# Academic Achievement as a Function of Emotional Intelligence

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## Abstract

This study examined academic achievement as a function of emotional intelligence. Participants (N=400, 200= boys & 200= girls) from different CBSE schools of Gondia City of age 12 years were selected. The tools used were Multifactor Emotional Intelligence by Vinod kumar Shanuwal and General Class-room Achievement test by Dr. A.K. Singh and Dr. A. Sen Gupta. The findings revealed that a significant relationship between emotional intelligence and academic achievement.

*Keywords***:** Emotional Intelligence, Academic Achievement.

## Introduction

Academic Achievement is regarded as the end product of all educational endeavors (Balasubramanayan, 1997). It is considered as the sole criteria to evaluate the successful accomplishment of performance in a particular subject, area and course, usually visualized through skills, hard work and interest, typically summarized in various types of grades, marks and scores or descriptive commentary (Hawes et.al. 1982). In a classroom students are usually involved in developing and reconstructing knowledge through experiences, motivation, cooperation, exporting talk and teacher's intervention (Driver1989). Students need opportunities to construct knowledge by solving real problems and conducting, investigations, gathering, analyzing and interpreting information and data, drawing conclusions and reported findings (Blumenfield 1993).

Emotional Intelligence Emotion appears to be engaged in all aspects of human interaction. Our emotions are something that we are familiar with and use in our daily life, as well as something that we recognize reading in everyday situations as we read people face or body language.

According to Ciarrochi, Chan, Coputi and Robert (2001) emotional intelligence play a potential role in aspects of everyday life. Ciarrochi reported that an individual's perception, expression, understanding and management of emotions are directly related to the major life events that they have experienced. These emotions are then interrupted and adopted according to those life outcomes, either positive or negative. Hence, the importance of being able to understand and manage an emotion as it is applied to life.

Goleman (1995) viewed emotional intelligence as the ability to know and manage one's own emotion, recognize them in others and to handle relationships. It includes abilities such as

being able to motivate one self and persist in the face of frustration, to control impulses and delay gratification to regulate one's mood and keep distress from swamping the ability to think, to empathize and to hope. This definition of emotional intelligence includes self-control, zeal and persistence and the ability to motivate oneself.

**Emotional Intelligence & Academic Achievement**

The rapid development of the era is challenging the students to face the wave of globalization. Their ability to control emotions plays a significant role in determining their level of success in life. A high emotional intelligence helps to maintain a state of harmony in oneself and finally be more self confident in dealing with the challenges of living and learning inn educational institutions. Teaching emotional and social skills is very important in schools and college. It can affect academic achievement positively not only during the year, they are taught, but during the years that follows as well. Teaching these skills has long term effect on achievement (Elias et. al, 1992).

**Literature Review**

Ramzan, and Saira (2011) studied of emotional intelligence on academic achievement of prospective teachers in the subject of English. The participants of the study were included two hundred randomly selected prospective teachers at B.Ed. level as the sample of the study. Wong and Law emotional intelligence scale (WLIS) was used for the purpose of data collection. Data analysis was done by using person correlation co-efficient on SPSS version 15. Findings of the study showed that overall emotional intelligence score was positively correlated with the academic results of the prospective teachers.

Lotfi, K. F., Lotfi, A. A. and Vaziri, (2012) examined relationship between emotional intelligence and academic achievement. In a correlation study, a sample of 100 individuals was

selected using the opportunity or convenience sampling among the students of Islamic Azad University, Tehran South branch and tested with emotional intelligence questionnaires (Brad berry and Greaves, 2003). Results indicated that there was no significant association between emotional intelligence and the students' end of the term and diploma degrees.

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## Methodology

### Objective of the study

The major objective of this study to examine academic achievement as function of emotional intelligence. Present study will provide a better estimate of the true association between emotional intelligence and academic achievement. Hence the following hypotheses are examined these studies are:

1.  Academic achievement significantly varies amongst the high and low emotionally intelligent children.

2.  Significant sex differences exist with respect to emotional intelligence and academic achievement.

### Research design and sample

Descriptive survey method of research was used for the present study. Total 400 school children 200 boys and 200 girls of 12-13 years old, from different CBSE school of Gondia city were selected randomly as sample.

### Tools

### General class-room Achievement Test (GCAT):

GCAT has been developed by Dr. A.K. Singh and Dr. A. Sen Gupta. This test consists of 77 items. This test consist of three sections namely, English Achievement Test (EAT) which

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consists 30 items, Science Achievement Test (SAT) consisting 17 items, Social Science Achievement Test (SSAT) consisting 30 items. Here general achievement has been defined as success in English, Science and Social Studies.

**Multifactor Emotional intelligence scale (MEIS) Indian Version***:*

The Indian Version has been developed by Dr. Vinod Kumar Shanuwal. It consists of 141 items and 31 stimuli designed to measure the following four branches of emotional intelligence (a) perceiving emotions, (b) using emotions to facilitate thought, (c) understanding emotions, and (d) managing emotions.

**Procedure**

A 2 x 2 design was used.

After the scoring of all the tests was completed the data was analysed to find out relationship between emotional intelligence of the students with their academic achievement and sex.

First and foremost a master sheet that is the tabulation of the data was prepared. Initially, the data was subjected to mean and standard deviation and for inferential purpose the data was treated with ANOVA. Graphs were also used to present the data

**Results**

The results of the analysis on the study are presented in the tables below.

*Table 1 – Mean and S.D. of Academic Achievement, Emotional Intelligence of students*

| Variables | | | Boys | Girls |
|---|---|---|---|---|
| Academic Achievement | | M | 66.41 | 68.70 |
| | | SD | 11.92 | 11.28 |
| Emotional Intelligence | | M | 521.21 | 539.52 |
| | | SD | 44.47 | 46.57 |

Illustration of table 1 shows that the academic achievement of the students was average. The mean of academic achievement for boys 66.41(SD=11.92) and for girls it was 68.70 (SD =11.21). On the variable emotional intelligence, the mean for boys was 521.21 (SD=44.47) and for girls it was 539.42 (SD=46.57). The emotional intelligence of the children when compared with the norms given in the manual revealed more or less similar levels of emotional intelligence.

The objective of the study was to assess the impact of Emotional Intelligence on the academic achievement of the sample and also to explore the sex difference with respect to the same. For this the data was classified into four groups i.e. 2 levels for Emotional Intelligence and 2 for gender. The mean and SD's of Academic Achievement for the four classified groups are displayed in table no. 2.

*Table 2- Mean and SD's of Academic Achievement for 4 classified groups.*

| **Groups** | **A1B1** | **A1B2** | **A2B1** | **A2B2** |
|---|---|---|---|---|
| Mean | 66.29 | 66.53 | 66.43 | 70.97 |
| SD | 11.98 | 11.92 | 11.01 | 11.14 |

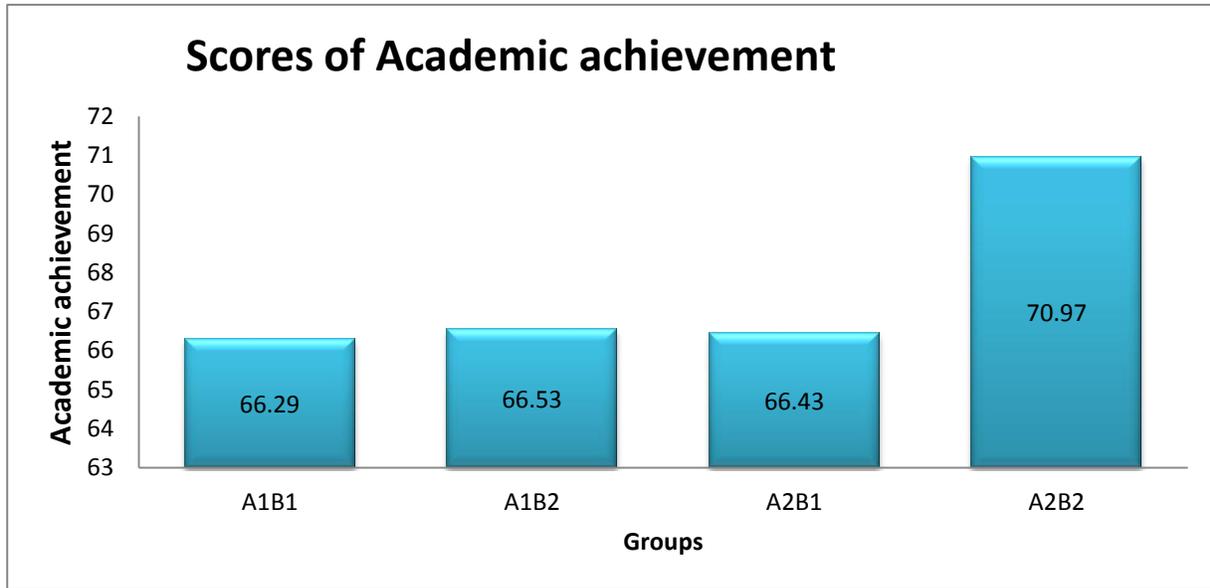A1= Boys, A2= Girls, B1= Low Emotional Intelligence, B2= High Emotional Intelligence

*Figure 1: Scores of academic achievement of the four groups.*

Illustration of table 2 reveals that there are differences in the mean values of academic achievement with respect to Emotional Intelligence and sex of the subjects. It is not possible to infer confidently whether the differences seen are significant or not only on the basis of descriptive statistics, hence, the data was subjected to inferential statistic i.e. 2 way Analysis of Variance. Complete summary of 2 ways ANOVA for the measure Academic Achievement is displayed in table no 3.

*Table 3: Complete summary of 2 way ANOVA for the measure Academic Achievement with respect to Emotional Intelligence*

| Sources of variation | SS | Df | MS | F-ratio |
|---|---|---|---|---|
| A :Sex (Male Vs Female) | 524.41 | 1 | 524.41 | 3.95* |
| B:EI  High EI Vs  Low EI | 571.21 | 1 | 571.21 | 4.30* |

| AxB | 462.25 | 1 | 462.25 | 3.48 |
|---|---|---|---|---|
| ess (within) | 52566.92 | 396 | 132.7447 | |
| Total | 54124.79 | 399 | | |

*p < 0.05

From the above table it is seen that the computed value F= 3.95 (df 1 & 396) is larger than the table value 3.84 at 0.05 level. Since the computed value is larger than the table value it can be confidently stated that the 2 groups differ significantly. From table 1 it is clear that the mean values of female students M=68.7, SD=11.28 is larger than the male students M=66.41, SD=11.92. Therefore it can be stated that girls' academic achievement is significantly higher than the boys' academic achievement. This is because girls take studies more seriously and are more sincere in studies than boys.

The calculated value of F=4.30 (for df 1 & 396) at 0.05 level is larger than the table value. Hence it can be said that there is a significant difference amongst high emotionally intelligent students and low emotionally intelligent students with respect to academic achievement. From table 2 it can be seen that the mean values of high emotionally intelligent students is larger than the low emotionally intelligent students. Therefore it can be said that students with high emotional intelligence scored significantly higher academic achievement than students with low emotional intelligence.

ANOVA results provide clear cut information about the main as well as the interaction effects. However in no way they tell whether the intergroup mean differences are significant or not. Hence the academic achievement data of the four classified groups were treated with Scheffe's Test of multiple comparisons. The obtained values are given in table 4.4.

*Table no 4- MSDi values computed by Scheffe's test for testing significance of intergroup mean differences for Academic Achievement measure*.

| Sr. No. | GROUPS | A1B1 | A1B2 | A2B1 | A2B2 |
|---------|--------|------|------|------|------|
| 1 | A1B1 | X | 2.88 | 0.98 | 1095.12** |
| 2 | A1B2 | | X | 0.5 | 985.68** |
| 3 | A2B1 | | | X | 1030.58** |
| 4 | A2B2 | | | | X |

** Significant at 0.01 level.

The values displayed in table no 4.4 are called as MSDi values. In scheffe's test the obtained MSDi values are presented in a matrix form. It is more convenient because by examining the relevant MSDi values it could be found out whether the 2 groups differ significantly or not.

Hence it can be said that the there are significant differences amongst low emotionally intelligent boys and high emotionally intelligent girls i.e. between group A1B1 and group A2B2, also there exists significant differences amongst high emotionally intelligent boys with high emotionally intelligent girls i.e. between group A1B2 and group A2B2. Similarly significant differences existed amongst low emotionally intelligent girls and high emotionally intelligent girls i.e. between groups A2B1 and A2B2. When the factors are segregated and studied it is seen

that emotional intelligence and gender as factors affected the academic achievement of the students.

## Discussion

Analysis of relationship among emotional intelligence and academic achievement in this investigation indicated that there is positive and significant relationship between emotional intelligence and academic achievement of the participants. This suggests that emotional intelligence could predict academic achievement.

The result of the present study revealed that emotional intelligence had a significant impact on academic achievement. This finding is consistent with the earlier research findings of Abisamra N.S. (2000), who found a significant relationship between emotional intelligence and academic achievement in eleventh graders. Sridevi et al. (2008) reported that there was a positive relationship between emotional intelligence, adjustment, self concept and achievement of higher secondary students. Sunbul, A. M.&Aslan Y. (2009), foundshowed that there were significant difference between the proficiency of emotional intelligence of girls and boys. Mahajan M.(2010), concluded that there was positive and significant relationship between academic achievement and emotional intelligence of boys and girls.

## Conclusion and limitation

It is important to acknowledge that this study has some limitations. However, there are many other variables that could affect the preference for academic achievement which should be studied in the future: these variables includes internal and external locus of control and others are

self esteem, self efficacy and cognitive ones (e.g. fluid and crystallized intelligence, spiritual intelligence).

The present study was conducted in Gondia district only. Thus the extents to which results apply to other cities. Only CBSE students were included in the participants.

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