relationship to academic achievement and all the above variables to the sex and age of the student. The sample of the study was 420 students of the ninth, tenth, and first secondary at the Jubilee and the Islamic scientific schools. The findings of the study discovered a significant statistical difference between gifted and ordinary students in favor of the gifted students. The same findings also showed no significant statistical differences between males and females gifted students on dimensional emotional intelligence. Regarding the age factor, this study displayed no significant statistical difference between age groups in dimensional emotional intelligence.

Singaravelu (2007) studied student teachers at primary level and found that no significant difference was found on emotional intelligence between men and women student teachers.

Namdar, Sahebiagh, Ebrahimi and Rahmani (2008) studied relationship between emotional intelligence and demographic variables. One forty four (144) nursing students were selected from Tabriz School of nursing and midwifery using census method. To assess the emotional intelligence, BarOn EQ-i, which includes 90 questions in 5 categories and 15 scales scoring in a range between 90 and 450, were used. Result of this study reveals that there is no significant difference between emotional intelligence of female and male students. Also, ANOVA result showed no significant difference among the emotional intelligence of

students in different birth ranks. Pearson correlation coefficient showed no significant relation between age and emotional intelligence.

Satouf (2008) conducted a study to identify the relationship between EI and the achievement motivation for gifted students in Jordan, plus testing the effect of sex variable on EI. The study sample comprised 120 students from King Abdullah excellence Schools, 68 student of first secondary class and 52 second secondary. To test the EI for the students, Abu Dayeh standard (2006) were used with validity and credibility standards been displayed. The results of Satouf study showed a positive relationship between EI and achievement motivation, the same results showed a significant statistical difference at the denotation level caused by the sex variable factor on EI standard test in favor of females.

Ahmad, Bangash and Khan (2009) conducted a study on a sample of one hundred and sixty (male = 80 and female=80). All of them were educated and their age was 25 years or above. They were more or less similar with regard to socioeconomic status and cultural background. Personal Data Sheet and Emotional Quotient Inventory (EQ-i) by Reuven BarOn (1997) was collected from sample. The result shows that males scored high than females on Emotional Quotient Inventory. High scores on this scale indicates the higher level of emotional intelligence, so the above findings clearly suggests that males are emotionally intelligent than females.

Narimani, Taklavi, and Siahpoosh (2009) studied to compare the emotional of male and female students. The samples of this study included all high school students of Ardabil (Iran). The results of study showed that mean score of leadership tendency and emotional intelligence among girl students are higher than that of boy students.

Afolabi, Awosola, and Omole (2010) studied influence of emotional intelligence and gender on job satisfaction among Nigeria Police Officers. One hundred and nineteen (male=79 and female=40) participants were selected. Emotional intelligence was measured by using a 25-item scale developed by Afolabi (2004). Result of this study shows that there is no gender difference on job satisfaction. This study also reveals that emotional intelligence has a significant influence on job satisfaction and significant interaction effect of gender and emotional intelligence on job satisfaction was found.

Gupta and Sushil Kumar (2010) conducted a study on 200 college going students and found that male students were better than female students in terms of emotional intelligence.

Shankman *et al.* (2010) studied emotional intelligence of 566 students from 139 colleges and universities in the United States. Findings of this study indicate that women demonstrate significantly higher levels of emotionally intelligent leadership in the constructs of self consciousness and consciousness of others.

Al Qamash, Altal and Jawal (2011) conducted a study on all registered MA students of educational psychology, gifted & creativity at the Princess Alia University College in the 2009/2010 academic year. Preliminary sample of the study was 195 student. One hundred and sixty (160) students were selected for study. Analysis of variance and t-test were used to analyse data. Results of this study showing that gender differences were found on all dimension of emotional intelligence (Establishing social relationships, identifying own emotions identifying others' emotions, Emotions management & control and Individual self esteem). Emotional intelligence of females was found higher on all dimensions.

## METHODOLOGY

### Sample

Two hundred eleven (211) pre-service teachers were selected from Modern Group Colleges of Education of Sangrur Districts. Out of 211 students 111 ( 78 Arts and 33 Science) were female students and 100 (58 Arts and 42 Science) were male students. Sample was selected using sample random sampling.

### Tool Used

To major emotional intelligence of pre-service teachers **Emotional Intelligence Scale** (EIS) by Anukool Hyde, Sanjyot Pethe and Upinder Dhar was used. This scale contains 34 items and measures emotional intelligence through 10 factors – self-awareness, empathy, self-motivation, emotional stability, managing relation, integrity, self-development, value orientation, commitment and altruistic behaviour. The split-half reliability co-efficient was found to be 0.88. Besides face validity, as all items were related to the variable under focus, the scale has high content validity. The higher score represented higher emotional intelligence.

## RESULTS AND DISCUSSION

To test hypotheses of present study t-test was used. Results of t-test are given in Table-1. Table-1 showing that t-value for differences between female and male for Arts and Science pre-service teachers are 3.575 and 2.651, respectively. Table values for significance at 0.01 level for 134 df and 73 df are 2.612 and 2.645 respectively. Obtained values are greater than table values. Therefore, significant gender differences exist for Science and Arts pre-service teachers on emotional intelligence. Means of science and Arts male students are higher on emotional intelligence than female Arts and Science students. Therefore, null hypothesis that “There is no significant difference between male and female pre-service teachers on emotional intelligence”, is rejected at 0.01 level for both-science and Arts pre-service teachers.

**Table-1**

**Descriptive statistics and t-values for gender and discipline differences.**

|                | <b>Discriptive Statistics</b> | <b>Arts</b> | <b>Science</b> | <b>t-value</b> |
|----------------|-------------------------------|-------------|----------------|----------------|
| <b>Female</b>  | <b>N</b>                      | 78          | 33             | 0.529          |
|                | <b>Sum</b>                    | 9932        | 4260           |                |
|                | <b>Ssquare</b>                | 1285052     | 556942         |                |
|                | <b>Mean</b>                   | 127.333     | 129.091        |                |
|                | <b>S.D.</b>                   | 16.268      | 14.806         |                |
| <b>Male</b>    | <b>N</b>                      | 58          | 42             | 0.199          |
|                | <b>Sum</b>                    | 7966        | 5794           |                |
|                | <b>Ssquare</b>                | 1108166     | 806950         |                |
|                | <b>Mean</b>                   | 137.345     | 137.952        |                |
|                | <b>S.D.</b>                   | 15.715      | 13.663         |                |
| <b>t-value</b> |                               | 3.575       | 2.651          |                |

Table-1 also showing that t-value for differences between Arts and Science for female and male pre-service teachers are 0.529 and 0.199, respectively. Table values for significance at

0.05 level for 134 df and 73 df are 1.982 and 1.984 respectively. Obtained values are less than table values. These results are indicating that no significant differences exist between Arts and science pre-service male and female teachers. Therefore, null hypothesis that "There is no significant difference between arts and science student on emotional intelligence", is not rejected at 0.05 level of significance for both-male and female pre-service teachers.

The obtained results are in line of the findings of studies reported by Katyal and Awasthi (2005), Chu(2002), Ahmad et al. (2009) and Gupta and Shushil Kumar (2010) that males are higher than female on emotional intelligence. However, review of previous researches showing that females are higher on emotional intelligence. Results related to emotional intelligence of Arts and Science students also fails to support result of Radi (2001) that Science students higher than Arts students on emotional intelligence. Lack of research evidences related to gender and discipline in connection to emotional intelligence needs further studies on large groups.

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