



EMOTIONAL INTELLIGENCE AND MATHEMATICAL ACHIEVEMENT AMONG HIGH SCHOOL STUDENTS

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Abstract:

The objective of this study is to examine the relationship between emotional intelligence and Mathematic achievement of the high school students. This research is descriptive with the use of correlation. The sample volume is 300 people, according to the Cochran formula. The samples were chosen by stratified random sampling among the high school students. Tools of this study are Bar-On emotional intelligence test second semester of 2015-2016 academic years. Mathematic score was used as the students' academic success index in Mathematics. The survey's information was analyzed in two levels of descriptive and inferential statistics via SPSS software. The results of the research showed that there is a meaningful and straight relationship between students' emotional intelligence and mathematic success. Father's education have significant role in the academic achievement and emotional intelligence of students.

Key Words: Student's Emotional Intelligence, Teacher's Emotional Intelligence, Mathematic Achievement, Mother's, Education & Father's Education.

Introduction:

Education is simply to humanize the human beings. 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 Mathematics Achievement in of high school students.

Objectives of the Study:

- ✓ To measure the level of Emotional Intelligence among the high school students.
- ✓ To measure the level of Mathematics Achievement among the high school students.
- ✓ To find out the relationship between Emotional Intelligence and Mathematics Achievement.
- ✓ To find out the significant influence of Independent variables on dependent variable Emotional Intelligence and mathematical achievement.

Methodology in Brief:

Design	:	Descriptive
Method	:	Normative
Technique	:	Survey

Sample of the Study:

A stratified representative sample of 300 students constituted from Government and Government aided and private Schools recognised by the Department of School Education, Tamil Nadu, situated in Theni Districts with due representation given to the variables viz., Gender, Nature of the School, Medium of Instruction, Type of the School, Locality of the School, Locality of the Family, Type of the Family, Monthly Income of the Family, Education of the Father, Education of the Mother, Religion, Going to Tuition

Tool:

The following tool was used by the investigator for the data collection:

- ✓ Emotional Intelligence Scale developed and standardized by S. Sathyagiri Rajan (2010)

Statistical Treatments:

The statistical treatments employed in the study are listed below:

- ✓ Mean
- ✓ Standard deviation
- ✓ 't' test for significance of difference between the means of independent samples.
- ✓ Pearson Product Moment Correlation 'r'

Hypothesis 1: There is a significant difference in the Emotional Intelligence among the high school students in terms of nature of the school.

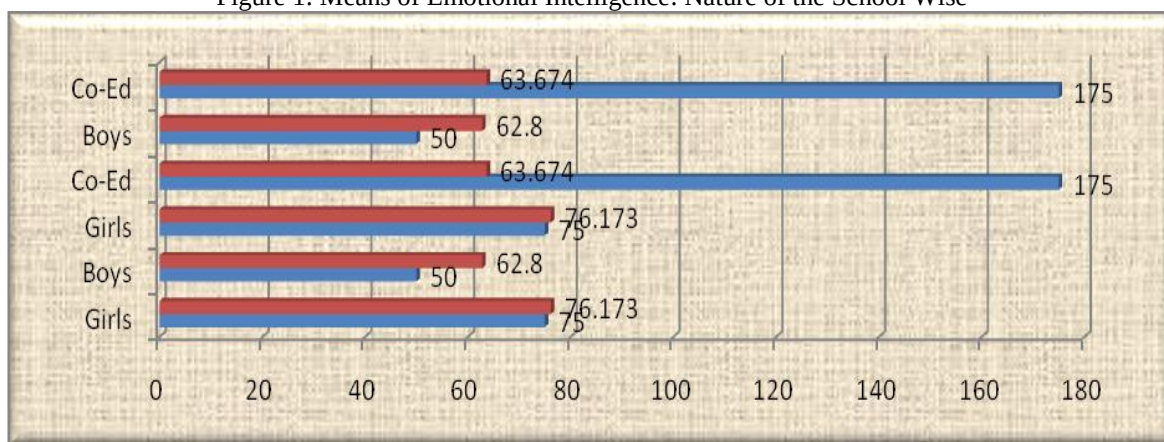
Table 1: Statistical Measures and Results of Test of Significance of Difference Between the Means of Emotional Intelligence: Nature of the School Wise

Variable	Sub-Variables	N	Mean	SD	'T' - Value	Significance At 0.05 Level
Nature of the School	Girls	75	76.173	19.548	3.533	Significant
	Boys	50	62.800	22.402		
	Girls	75	76.173	19.548	4.910	Significant
	Co-Ed	175	63.674	17.955		
	Boys	50	62.800	22.402	0.28	Not Significant
	Co-Ed	175	63.674	17.955		

The obtained 't' value 3.533 is greater than the table value 1.96 at 0.05 level of significance. This shows that there is a significant difference in Emotional Intelligence among the high school students in terms of nature of the school. Further, it is observed that students studying in girls school have high level of Emotional Intelligence than the students studying in boys school.

The obtained 't' value 4.910 is greater than the table value 1.96 at 0.05 level of significance. This shows that there is a significant difference in Emotional Intelligence among the high school students in terms of nature of the school. Further, it is observed that students studying in girls school have high level of Emotional Intelligence than the students studying in co-ed school.

Figure 1: Means of Emotional Intelligence: Nature of the School Wise



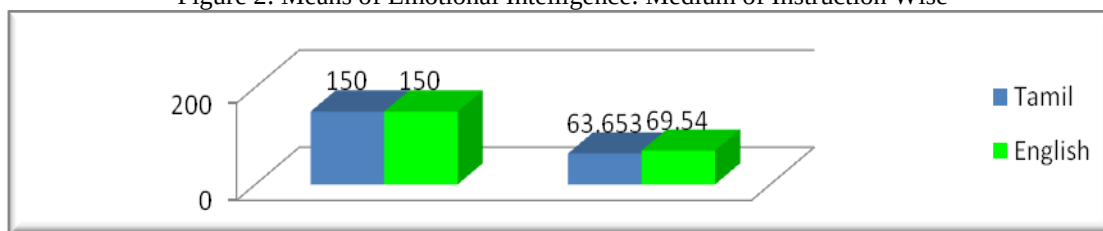
Hypothesis 2: There is a significant difference in the Emotional Intelligence among the high school students in terms of medium of instruction.

Table 2: Statistical Measures and Results of Test of Significance of Difference Between the Means of Emotional Intelligence: Medium of Instruction Wise

Variable	Sub-Variables	N	Mean	SD	'T' - Value	Significance At 0.05 Level
Medium of Instruction	Tamil	150	63.653	19.766	2.581	Significant
	English	150	69.540	19.735		

Further, it is observed that students studying in English Medium schools have high level of Emotional Intelligence than the students studying in Tamil Medium schools.

Figure 2: Means of Emotional Intelligence: Medium of Instruction Wise



Hypothesis 3: There is a significant difference in the Emotional Intelligence among the high school students in terms of type of the school.

Table 3: Statistical Measures and Results of Test of Significance of Difference between the Means of Emotional Intelligence: Type of the School Wise

Variable	Sub-Variables	N	Mean	SD	'T' - Value	Significance at 0.05 Level
Type of the School	Government	100	66.770	16.190	2.011	Significant
	Govt Aided	100	60.950	23.992		
	Government	100	66.770	16.190	2.235	Significant
	Private	100	72.070	17.327		

	Govt Aided	100	60.950	23.992	3.758	Significant
	Private	100	72.070	17.327		

The obtained 't' value 2.011 is greater than the table value 1.96 at 0.05 level of significance. This shows that there is a significant difference in Emotional Intelligence among the high school students in terms of type of the school. Further, it is observed that students studying in government school have high level of Emotional Intelligence than the students studying in government aided school.

The obtained 't' value 2.235 is greater than the table value 1.96 at 0.05 level of significance. This shows that there is a significant difference in Emotional Intelligence among the high school students in terms of type of the school. Further, it is observed that students studying in private school have high level of Emotional Intelligence than the students studying in government school.

The obtained 't' value 3.758 is greater than the table value 1.96 at 0.05 level of significance. This shows that there is a significant difference in Emotional Intelligence among the high school students in terms of type of the school. Further, it is observed that students studying in private school have high level of Emotional Intelligence than the students studying in government aided school.

Conclusions:

- ✓ Emotional Intelligence among the high school students is found to be high.
- ✓ Emotional Intelligence of the high school students is dependent upon Gender, School Kind, Medium of Instruction, Type of school, Locality of the School, Locality of the family, Education of the father, Going to tuition,
- ✓ Emotional Intelligence of the high school teachers is independent upon Type of the Family, Monthly Income of the Family, Education of the Mother and Religion.
- ✓ Mathematics Achievement among high school students is above the average level.
- ✓ Mathematics Achievement among high school students is dependent upon Gender, School Kind, Type of the School, Monthly Income of the Family.
- ✓ Mathematics Achievement among high school students is independent upon Medium of Instruction, Locality of the School, Locality of the family, Monthly Income of the Family, Education of the father, Education of the Mother, Religion, Going to tuition.
- ✓ There is a significant positive relationship between Emotional Intelligence and Mathematics Achievement among high school students.

Educational Implications:

Emotional Intelligence is vital correlates to students because without these no one can succeed in their life. Emotional intelligence plays a vital role in their study. One who has high Emotional intelligence live happily, whereas less level of Emotional Intelligent persons cannot achieve anything. This study reveals that the high school students who study in the girls school have high level of Emotional Intelligence as well as high level of Mathematics Achievement, the high school students who are living in the family with monthly income more than 25000 and studying in private schools alone score high Mathematics Achievement, the high school students who are living and studying in urban schools have high level of level of Emotional Intelligence as well as high level of Mathematics Achievement than their counterparts Hence they should be facilitated through proper training for developing their Emotional Intelligence. To tackle this situation the service organization and the government may take necessary action.

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