EMOTIONAL INTELLIGENCE AS RELATED TO GENDER, STREAM AND SOCIAL INTELLIGENCE

Ishita Ghaonta and Pawan Kumar

This study aims to assess the social intelligence of prospective teachers in relation to gender, stream, and emotional intelligence. Initial sample of the study consisted of 400 prospective teachers on which Rogan Emotional Intelligence Test (REIT) developed and standardized by Zainuddin (2005) and Social Intelligence Scale developed and standardized by Chadha and Ganeshan (2009) were administered. The sampled teachers were categorized into two extreme groups on the basis of emotional intelligence scores. Finally, the sample consisted of 136 prospective teachers i.e. 68 of each gender as well as 68 of each stream of teacher education. Analysis of Variance (ANOVA) was applied for data analysis. Significant differences were found in their social intelligence on the basis of their emotional intelligence. However, no significant differences were observed in the social intelligence of prospective teachers on the basis of their gender and stream.

KEYWORDS: Emotional Intelligence, Social Intelligence

INTRODUCTION

Personality of an individual cannot be studied independently in isolation. There are certain variables, which affect the human personality directly, or indirectly i.e. intelligence, aptitude, attitude, interest, creativity and motivation, etc. Intelligence and other cognitive abilities play a significant role in developing the human personality. Emotional intelligence as well as social intelligence plays a major role in distinguishing a human being from different
species of animals. No psychological and sociological variables can be studied in isolation because these variables affect each other directly.

**Emotional Intelligence**

The term emotional intelligence has been rooted from social intelligence which was first coined by Thorndike in 1920. Emotional intelligence is a term used to describe a person's ability to control impulses, show empathy, and persist in the face of obstacles with resilience and flexibility. It involves abilities, competencies and skills related to understanding of oneself and others, relating to peers and family members, and adapting to changing environmental situations and demands. Emotional Intelligence is the ability to understand, accept and recognize our own emotions and feelings, including their impact on ourselves and other people and to use this knowledge to improve our own behaviours as well as to manage and improve our relationship with others. It is the ability to understand emotions and their causes, the capability to effectively regulate these emotions in one and in others and most importantly being able to use the emotions as a source of information for problem solving, being creative and dealing with social situations. It is the accumulation of all the cognitive, non-cognitive and non-physical capabilities, competencies and skills a person possesses, that help him/her to deal with the demands and pressures of everyday life. Goleman (1995) subsumed the definition given by Salovey and Mayer (1900) with a lot of personality characteristics, which he believed would contribute positively to success in any domain of life. Israeli psychologist Bar-On (1996) who made the first commercially available test to measure 'emotional quotient' defined emotional intelligence as capabilities and skills that influence one's ability to succeed in coping with environmental demands and pressures which directly affect one's overall psychological well being. Mayer and Salovey (1997) described "Emotional intelligence involved the ability to perceive accurately, the ability to understand emotions and emotional knowledge and the ability to regulate emotions to promote emotional and intellectual growth. Davies et. al. (1998) quantitatively summarized the emotional intelligence literature and concluded that emotional intelligence was elusive as a construct. Fredrick (2001) described emotional intelligence as the ability to consciously make your emotions work for you.

**Social Intelligence**

Today, social scientists have beliefs that success in any kind of field such as work, school, or sports is not determined by intellect but by social intelligence. They believe that anything is possible if you are working with others because
you can lead, motivate, and get work done. Many behavioural scientists and psychologists believe that success in life is determined by social intelligence and not just by pure intelligence. The ability to work with others, lead and motivate others, and inspire team spirit is all part of social intelligence. For example doctors need to work with other colleges like nurses to take care of their patients and try to cure them. Surgeons need to work with a group of people to make their surgery a success. If people do not communicate with each other they would not know what role to play in their job and what work is to be done. The term social intelligence is being increasingly used today to describe the next rung on the evolutionary ladder of listening to and acting upon consumer conversation on the social web. That rung maps to a number of technology innovations. Chief among them are improved capabilities around analysing and integrating all sources of voice-of-the-customer data to generate more actionable insights. Social intelligence also speaks to an emerging corporate mindset regarding the strategic importance of social data and the need to better capitalize upon it. Social intelligence is the ability to understand and manage people and to act wisely in human relations. Social Intelligence is the ability to get along well with others, and to get them to cooperate with you. Sometimes referred simply as "people skills", social intelligence includes an awareness of situations and the social dynamics that govern them and knowledge of interaction styles and strategies that can help a person achieve his or her objectives in dealing with others. It also involves a certain amount of self-insight and a consciousness of one's own perceptions and reaction patterns. Thorndike (1920) defined social intelligence as “the ability to understand and manage men and women, boys and girls to act wisely in human relations”. Guilford (1958) suggested that social intelligence could be accounted for as fourth category of information. Goleman (2008) has drawn on social neuroscience research to propose that social intelligence is made up of social awareness and social facility. Cantor and Kihlstrom (1987) defined social intelligence as an individual’s fund of knowledge about social world. Moss and Hunt (1927) defined social intelligence as the ability to get along with other.

**Review Of Related Literature**

Walker (2001) studied the emotional intelligence of classroom teachers. The results showed that all research participants had an above average and higher emotional intelligence. Vincent (2003) conducted an 8-week study involving the evaluation of the social emotional intelligence programme for children. Mixed results were found. The EQ program’s integrity was high, but it was not
clearly linked to perceive short-term positive behavioural change and although
the teachers rated the program to be acceptable, the students did not. Kaur and
Kalaramna (2004) conducted the study to assess the existing levels of inter-
relationship between home environments, social intelligence and socio-
economic status and found that socio-economic status and home environment
affect social intelligence. Rosales (2005) examined the relationship between
emotional intelligence and communication styles in middle school teachers
and reported that a negative significant correlation between composite score of
emotional intelligence and the dramatic communicator style was found. Patil
and Kumar (2006) studied the emotional intelligence among students' teachers
in relation to sex, faculty and academic achievement and found that there is no
significant difference between emotional intelligence of male and female,
science and arts students' teachers. No significant relationship was found
between emotional intelligence and academic achievement of students' teachers.
Vyrost and Kyselova (2006) investigated interconnections between
social intelligence, wisdom, values and interpersonal personality traits. The
results revealed close mutual relations between social intelligence and wisdom
related knowledge. Crowne (2007) studied the relationship between social
intelligence, emotional intelligence, cultural intelligence and cultural
exposure. Results indicated that cultural intelligence and emotional
intelligence are related constructs. Singh (2007) found no significant difference
in social intelligence between less creative & highly creative adolescents and
between highly creative boys and girls. Further Gowdhaman and Murugan
(2009) investigated the emotional intelligence among the B.Ed. teacher trainees
and reported that the emotional intelligence of the B.Ed. teacher trainees is
normal. The study considered eleven variables to study the effect of emotional
intelligence among the B.Ed. teacher trainees. Among the eleven variables
gender, type of institutions, age, religion and social service were found to cause
significant effect on emotional intelligence among the B.Ed. teacher trainees.
The remaining seven variables do not cause any significant effect on the
emotional intelligence. In another study conducted by Gupta (2010) found no
significant difference in the dimensions as well as overall emotional
intelligence on the basis of gender, stream and social category of prospective
teachers.

**Need Of The Study**

Teachers who are quality conscious are committed, enthusiastic and
intellectually, socially and emotionally energetic in their work with children. A
teacher must not be socially intelligent but emotionally also because he has to
educate the generation of today and tomorrow. Social intelligence is very
important because it helps people get along in their jobs and do their work. A teacher who is emotionally and socially intelligent understands and expresses oneself effectively, understand and relate well with others and cope successfully with daily demands, challenges and pressures of teaching. That is why; taking into consideration these variables were selected for the present study. It is hoped that the present study would be of great significance for the teaching learning process.

**Objectives of the Study**

Following are the objectives of the study:

1) To study the effect of gender on emotional intelligence of prospective teachers.
2) To study the effect of academic stream on emotional intelligence of prospective teachers.
3) To study the effect of social intelligence on emotional intelligence of prospective teachers.
4) To study the combined interaction effect of gender and academic stream on emotional intelligence of prospective teachers.
5) To study the combined interaction effect of gender and social intelligence on emotional intelligence of prospective teachers.
6) To study the combined interaction effect of academic Stream and Social Intelligence on emotional intelligence of prospective teachers.
7) To study the combined interaction effect of Gender, Academic Stream and Social Intelligence on emotional intelligence of prospective teachers.

**Hypotheses**

The hypotheses of the study are:

1) There will be no significant effect of Gender on Emotional Intelligence of prospective teachers.
2) There will be no significant effect of Academic Stream on Emotional Intelligence of prospective teachers.
3) There will be no significant effect of social Intelligence on emotional intelligence of prospective teachers.
4) There will be no significant combined interaction effect of gender and academic Stream on emotional intelligence of prospective teachers.
5) There will be no significant combined interaction effect of Gender and Social Intelligence on emotional intelligence of prospective teachers.
6) There will be no significant combined interaction effect of academic stream and social intelligence on emotional intelligence of prospective teachers.
7) There will be no significant combined interaction effect of gender,
academic stream and Social Intelligence on emotional intelligence of prospective teachers.

RESEARCH METHODOLOGY

SAMPLE

To conduct the present study survey method of research was used. Initially, a sample of 400 prospective teachers (200 of each gender i.e. male and female and stream i.e. science and arts) were selected using random sampling technique. The final sample of the study consisted of 136 prospective teachers i.e. 68 of each gender as well as 68 of each stream of teacher education colleges of Himachal Pradesh.

TOOLS USED

1) Rogan Emotional Intelligence Test (REIT) developed and standardized by Zainuddin, and Ahmed.(2005) was used. The final draft contained 30 items and the scale contains five dimensions namely 1) self-awareness 2) self-regulation 3) motivation 4) empathy, 5) social skills. The reliability of the scale was determined by calculating Cranach's Alpha Co-efficient on a sample of 300 subjects. Cranach's Alpha Co-efficient is 0.70, which was fairly high and acceptable. In order to find out the validity from the coefficient of reliability, the reliability index was calculated, which indicated high validity on account of being 0.83.

2) Social Intelligence Scale developed and standardized by Chadha and Ganeshan (2009 revised) was also used. The scale is divided into five parts- Part-I, Part-II Part-III, Part-IV contains 36, 3, 7 and 8 items respectively and Part-V contains 12 pictures of renowned personalities of 20th /21st century of India. Further, the scale covers eight dimensions (Patience, Cooperativeness, Confidence level, Sensitivity, Recognition of social environment, Tactfulness, Sense of humour and Memory having 8,11,8,9,3,7,8 and 12 items respectively) of social intelligence. In the case of first four dimensions (Patience, Cooperativeness, Confidence and Sensitivity) scores of 1, 2 and 3 are given to three response alternatives. In case of the dimensions (Sense of humour and Recognition of social environment) one of three alternatives given is the appropriate response for which a score of 1 is given for the right response and 0 for the wrong one. In case of the tactfulness dimension the responses are in 'Yes' or 'No'. The correct response is to be awarded a score of 1. The last dimension that of Memory was awarded a score of 1 or 0 depending on whether or not the respondent's response is right or wrong. The reliability co-efficient of
Hindi version of SIS is 0.857, which is significant at 0.01 level of significance. The validity of the Hindi version of SIS was computed by correlating English-Hindi version. The validity co-efficient came out to be 0.91, which is significant at 0.01 level of significance.

**ANALYSIS AND INTERPRETATION OF DATA**

In order to study the main effects of type of gender, stream and social intelligence of sampled prospective teachers on the emotional intelligence, statistical technique of analysis of variance (2x2x2, factorial design involving two levels of gender i.e. male and female, two types of streams i.e. science and arts and two types of social intelligence i.e. Low and High) was applied. Total scores and means of emotional intelligence of prospective teachers with respect to their gender, stream and social intelligence are given in the Table 1, 2 and 3 as follows.

**Table 1**

**Gender and Stream-Wise Total Scores and Means on Emotional Intelligence.**

<table>
<thead>
<tr>
<th>Stream Gender</th>
<th>Arts</th>
<th>Science</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>2393 (70.38)</td>
<td>2371 (69.73)</td>
<td>4764 (70.05)</td>
</tr>
<tr>
<td>Female</td>
<td>2390 (70.29)</td>
<td>2405 (70.73)</td>
<td>4795 (70.51)</td>
</tr>
<tr>
<td>Total</td>
<td>4783 (70.33)</td>
<td>4776 (70.23)</td>
<td>9559 (70.28)</td>
</tr>
</tbody>
</table>

Table 1 shows that the female prospective teachers of science stream have the highest mean score (70.73) whereas the male prospective teachers of science stream possess the lowest mean score (69.73) on emotional intelligence. The female prospective teachers irrespective of their stream possess a higher mean score (70.51) as compared to the mean score (70.05) of their male counterpart.

From Table 2, it can be seen that the female prospective teachers having high social intelligence have the highest mean score (71.55) whereas the male prospective teachers having low social intelligence possesses the lowest mean score (69.20) on emotional intelligence. The female prospective teachers irrespective of their social intelligence possess a higher mean score (70.51) as compared to the mean score (70.05) of their male counterpart.
Table 2
Gender and Social Intelligence wise Total Scores and Means.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Soc. Intelligence</th>
<th>Mean -1/2 SD Low</th>
<th>Mean+1/2 SD High</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td></td>
<td>2353 (69.20)</td>
<td>2411 (70.91)</td>
<td>4764 (70.05)</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td>2362 (69.47)</td>
<td>2433 (71.55)</td>
<td>4795 (70.51)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>4715 (69.33)</td>
<td>4844 (71.23)</td>
<td>9559 (70.28)</td>
</tr>
</tbody>
</table>

Table 3
Stream and Social Intelligence wise Total Scores and Means.

<table>
<thead>
<tr>
<th>Stream</th>
<th>Soc. Intelligence</th>
<th>Mean-1/2 SD Low</th>
<th>Mean+1/2 SD High</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts</td>
<td></td>
<td>2361 (69.44)</td>
<td>2422 (71.23)</td>
<td>4783 (70.33)</td>
</tr>
<tr>
<td>Science</td>
<td></td>
<td>2354 (69.23)</td>
<td>2422 (71.23)</td>
<td>4776 (70.23)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>4715 (69.33)</td>
<td>4844 (71.23)</td>
<td>9559 (70.28)</td>
</tr>
</tbody>
</table>

From Table 3, it can be seen that the mean scores of the prospective teachers of arts and science stream are the same (71.23) whereas the prospective teachers of arts stream having low social intelligence possesses a higher mean score (69.20) as compared to prospective teachers of science stream having low intelligence.

From the means of emotional intelligence score of prospective teachers 'F' values are calculated. The results are summarized in Table 4:
Table 4
Summary of Analysis of Variance.

<table>
<thead>
<tr>
<th>Source of Variations</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>7.07</td>
<td>1</td>
<td>7.07</td>
<td>0.42</td>
</tr>
<tr>
<td>Stream</td>
<td>0.36</td>
<td>1</td>
<td>0.36</td>
<td>0.02</td>
</tr>
<tr>
<td>Social Intelligence</td>
<td>122.36</td>
<td>1</td>
<td>122.36</td>
<td>7.31**</td>
</tr>
<tr>
<td>Gender x Stream</td>
<td>10.07</td>
<td>1</td>
<td>10.07</td>
<td>0.60</td>
</tr>
<tr>
<td>Gender x Social Intelligence</td>
<td>1.24</td>
<td>1</td>
<td>1.24</td>
<td>0.07</td>
</tr>
<tr>
<td>Stream x Social Intelligence</td>
<td>0.36</td>
<td>1</td>
<td>0.36</td>
<td>0.02</td>
</tr>
<tr>
<td>Gender x Stream x Social Intelligence</td>
<td>0.59</td>
<td>1</td>
<td>0.59</td>
<td>0.03</td>
</tr>
<tr>
<td>Error Variance</td>
<td>2141.77</td>
<td>128</td>
<td>16.73</td>
<td></td>
</tr>
<tr>
<td>Total Sum of Squares</td>
<td>2283.82</td>
<td>135</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Significant at 0.01 level of Significance

Main Effect of Gender
Results shown in Table 4 reveals that the calculated value of 'F' ratio for the main effect of gender of prospective teachers on emotional intelligence is 0.42 for df 1 and 128, which is less than the table value of 'F' at 0.05 level of significance. Hence the Hypothesis no.1 i.e., 'There will be no significant effect of Gender on Emotional Intelligence of prospective teachers' is retained. Thus it is interpreted that male and female teachers possess almost equal level of social intelligence.

Main Effect of Stream
Data in Table 4 reveals that the calculated value of 'F' ratio for the main effect of stream of prospective teachers on emotional intelligence is 0.02 for df 1 and 128, which is less than the table value of 'F' at 0.05 level of significance. Hence the Hypothesis no.2 i.e., 'There will be no significant effect of Academic Stream on Emotional Intelligence of prospective teachers' is retained. Thus it is interpreted that science and arts teachers possess almost equal level of social intelligence.

Main Effect of Social Intelligence
Results in Table 4 reveal that the calculated value of 'F' ratio for the main effect of social category of prospective teachers on the emotional intelligence is 7.31 for df 1 and 128, which is more than the table value of 'F' at 0.01 level of
significance. Hence Hypothesis no. 3 i.e., 'There will be no significant effect of social Intelligence on emotional intelligence of prospective teachers' was not retained.

Further, t-value was also calculated to test the significance of difference between the means of socially more intelligent as well as less intelligent group. The t-value along with means and SDs is given in Table 5.

**Table 5**

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Means</th>
<th>SDs</th>
<th>SED</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>More Social Intelligence</td>
<td>68</td>
<td>71.23</td>
<td>3.73</td>
<td>0.68</td>
<td>2.79**</td>
</tr>
<tr>
<td>Less Social Intelligence</td>
<td>68</td>
<td>69.33</td>
<td>4.22</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Significant at 0.01 level of Significance**

In the above table the calculated value of 't' is 2.79 for df 134 which is significantly greater than the table value of 2.62 at 0.01 level of significance. Hence it can be concluded that the two groups differ from each other significantly. The mean difference of 1.90 scores between the means of the two groups affected the results significantly.

**Interaction Effect of Gender and Stream**

Data in Table 4 reveals that the calculated value of 'F' ratio for the interaction effect of gender and stream of prospective teachers on the emotional intelligence is 0.60 for df 1 and 128, which is less than the table value of 'F' at 0.05 level of significance. Hence Hypothesis no. 4 i.e., 'There will be no significant combined interaction effect of gender and academic Stream on emotional intelligence of prospective teachers' is retained. Thus it is interpreted that male and female teachers of science and arts stream do not interact significantly.

**Interaction Effect of Gender and Social Intelligence**

Results in Table 4 reveal that the calculated value of 'F' ratio for the interaction effect of gender and social intelligence of prospective teachers on the emotional intelligence is 0.07 for df 1 and 128, which is less than the table value of 'F' at 0.05 level of significance. Hence Hypothesis no.5 i.e., 'There will be no significant combined interaction effect of Gender and Social Intelligence on emotional intelligence of prospective teachers' is retained.
Interaction Effect of Stream and Social Intelligence

Data in Table 4 reveals that the calculated value of 'F' ratio for the interaction effect of stream and social intelligence of prospective teachers on the emotional intelligence is 0.02 for df 1 and 128, which is less than the table value of 'F' at 0.05 level of significance. Hence Hypothesis no.6 i.e., 'There will be no significant combined interaction effect of academic stream and social intelligence on emotional intelligence of prospective teachers' is retained.

Interaction Effect of Gender, Stream and Social Intelligence

Information provided in Table 4 reveals that the calculated value of 'F' ratio for the interaction effect of gender, stream and social intelligence of prospective teachers on the emotional intelligence is 0.03 for df 1 and 128, which is less than the table value of 'F' at 0.05 level of significance. Hence Hypothesis no.7 i.e., 'There will be no significant combined interaction effect of gender, academic stream and Social Intelligence on emotional intelligence of prospective teachers' is not retained.

CONCLUSIONS

On the basis of the finding of the present investigation following conclusions have been drawn Prospective teachers do not differ in their emotional intelligence with respect to their gender as well as stream. It means that gender as well as stream has no significant effect on emotional intelligence of prospective teachers. Further, the study revealed that prospective teachers differ significantly in their emotional intelligence with respect to their social intelligence. In case of interaction effects that is Gender x social intelligence, Stream x social intelligence and Gender x Stream x social intelligence do not have combined effect on emotional intelligence of prospective teachers even at 0.05 level of significance. Thus it is interpreted that male and female prospective teachers of science and arts streams having low and high levels of social intelligence do not interact significantly.

REFERENCES


