

# Emotional Intelligence and Academic Achievement of Secondary School Students in Mathematics

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**Abstract:** *The term education has many different meanings. Each person who uses or reads or hears the word, interprets it in terms of his past experiences, his needs and his purposes and also according to his personal interest in and expectations of it. Learning is defined as modification of behavior through experience. It is also defined as the acquisition of a desirable behavioral pattern. In other words learning is the modification and co-ordination of the response of the organisms. This study focuses on the important psychological variables like emotional intelligence and academic achievement. Normative survey method was used for the research. Sample includes secondary students. Stratified sampling technique was used. The statistical technique used was correlation and t test. The hypotheses state that. 1) There will be significant correlation between emotional intelligence and academic achievement of secondary students. 2) There will not be significant difference between male and female students in their emotional intelligence. 3) There will not be significant difference between male and female students in their Academic achievement.*

**Keywords:** Education, Emotional intelligence, Academic achievement, Secondary school students, Learning

## 1. Introduction

The concept of education is still in the process of an evaluation and this process will never come to an end. As time passes there will be always a demand for revision of prevailing educational ideas. Teachers need to understand a subject enough to convey its essence to students. While traditionally this has involved learning on the part of the teacher. New institutional strategies put the teacher more in to the role of course designer, discussion and coach and students more in the role of active learners, discovering the subject of the course. In any case, the goal is to establish a sound knowledge base and skill set on which students will be able to build as they are exposed to different life experience. This study focuses on Emotional intelligence and Academic achievement in social science of secondary school students.

## 2. Need and Significance of the Study

It is presumed that students who are emotionally intelligent can successfully manage the stressful situation that they encounter in their day to day life. Academic achievement is considered as key to judge one's potentialities and capabilities. This study focuses on the important psychological variables like emotional intelligence and academic achievement. Thus emotional intelligence and academic achievement is need of special consideration and the investigator felt that the study is needed and it is significant in the contemporary educational practice.

### Statement of the Problem

The present study is entitled as: **Emotional Intelligence And Academic Achievement Of Secondary School Students In Mathematics Operational Definitions Of Key Terms**

### Emotional Intelligence

Emotional intelligence is the capacity for recognizing our own feelings and those of others, for motivating ourselves,

and for managing emotions well in ourselves and in our relationships (Goleman, 1998).

### Academic achievement

The term academic achievement refers to “performance in school in a standardized series of educational test” (Good 1974)

### Objectives of the Study

1. To find out whether there is any relation between emotional intelligence and academic achievement of secondary school students
2. To find out whether there was any difference between boys and girls in their emotional intelligence.
3. To find out whether there was any difference between boys and girls in their academic achievement.

### Hypotheses of the Study

1. There will be significant correlation between emotional intelligence and academic achievement of secondary school students
2. There will not be any significant difference between boys and girls in their emotional intelligence.
3. There will not be any significant difference between boys and girls in their academic achievement.

## 3. Methodology in Brief

Normative survey method (Sindhu, 1996) was adopted in the study.

- **Population:** The population for the investigation consisted of all secondary school students in Kerala following Kerala state syllabus.
- **Sample:** Sample of the present study consisted of 300 secondary school students.
- **Variables:** The variables of the present study include Emotional intelligence and learning style.
- **Tools:** The following standardized tools are used for the investigation.
  1. Emotional Intelligence Scale (Jayaraj & Sananda Raj, 1998)

2. Academic achievement will be measured on the basis of the marks scored for the first terminal examination.
3. Personal information schedule.

### Procedure for data collection

The investigator visited five selected schools from where the permission was taken in advance Investigator personally administer Emotional Intelligence Scale and learning style scale to students and with the help of a trained person for the hearing impaired students. The data collected from the students were analyzed statistically using appropriate statistical.

### Statistical techniques adopted

- 1) Karl Pearson 's product-moment method of correlation
- 2) Test of significance of difference between means of large independent sample (t test)

## 4. Scope of the Study

The study was designed with a view to finding the relationship emotional intelligence and academic achievement. The study would help in knowing how far the secondary school students differ in emotional intelligence and academic achievement with respect to gender of the students.. It is expected that the findings of the study would help the authorities to plan curricular and activities for secondary school students.

## 5. Analysis and Discussion

### Measures of Relationship between the Variables

**Table 1:** Correlation coefficient (r) between Emotional Intelligence and Academic Achievement

| Variables correlated                            | N   | r    | Level of significance | Verbal interpretation             |
|---|-----|------|-----------------------|-----------------------------------|
| Emotional Intelligence and Academic Achievement | 300 | 0.58 | 0.01                  | Marked or substantial correlation |

Table 1 shows that correlation between Emotional Intelligence and Learning Style secondary school students was 0.58 which was significant 0.01 level. This indicated that there existed a significant marked correlation between two variables. Therefore the relationship between emotional intelligence and learning style is substantial.

### Test of Tenability of Hypothesis 1

The hypothesis 1 entitled "There will be significant correlation between emotional intelligence and academic achievement of secondary school students" was accepted.

### Test of Significance of Difference Between Means (T Test)

Emotional Intelligence and academic achievement of secondary school students-analysis based on sex.

### Comparison of boys and girls in their emotional intelligence

The comparison of male and female students under study was done by selecting 170 boys and 130 girls for the variable emotional intelligence.

**Table 2:** Data and results of significance of difference between means of scores of boys and girls of secondary school students in their emotional intelligence

| Category | N   | Mean  | Standard deviation | t    | Level of significance |
|----------|-----|-------|--------------------|------|-----------------------|
| Male     | 170 | 66.99 | 22.23              | 1.68 | Not significant       |
| Female   | 130 | 71.14 | 19.74              |      |                       |

The data and results given in Table 2 represent that there is no significant difference between boys and girls with regard to emotional intelligence. The t obtained by t test is 1.68 is found to be not significant. This shows that there is no significant difference between boys and girls in their emotional intelligence.

### Test of Tenability of Hypothesis 2

The hypothesis 2 entitled "There will not be any significant difference between boys and girls of secondary school students in their emotional intelligence" was accepted

### Comparison of boys and girls in their Academic Achievement

The comparison of male and female students under study was done by selecting 170 boys and 130 girls for the variable Academic achievement.

**Table 3:** Data and results of significance of difference between means of scores of boys and girls in their Academic Achievement

| Category | N   | Mean  | Standard deviation | t    | Level of significance |
|----------|-----|-------|--------------------|------|-----------------------|
| Male     | 170 | 72.74 | 11.24              | 2.13 | Not significant       |
| Female   | 130 | 75.88 | 13.57              |      |                       |

The data and results given in Table 3 represent that there is no significant difference between boys and girls with regard to academic achievement. The t obtained by t test is 2.13 is found to be not significant. This shows that there is no significant difference between boys and girls in their academic achievement.

### Test of Tenability of Hypothesis 3

The hypothesis 3 entitled "There will not be any significant difference between boys and girls in their academic achievement" was accepted.

## 6. Conclusion

Each and every individual acquires some sort of education, even if he has never spent a day in a school, because all his acquired characteristics are the products of experiences and activities which are educational in nature. Education, thus, includes all influences in life. Emotional intelligence and academic achievement plays a significant role for cognitive affective and psycho motor development of children.

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