Emotional intelligence and academic performance of higher secondary school students: A study in Kamrup district, India.

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Abstract

The present study aims to investigate the relationship between emotional intelligence and academic performance of the students at the higher secondary level. Using stratified random sampling technique 400 students, from the higher secondary level in kamrup district (Assam). The Emotional Intelligence scale (Dr.A.K Sing and Dr.S Narain, 2014) has been used to assess the emotional intelligence and the marks scored in H.S.L.C examination. The data collected is subjected to statically analysis namely percentage, graphical Representation, coefficient of correlation, ‘t’ test. Results show a positive significant correlation between emotional intelligence and academic performance among the students of higher secondary level.

Keywords: Emotional Intelligence, Academic Performance

1. Introduction

In India our education system is divided in to three stage- Primary, Secondary and Higher education. Higher Secondary stage is the most crucial stage of pupil’s life. This stage of education is considered as the most significant stage of human life as it determines the future life of young generation. The students of the Higher Secondary stage belong to the adolescence period of life. Adolescence is one of the important periods of human life. This period is characterized by innumerable and unique problems. Adolescence is a transitional stage of physical and mental human development that occurs between childhood and adulthood. This transition involves biological, social and psychological changes shown in their personality traits. Cognitive, emotional and attitudinal changes which are characteristics of adolescence, often take place during this period, and this can be cause of conflict, stress and depression on one hand and positive personality development on the other.

Emotional Intelligence is the capability of individuals to recognize their own emotions and those of others discern between different feelings and label them appropriately, use emotional information to guide thinking and behavior and manage and or adjust emotions to adapt to environment or achieve one’s goal. In the words of Goleman, “Emotional Intelligence refers to an ability to separate healthy from unhealthy feelings and how to turn negative feelings into positive”. Emotional Intelligence occupies a significant place in human life. In the present circumstances, youth as well as children are facing difficulties in their life. These difficulties are giving rise to many psycho-somatic problems such as anxiety, tension, and frustration and emotional upsets in day to day life. So, the study of emotional life is now emerging as a descriptive science, comparable, with anatomy. It deals with interplay of forces with intensities and quantities. As Emotional Intelligence plays central place in human life, one is expected to have emotional intelligence in order to lead an effective life.

The term Academic Performance refers to the degree or level of success attained in some specific task, specially, scholastic performance. Assessment of academic performance is largely confined to the evaluation in terms of information, knowledge and understanding. As the effectiveness of any educational system is measured to the extent the student’s involve

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in the system achieved, so, in general performance refers to the scholastic or academic performance of the student at the end of an educational programme.

Emotional Intelligence is an essential factor for progressing academic performance of the students. It is well known that a good student is often referred to as being ‘Intelligent’, or ‘well-behaved’ or ‘academically successful’

2. **Significance of the study**

   Present study has been undertaken to measure the level of Emotional Intelligence and Academic Performance of the Higher Secondary school students. The result of the present study will provide a base which may help in strengthening the academic performance of the Higher Secondary school students. The findings will also act as a linkage of Emotional Intelligence and Academic performance which in turn imparts a significant role in the development of academic performance of the Higher Secondary school students. This study will correlate the Emotional Intelligence and Academic Performance which may lead to greater achievements for prosperous and bright future of Higher Secondary school students. After review of related literature and researches done earlier related to this proposed study, the investigator found that a very few studies have been conducted on the above mentioned topic, specially in our state. Thus, it is a potential area of research in the field of Emotional Intelligence and Academic Performance of the Higher Secondary school students.

3. **Objectives of the study**

   1. To measure the level of emotional intelligence of higher secondary school students.
   2. To find out whether students differ in emotional intelligence in relation to –
      (a) Gender (Boys and Girls)
      (b) Location (Rural and Metro)
   3. To measure the level of academic performance of higher secondary school students.
   4. To find out whether students differ significantly in Academic Performance in relation to –
      (a) Gender (Boys and Girls)
      (b) Location (Rural and Metro)
   5. To find out the relationship between emotional intelligence and academic performance of higher secondary school students

4. **Hypotheses of the study**

   On the basis of the above objectives following null hypotheses have been formulated-

   **Ho₁**: There exists no significant difference in emotional intelligence of higher secondary school students in relation to-
   (a) Gender (Boys and Girls)
   (b) Location (Rural and Metro)

   **Ho₂**: There exists no significant difference in Academic Performance in relation to –
   (a) Gender (Boys and Girls)
   (b) Location (Rural and Metro)

   **Ho₃**: There exists no relationship between emotional intelligence and Academic Performance of the higher secondary school students

4. **Operational definitions and terms**

   **Emotional Intelligence**: Emotional Intelligence refers to the mental processes involved in the recognition, use, understanding, and management of one’s and others emotional state required in solving problems and regulating behaviour.

   **Academic Performance**: Academic Performance refers to the performance (Marks) of students in the HSLC examination conducted by SEBA.

   **Higher Secondary School Students**: In the present study the students of higher secondary level of education studying in the Govt. Provincialised schools are meant as higher secondary school students

5. **Delimitation of the study**

   The present has been delimited as follows—
   1. The study has been confined only to the Govt. Provincialised Assamese medium higher secondary schools of Kamrup District of Assam.
   2. Only the higher secondary 1st year students have been considered as the sample for the present study.
   3. Only the Arts stream students have been selected as the sample for the present study.

6. **Methodology of the study**

   **Method of the study**: Descriptive survey method has been adopted in order to carry out the present investigation.

   **Population and sample**: In the present study, there are 81 govt. provincialised higher secondary schools of Kamrup district, out of which 8 schools have been selected as the sample for the study.

   On the other hand the total no. of students 3797 in govt. provincialised higher secondary schools of Kamrup district, out of which 400 students have been selected as sample for the present study.

   The sample has been selected with the help of stratified Random Sampling technique.
6. **Sample for the study**

Sample Schools -8

- Kamrup Rural - 4
- Kamrup Metro – 4

Sample Students 400

- Kamrup Rural - 200
- Kamrup Metro – 200

Boys -100

Girls – 100

7. **Tools for data collection**

To meet the objectives of the present study the following tools have been used by the investigation for data collection.

- Emotional Intelligence Scale developed by Dr. A.K Sing and Dr. S Narain. (year-2014)
- Academic performance, here taken as the percentage of marks obtained in H.S.L.C examination. (2017)

8. **Analysis and interpretation of data**

After collection of data for the study a systematic objective wise analysis and interpretation has been made as following:

**Objective 1:** To measure the levels of emotional intelligence of the higher secondary school students.

**Table 1:** Showing the number and percentage of EI of higher secondary school students in different levels.

<table>
<thead>
<tr>
<th>Level</th>
<th>Number</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High EI</td>
<td>36</td>
<td>9.0</td>
</tr>
<tr>
<td>Average EI</td>
<td>259</td>
<td>64.5</td>
</tr>
<tr>
<td>Low EI</td>
<td>105</td>
<td>26.3</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100</td>
</tr>
</tbody>
</table>

**Fig. 1:** Graphical representation of number and percentage of EI of higher secondary school students in different level.
9. **Findings**
   From the above Table it has been found that 9.0% higher secondary school students have high Emotional Intelligence. Again, 64.5% higher secondary school students have average Emotional Intelligence. On the other hand 26.3% higher secondary school students have low Emotional Intelligence. It means majority of students have average Emotional Intelligence.

   **Objective:** 2:- To find out whether students differ significantly in emotional intelligence in relation to-
   (a) Gender (Boys and Girls)
   (b) Location (Rural and Metro)
   **H₀:** There exists no significant difference in emotional intelligence of the higher secondary school students in relation to-
   (a) Gender (Boys and Girls)
   (b) Location (Rural and Metro)

**Table 2 (A):** Showing the Mean , S.D, Std. Error, ‘t’ Value and level of significance of 200 boys and 200 girls higher secondary school students on emotional intelligence

<table>
<thead>
<tr>
<th>Variable</th>
<th>Boys</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>S.D</td>
<td>Std. Err</td>
<td>M</td>
<td>S.D</td>
<td>Std. Err</td>
<td></td>
</tr>
<tr>
<td>Emotional</td>
<td>22.48</td>
<td>3.487</td>
<td>.247</td>
<td>21.82</td>
<td>3.144</td>
<td>.222</td>
<td></td>
</tr>
<tr>
<td>Intelligence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Significant at .05 level

**Fig. 2:** Graphical representation of Means of Boys and Girls students on emotional intelligence

**Findings and Interpretation:** From the Table 2(A), it has been found that the mean of EI score of Boys is 22.48 and that of Girls is 21.82 and the calculated t-value is 1.973, which is significant at .05 level. Hence, the null hypothesis has been rejected at .05 level of confidence.

From the observation it can be said that, Boys have more EI than Girls.
Findings and Interpretation: From the Table 2(B), it has been found that the mean of EI score of Metro is 23.03 and that of Rural is 21.27 and the calculated t-value is 5.487, which is highly significant at .01 level. Hence, the null hypothesis has been rejected at .01 level of confidence. From the result it is observed that, students of metro have high EI than Rural.

Objective 3: To measure the level of academic performance of higher secondary school students.

Table 2(B): Showing the Mean, S.D, Std. Error, 't'- Value and level of significance of 200 Metro and 200 Rural higher secondary school students on emotional intelligence

<table>
<thead>
<tr>
<th>Variable</th>
<th>Rural</th>
<th></th>
<th></th>
<th>Metro</th>
<th></th>
<th></th>
<th>df</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional</td>
<td>M</td>
<td>S.D</td>
<td>Std. Err mean</td>
<td>M</td>
<td>S.D</td>
<td>Std. Err mean</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intelligence</td>
<td>21.27</td>
<td>3.243</td>
<td>.229</td>
<td>23.03</td>
<td>3.191</td>
<td>.226</td>
<td>398</td>
<td>5.487**</td>
</tr>
</tbody>
</table>

Significant at .01 level

Fig. 3: Graphical representation of Means of Metro and Rural students on emotional intelligence

Table 3: Showing the number and percentage of AP of higher secondary school students in different levels.

<table>
<thead>
<tr>
<th>Level</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Div(60 and above)</td>
<td>92</td>
<td>23.0</td>
</tr>
<tr>
<td>2nd Div(45 – 59)</td>
<td>230</td>
<td>57.5</td>
</tr>
<tr>
<td>3rd Div(30—44)</td>
<td>78</td>
<td>19.5</td>
</tr>
</tbody>
</table>
**Findings:**

- From the above Table it is found that 23.0% higher secondary school students have secured 1st division.
- Again 57.5% higher secondary school students have secured 2nd division.
- 19.5% higher secondary school students have secured 3rd division.
- From the analysis it has been found that majority of the students have secured 2nd division.

**Objective 4:** To find out whether students differ significantly in academic performance with respect to – (a) Gender (Boys and Girls); (b) Location (Rural and Metro)

**Table 4(A):** Showing the Mean, S.D, Std. Error, ‘t’- Value and level of significance of 200 boys and 200 girls higher secondary school students on academic performance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Boys</th>
<th>Girls</th>
<th>df</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic performance</td>
<td>M 53.87</td>
<td>M 52.41</td>
<td>398</td>
<td>1.783</td>
</tr>
<tr>
<td></td>
<td>S.D 7.656</td>
<td>S.D 8.640</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Std. Err .541</td>
<td>Std. Err .611</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fig. 4:** Graphical representation of number and percentage of AP of higher secondary school students in different levels.

**Fig. 5:** Graphical representation of Means of Boys and Girls students on Academic Performance.
Findings and Interpretation: From the Table 6(A), it has been found that the mean SC score of Boys is 53.87 and that of Girls is 52.41 and the calculated t-value is 1.783, which is not significant. Hence, the null hypothesis is accepted. From the observation it can be said that there is no difference between boys and girls in terms of academic performance.

Table 4(B): Showing the Mean, S.D, Std. Error, ‘t’- Value and level of significance of 200 Rural and 200 Metro higher secondary school students on Academic performance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Rural</th>
<th>Metro</th>
<th>df</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>50.93</td>
<td>55.35</td>
<td>398</td>
<td>5.595**</td>
</tr>
<tr>
<td>S.D</td>
<td>7.918</td>
<td>7.863</td>
<td>398</td>
<td></td>
</tr>
<tr>
<td>Std. Err. Mean</td>
<td>.560</td>
<td>.556</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Significant at .01 level

Fig. 6: Graphical representation of Means of rural and metro students on Academic Performance

Findings and Interpretation: From the Table 6(B), it has been found that the mean AP score of Rural students is 50.93 and that of Metro students is 55.35 and the calculated t-value is 5.595, which is highly significant. Hence, the null hypothesis is rejected. From the observation it can be said that there is a significant difference between Rural and Metro students in terms of academic performance. From the mean value it can be said that, Metro students are better in academic performance than rural students.

Statistical description for correlation

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Intelligence</td>
<td>22.15</td>
<td>3.332</td>
<td>400</td>
</tr>
<tr>
<td>Self-Confidence</td>
<td>33.61</td>
<td>7.347</td>
<td>400</td>
</tr>
<tr>
<td>Academic Performance</td>
<td>53.14</td>
<td>8.185</td>
<td>400</td>
</tr>
</tbody>
</table>
Objective 5: To find out the relationship between emotional intelligence and academic performance of higher secondary school students.

$H_0$,: There exists no relationship between emotional intelligence and Academic Performance of the higher secondary school students.

**Table 5:** Showing correlation between Emotional Intelligence and Academic performance of higher secondary school students

<table>
<thead>
<tr>
<th>Variable</th>
<th>Correlation</th>
<th>Significant level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Intelligence</td>
<td>.591</td>
<td>.01</td>
</tr>
<tr>
<td>Academic Performance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Significant at .01 level

**Findings and Interpretation:** From the above result it has been seen that, the correlation value of Emotional Intelligence and Academic Performance of higher secondary school students is .591, which is significant at .01 level of confidence.

Hence, it can be said that there is a significant correlation between Emotional Intelligence and Academic Performance of higher secondary school students.

Therefore, the null hypothesis is rejected here.

**Findings and discussion**

Major findings of the study has been discussed as follows:

- Findings from the objective 1 revealed that majority of students have average Emotional Intelligence.
  
  This finding is similar with previous findings of (Rajkhow, 2002) on the study “Emotional Intelligence of IAS officers”. The findings showed that majority of officer are in the average category of Emotional Intelligence.

- The present study, objective 2, it was also found that boys have more Emotional Intelligence than girls ,the findings also revealed that students of metro have high Emotional Intelligence than rural.

  On the other hand the previous findings of (Dr, A. pinku, 2017) revealed that Gender has no impact on Emotional Intelligence where as there is significant difference found in relation to locality as urban students are more Emotional mature in comparison to rural.

- From the objective 3 ,it has been found that majority of the students have secured 2nd division.

- Findings from the objective 4 revealed that, there is no difference between boys and girls in terms of academic performance . It was also found that metro students are better in academic performance than rural students.

  On the other hand the previous study (Mehna,1986) on “Some factors affecting academic achievement in science of standard ix students of Greater Bombay”. The result found that the significant predictors of achievement of class ix students in general science.

- In this study, objective 5 found that , there is a significant correlation between Emotional Intelligence and Academic Performance of higher secondary school students.

  This findings was similar for the previous findings of (Parker,2003 ,Aremu, Adyinka & Tella,2007)on the “Relationship between Emotional Intelligence ,Parental Involvement and Academic success among secondary school students”. The study found that there is a significant correlation between Emotional Intelligence and Academic success among secondary school students. Similarly, (Abisabra2000) had reported that there is a positive relationship between Emotional Intelligence and Academic Achievement among adolescent students.

10. **Conclusion**

The present study aimed to investigate the relationship between Emotional Intelligence and Academic Performance of Higher Secondary school students .From the study it has been found that boys have more emotional intelligence than girls. It has been also found that students of metro have high emotional Intelligence in than rural . The present study also found that there is a significant correlation between Emotional Intelligence and Academic Performance of Higher Secondary School students.
References


B.A Fatum 2008: examined on “A study on the relationship between Emotional Intelligence and Academic Achievement in elementary school children”.

