General Intelligence and Emotional Intelliigence among Higher Secondary Students

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Abstract : *In contrast to animal, men are definitely superior in all respects of behavior. But human beings themselves are not alike. The level of intelligence and emotional intelligence differ among each individual hence the objective of the present study was to examine whether there exist any relationship between intelligence and emotional intelligence among higher secondary students. Six hypotheses were formulated- (1) There will be positive correlation between intelligence and intra- personal awareness of emotions. (2) There will be positive correlation between intelligence and inter-personal awareness of emotions. (3) There will be positive correlation between intelligence and intra-personal management of emotions. (4) There will be positive correlation between intelligence and inter-personal management of emotions. (5) There will be significant gender difference in intelligence. (6) There will be significant gender difference in emotional intelligence. A sample of 200 students (100 males and 100 females) from few schools of Patna was selected through incidental-cum-purposive sampling method. General Mental Ability Test by M.C Joshi and Mangal Emotional Intelligence Inventory by Mangal and Mangal were taken as research tools. Mean, Standard Deviation, correlation and t-ratio were chosen as statistical tools. The obtained result revealed that there is positive correlation between intelligence and intra-personal awareness of emotions, inter- personal awareness of emotions, intra- personal management of emotions and inter-personal management of emotions, it is also found that there is significant gender difference in intelligence but there is no significant gender difference in emotional intelligence.*

Key words : *Higher secondary students, intelligence and emotional intelligence.*

Introduction :

Higher secondary students are those who are in a two-year education system after completing their class 10. Higher Secondary students belong to the age of adolescence. Adolescence is a period of social awakening and enhancing one's own knowledge to face the competitive world .Thus this sample is taken purposefully. Intelligence is the aggregate or global capacity of an individual to act purposefully, to think rationally, and to deal effectively with his environment.. Emotional Intelligence is the ability to monitor one's own and other people's emotions, to discriminate between different emotions and to label them appropriately, and to use emotional information to guide thinking and behaviour. There are four dimensions in emotional intelligence test these are (1) intra-personal awareness of emotions (being aware of one's own emotions), (2) inter- personal awareness of emotions (being aware of others emotions), (3) intra- personal management of emotions (managing one's own emotions) and (4) inter- personal management of emotions (managing others emotions).

Purpose:

The purpose of the present study was:

- To examine whether there exists any relationship between General Intelligence & Emotional Intelligence among higher secondary students.

- To see whether there is any gender difference in the General Intelligence of the students.

- To assess whether there exists any gender difference in Emotional Intelligence of the students.

Hypotheses:

1. There will be positive correlation between intelligence and intra-personal awareness of emotions.

2. There will be positive correlation between intelligence and inter-personal awareness of emotions.

3. There will be positive correlation between intelligence and intra-personal management of emotions.

4. There will be positive correlation between intelligence and inter-personal management of emotions.

5. There will be significant gender difference in intelligence.

6. There will be significant gender difference in emotional intelligence.

Method of the study:

Sample: A sample of 200 higher secondary students (100 males and 100 females) were taken from few schools of Patna, the capital of Bihar. The sample consisted of students studying in XI and XII standards having an age range of 16 –18 years.

Research Tools: The following research tools were used for data collection:

1. General Mental Ability Test by Joshi, M.C.

2. *Mangal Emotional Intelligence Inventory (MEII) by Mangal and Mangal a speed test. Emotional Intelligence Inventory is developed by S.K. Mangal and Mrs. Shubhra Mangal. It has been designed for the use of Hindi and English knowing 16+ of age of school. In 1956, Prof. Mohan Chandra Joshi developed the General Mental Ability Test. It is a verbal test in which the questions are arranged in order of their difficulty level in a mixed form. It is designed for college and university students to measure their emotional intelligence*

Procedure of Data Collection: The data were collected in two test sessions for 10 days. The tests were administered during regular class hours. This was done in order to minimize boredom and fatigue. Prior to administration of the test a rapport was established with the respondents. They *were encouraged and motivated to give their*

answers without any hesitation as the responses given by them would be kept confidential. Both the tests were administered as a group test. One of the tests that is, the General Mental Ability test was conducted as a speed test and the other test that is, Mangal Emotional Intelligence Inventory, was conducted as a non speed test.

Result Interpretation: The result interpretation deals with the analysis of data. For the quantitative data analysis the researchers have chosen suitable statistical methods according to the framed hypotheses.

Hypothesis - 1: "There will be positive correlation between intelligence and intrapersonal awareness of emotions."

Table - I

Co-efficient of Correlation between Intelligence and Intrapersonal Awareness of Emotions

Variables	Scores	N	r	df	Level of Significance
Intelligence	14751.85	200	.06	198	P < .05*
Intrapersonal Awareness	2992				

Table value at 0 .05 level = 0.13

*Not significant at .05 level

The obtained r value is 0.06 which is showing a positive correlation between IQ and intrapersonal awareness of emotions and thus it is going in favour of the framed hypothesis. The result was further verified on the basis of the level of confidence with the help of the table values. The values of df, that is, 198 on .01 level is 0.181, and on .05 level is .138. Therefore, it can be said that the obtained r value is less than both the table values at .01 and .05. For that reason it can be interpreted that although the result is showing positive correlation between the IQ and intrapersonal awareness of emotions, the result is not significant.

Hypothesis - 2: "There will be positive correlation between intelligence and interpersonal awareness of emotions."

Table – II

Co-efficient of correlation between Intelligence Quotient and Interpersonal Awareness of Emotions

Variables	Scores	N	r	df	Level of Significance
Intelligence	14751.85	200	.12	198	P < .05*
Intrapersonal Awareness	2974				

Table value at 0.05=0.13

*Not significant at 0.05 level

The obtained r value between the scores of intelligence quotient and interpersonal awareness of emotions is 0.12 which shows a positive correlation between IQ and intrapersonal awareness of emotions. Thus, it is going in favour of the framed hypothesis. The result was further verified on the basis of the level of significance with the help of the table values. The *df* is 198 which on .01 level is .181 and on.05 level is .138. Therefore, it can be said that the obtained r value is less than the table value of both .01 and .05 level. Thus, it can be interpreted that although the result shows positive correlation between the IQ and interpersonal awareness of emotions, the result is not significant.

Hypothesis - 3: "There will be positive correlation between intelligence and Intrapersonal management of emotions."

Table-III

Co-efficient of correlation between Intelligence Quotient and Intrapersonal Management of Emotions

Variables	Scores	N	r	df	Level of Significance
Intelligence	14751.85	200	.19	198	P < .01*
Intrapersonal Awareness	3510				

Table v alue at 0.01=0.81 and 0.05=0.13

**Significant at 0.01 level

In the present research the obtained *r* value between IQ and intrapersonal management of emotions is .19 which shows a positive correlation between IQ and intrapersonal management of emotions and thus it goes in favour of the framed hypothesis. The result was further verified on the basis of the level of significance with the help of the table values. The values of df , that is,198 on .01 level is .181 and at .05 level is .138. Therefore, it can be said that the obtained r value is more than both the table values of .01 and .05. For that reason, it can be interpreted that the result showing positive correlation between the IQ and interpersonal awareness of emotions is significant.

Hypothesis - 4: "There will be positive correlation between intelligence and interpersonal management of emotions."

Table -IV
Co-efficient of correlation between Intelligence Quotient and Interpersonal Management of Emotions

Variables	Scores	N	r	df	Level of Significance
Intelligence	14751.85	200	.12	198	P < .05*
Intrapersonal Awareness	3346				

Table value at 0.01=0.81 and 0.05=0.13

*Not significant at 0.05 level

The obtained r value between IQ and interpersonal management of emotions is .12 which is showing a positive correlation between IQ and interpersonal management of emotions and thus it is going in favour of the framed hypothesis The result was further verified on the basis of the level of significance with the help of the table values. The values of df, that is, 198 on .01 level is .181 and on .05 level is .138. Therefore, it can be said that the obtained r value is less than both the table values of .01 and .05. Thus, it can be inferred that, although the findings show positive correlation between the IQ and interpersonal awareness of emotions, they are not significantly correlated.

Hypothesis - 5: "There will be significant gender difference in Intelligence Quotient"
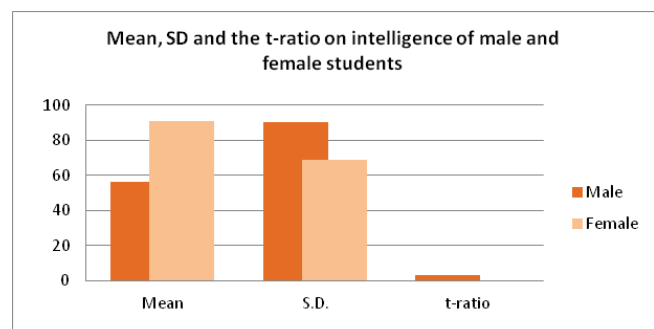
Table -V
Mean, SD and the t-ratio on intelligence of male and female students

Gender	N	Scores	Mean	S.D.	t-ratio	df	Level of Significance
Male	100	646.77	56.47	90.53	3.04	198	P>.01**
Female	100	105.08	91.05	68.83			

Table value at 0.01=2.60 and 0.05=2.35

Significant at 0.01 level

The mean of IQ scores of male students is 56.47 and female students is 91.05. There is a difference of 34.58. The Standard Deviation, that is, S.D. of boys is 90.53 and of girls is 68.83 with the difference of 21.87. The S.D. is high to its mean of scores of males, hence, it can be said that there is variability in males' response. But, the S.D. is low to its mean of scores of females, hence, it can be said that there is less variability in females' response in comparison to that of males. The obtained critical ratio is 3.04, which is significant at .05 level as well as at .01 level. According to the hypothesis, the obtained results confirm that there is a significant difference in the level of IQ, where male and female students are concerned. The same is presented graphically as below:

Hypothesis - 6: "There will be significant gender difference in Emotional Intelligence."

Table-VI

Mean, SD and the t-value of male and female students on Emotional Intelligence

Gender	Scores	N	Mean	S.D.	t-ratio	df	Level of Significance
Male	6340	100	63.40	64.57	.12	198	P<.05*
Female	6446	100	64.46	65.1			

Table value at 0.01=2.60 and 0.05=2.35

*Not significant at 0.05 level

The mean on EI scores of male students is 63.40 and female students is 64.46 respectively, the difference 1.06. Also, S.D. of boys is 64.57 and of girls is 65.1 with the difference of 0.53. The SD is higher than their respective means, hence, it can be said that there is variability in respondent's response. In the result of the present study it is found that the critical ratio is .12, which is not significant at .01 level and .05 level. Thus, the findings reveal that hypothesis is not proved, as there is no significant difference among male and female students on the level of EI. Therefore, further studies are required in this field. The same is presented graphically as below
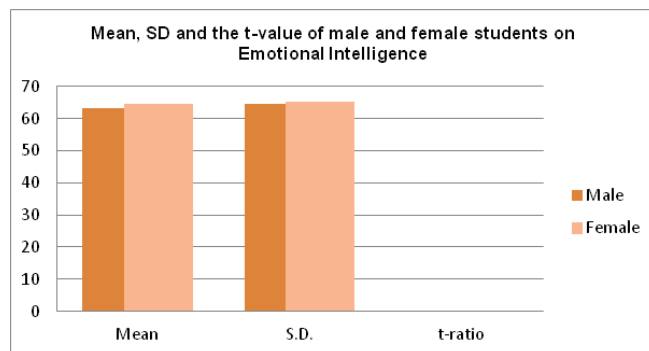
Conclusion:

On the basis of the sample studied following conclusions were drawn:

- The Intelligence and the intrapersonal awareness of emotions are positively correlated.

- The Intelligence and the interpersonal awareness of emotions are positively correlated.

- The Intelligence and the intrapersonal management of emotions are positively correlated.

- The Intelligence and the interpersonal management of emotions are positively correlated.

- There is significant difference in Intelligence between girls and boys.

- There is no significant difference in Emotional Intelligence between girls and boys.

Suggestions:

The researchers have the following suggestions to offer:

- One should try to develop the ability to perceive the feelings correctly both of oneself and of others.

- Try to give up the misgivings and misinterpretations of the feelings of others; it leads to hostile attribution bias.

- In all situations, awareness of the feelings and emotions is most important.

- Be a good listener for better understanding of others and their feelings. Try to build your empathy.

- Do not try to suppress emotions; try to build a balance between rational thoughts and emotions.

- Try to manage your emotions properly as adequately as possible.

- Use your emotions as motivating factors rather than as hindrances and obstacles in your way.

- Have ways for proper development of social skills, for better communication and interpersonal relationships. Don't break the communication channels.

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