



# A Study On Measuring The Emotional Intelligence Level Of High School Students And Its Impact On Their Academic Performance

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## Abstract

The academic performance of the students during the high school is considered to be more important for their future career. The academic performance is affected by various factors internally and externally. To overcome all the challenges during their studies in high school, emotional intelligence is very important. Low emotional intelligence among students might affect their performance in academics. But empirical evidence for this is very minimal and thus this research has been conducted to find whether emotional intelligence affects the academic performance of the students by analyzing their high school Tamilnadu state board examination results. This research uses a descriptive method of research. The population used in this study was high school students who have completed their 12<sup>th</sup> standard as per the Tamilnadu state board Examination in Coimbatore area, and as many as 287 students were sampled in this study by random sampling. The data analysis was a simple linear regression test using IBM SPSS 23. The result of this study shows that the relationship between variables of 0.543 in a positive direction, with a coefficient of determination (R Square) of 0.374, which means that independent variables have an influence of 37.4% on dependent variables. Referring to the calculated F value = 62.869 with a Sig. rate of  $0.000 < 0.05$  means that the null hypothesis is rejected, and the research hypothesis is accepted. In conclusion, emotional intelligence positively affects students' academic performance.

**Key words:** Emotional intelligence, academic, performance, student, high school, correlation

## INTRODUCTION

Education is universally important for any individual. To enhance one's skills and abilities, it is vital to earn good academic grades. In academic environment especially for students it is seen that there are number of factors that affect good academic performance of the students both inside and outside the school environment. Inside the school, factors like ability of teachers, library facilities, laboratory, teaching learning process, effective communication and use of technologies influences the academic performance of the students (Lopes, D. C., Gerolamo, M. C., Musetti, M. A., & Amaral, D. C., 2021). Outside the school factors like home environment, financial position of family, assistance at home from parents (Hassan, M., Luo, Y., Gu, J., Mushtaque, I., and Rizwan, M., 2022), guidance, dispute management, household works, family support etc. also influences the student's academic performance externally. Apart from these internal and external factors, there are some mental and psychological factors that influence the academic performance of the students (Aqeel, M., Rehna, T., Shuja, K. H., and Abbas, J., 2022). Such a factor is emotional intelligence of students. It is related to the human feelings towards dealing intellectually each and every situation. A student's academic performance is also affected by emotional intelligence level, because EI level differs from person to person. Thus this study deals in measuring the impact of emotional intelligence on academic performance of the students in high school.

## OBJECTIVES OF THE STUDY

Due to pandemic of COVID 19, education has gone online and student's academic performance has been disturbed massively in countries like India. In such a situation, the emotional intelligence of a student would support them in overcoming the situation and to earn good academic performance. The current study examines the influence of emotional intelligence level of the high school students on their academic performance.

## REVIEW OF LITERATURE

According to Salovey and Mayer (1997), Emotional intelligence is the "capacity to recognize, value, and express emotions appropriately; to access and generate feelings that support thinking; to comprehend emotion and emotional knowledge; and to manage emotions to foster emotional and intellectual progress." EI refers to the ability of enabling people to address their challenges efficiently (Rosado et al., 2022). In the thoughts of Goleman, (1995), EI is the capacity of a person to manage and control the feelings of their own self and also others and tries to use emotions and feeling to guide their thoughts and actions. Thus EI is very essential in environment like education sector as emotions can affect the ability of the students to learn, motivate and work hard (Grijalva-Quiñonez, C. S., Valdés-Cuervo, A. A., Parra-Pérez, L. G., and Vázquez, G., 2020).

Intelligence is the ability possessed by any person emotionally, spiritually and also academically (N. Aida, K. Kusaeri, and S. Hamdani, 2017). Intelligence is also a person's capability to act with certain goals, believe

rationally and line up oneself in the right mode (N. K. S. Arini and M. Fakhurrozi., 2023). Emotion is a feeling that supports a person to handle any situation both inside and outside (E. N. Thaib, J. Ilm. Didakt, 2013). According to K. Kadani, (2014), emotional intelligence is ability to detect one's own sensitivity, ability to motivate, self control, understanding others feelings and managing their own emotions and thoughts to take best decisions. But I. S. Awang, M. Merpirah, and Y. B. Mulyadi, (2019), says EI is a person's ability to face frustrations, controlling their impulsive nature, mood controlling, balancing the pleasure, and not allowing disturbances on their thinking. IF someone has a high IQ but low EI, they used to be stubborn in any situations, gets quickly frustrated, does not trust anyone, insensitive to the environmental changes and remains stressed (S. Sukriadi, A. Basir, and R. Rusdiana, 2016).

I. S. Awang, M. Merpirah, and Y. B. Mulyadi, (2019), say that EI can predict a student's academic performance. EI helps in directing attention of students, removing their worries and recommending the focus area in learning. In learning at school environment, EI supports students to understand their own self and their environment. It develops their self confidence by avoiding feelings like jealous, anxious, angry, fear, etc. and helps them to remain patient (I. M. Purnama, 2012). EI is not only based on the student's intelligence level but also on their personal characteristics and behavior. In improving learning skills, students who are having high EI are required, because this would help the students to perform well in group activities and to achieve the set goal (F. Daud, 2012). Thus parents and teachers should support the students to improve the EI in early age itself since EI plays a vital role in the attaining the academic achievements (Trigueros, R., García-Tascón, M., Gallardo, A. M., Alías, A., & Aguilar-Parra, J. M., 2020).

Conversely, if the student is having average level of IQ and high EI then the student will possess a higher competency in managing their emotions especially in mathematics material. They manage their emotions to receive, control, absorb and process the subject content and produce increased learning outcomes. EI is a psychological ability that is needed to understand the complicated mathematics (R. Werdaningsih, Y. Y. Sari, and E. Azhar, 2019). EI supports in effective mastering of minds of students and encourage improved productivity. To improve their EI, the role of parents and teachers are important (Mukminin Amirul, Habibi Akhmad, Diat Prasajo Lantip, 2019). In the same way the teacher's role is to provide inputs on improving EI to the students using the skills like reducing stress, recognize and manage emotions, effective non verbal communication, using humor sense and resolving conflicts positively (S. Sukriadi, A. Basir, and R. Rusdiana, 2016).

When it comes to academic achievement, emotional intelligence offers several advantages (Chik, Z., and Abdullah, A. H., 2018). It is seen that students with high EI could effectively handle stress, manage time and stay motivated (Chong, A. M., Lee, P. G., Roslan, S., & Baba, M., 2015). They can regulate their emotions and overcome any obstacles in challenging situations. Moreover emotionally intelligent students would have strong interpersonal skills that impact positively on their relationship with friends, peers, teachers, parents and others (Krishnakumar, S., Perera, B., Hopkins, K., & Robinson, M. D., 2019). It also develops self awareness in students that supports them to identify emotions that influence their thoughts and behavior leading them in

taking best decisions (Andres, A., 2021). Students who are able to effectively manage their emotions are free from stress and negative emotions. They can able to maintain a balance emotional state that allows them to concentrate effectively on their studies. Students with empathy could build a positive relationship in their surroundings creating a supportive learning environment (Rosado, P. P., Grao-Cruces, A., Ayllon-Negrillo, E., & Pérez-Ordás, R., 2022). This in turn provides a good academic performance of the students. Furthermore, EI helps the students to perform effective communication so that they can express themselves clearly and engage in meaningful discussions.

To increase EI in students, educators play an important role (Mushtaque, I., Rizwan, M., Dasti, R. K., Ahmad, R., and Mushtaq, M., 2021). They can integrate EI in their curriculum and create platforms to develop such skills. This in turn leads the students to academic success. Understanding and developing EI in students will impact the academic performance of the students along with social interactions and well being (Luna, P., Guerrero, J., & Cejudo, J., 2019). This empower students to face challenges, building strong everlasting relationship, and lots of academic achievements.

## METHODS

This research is quantitative research with a descriptive method with a correlation type of research. This study used the target population of all high school students who have completed their 12<sup>th</sup> standard Tamilnadu State Government public examination in Coimbatore City. The sampling method that researchers use is random sampling. The number of respondents was 287 willing and selected people in the entire Coimbatore area.

The instrument for emotional intelligence uses an existing questionnaire from other people's research, namely using the Schutte Self-Report Emotional Intelligence Scale (SREIS) (Jonker & Vosloo, 2008; Schutte et al., 1998, 2001) many as 33 items of statements with five alternative responses ranging from "Strongly Disagree" with point 1 to "Strongly Agree" with point 5. And for measuring the academic performance a separate question is asked to choose the range of percentage obtained in their recent public examination. The four choices were a. less than 25%, b. 26 to 50 %, c. 51 to 75% and d. 76 to 100%. The data were analyzed using a normality test (Kolmogorov Smirnov) and a linearity test, and then continued to analyze simple linear regression.

## RESULT

The following tables provide an explanation of the findings of the researchers after they analyzed the data from the study they conducted.

<b>Table 1: Normality Test</b>		
<b>Variable</b>	<b>Sig. (2-tailed)</b>	<b>Information</b>
Unstandardized Residual	0.189	Normal

The table 1 shows the value of Asymp. Sig. (2-tailed) 0.189, and this is greater than 0.05. It is, therefore, evident that the data is normally distributed. In correlation research, in addition to testing the normality of data, it is also necessary to test the linearity of a relationship so that it will affect the analysis that will be used next. The results of the data linearity test in this study are shown in the table below.

<b>Variable</b>	<b>Sig. (2-tailed)</b>	<b>Information</b>
Deviation from Linearity	0.913	Linear

It refers to the basis of the decision in the linearity test that is the value of Sig. Deviation from linearity  $> 0.05$ , it is stated that the relationship between the two variables is linear. Based on the table 2, the value of Sig. Deviation from linearity is 0.913, which is greater than 0.05, so it is proved that there is a linear relationship between the two variables. After this simple linear regression requirement test is met, namely normal distributed data and linear relationships; the analysis is continued by testing simple regression with ANOVA, as shown in the table below.

<b>Model</b>	<b>R</b>	<b>R square</b>	<b>F</b>	<b>Sig.</b>
1	0.543	0.374	62.869	0.000

Based on the table 3, it is known that the relationship between variables is 0.543 in a positive direction, with a coefficient of determination (R Square) of 0.374, which means that independent variables have an influence of 37.4% on dependent variables. Referring to the calculated F value = 62.869 with a Sig. Level of  $0.000 < 0.05$ , then this means that this regression model can be used to predict participation variables, or in other words, the research hypothesis is accepted that there is an influence of emotional intelligence variables on Academic Performance. The equation means that 15.725 signify a positive constant value indicating the independent variable's positive influence (emotional intelligence). For the regression coefficient X of 0.316, it is stated that if emotional intelligence increases by one unit, academic performance will increase by 0.316 or 31.6%.



## DISCUSSION

Academic performance of a student especially when they go for high school education depends on numerous factors. Physical, mental and psychological factors will impact the academic performance of the students. When it comes to physical factor, underweight, inadequate intakes of healthy food are affecting the performance of the students. Some studies say that even the environmental factors like being in rural area also affects the academic performance of students. Even the uneducated parents have negative impact on the academic performance of their children (Aregash Ababayehu Zerga., et.al., 2022). Sometimes even the students peer pressure also impact the student's academic performance in terms of various content but it does not give any negative impact on performance. Furthermore, cultural parenting and social belongingness also affect the student's academic performance (Vangie M. Moldes, et.al., 2019)

It is known that computer are supporting tool for students in their academic. Especially during the pandemic of COVID 19, the education itself was provided in online mode using computers and smart phone technologies. Studies show that computers when used with enjoyment attitude, negatively influences the academic performance of the students. In contrast, if the students are using the computers and smart phones as educational tools, then it does not affect the student's performance in their higher education (Sofia Simoes, et.al., 2022). Some studies says that that a higher self reported ICT use also influences the student's academic performance (Catarina Nunes, et.al., 2023). The teacher student communication also plays a vital role in academic performance. If there is communication gap between teacher and student, it results in low academic performance of the students (Muhammad Saqib and Kaleem Ur Rehman, 2018). Every school should have a strong collaboration between teachers and students to increase their engagement which inturn supports the improved academic performance (Dr. Armando P. Delfino, 2019). Emotional intelligence is an important factor that impacts any individual mentally in their daily activities (Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Dornheim, L., 1998). Most of the research studies says that whenever there is low emotional intelligence level of a student, it affects their academic performance also. This can be addressed by giving training to the students in EI and supporting them to focus on the school climate, classroom and discipline. This training would help them to advance in their academic performance (Ana María Martínez-Martínez, et.al., 2020).

## CONCLUSION

In beam of the findings from the analysis of the data and the subsequent discussion, it is seen that emotional intelligence positively affects students' academic performance as same as in working atmospheres, where emotional intelligence has a positive impact on the job satisfaction level of the employees (Subhashini Durai, Shaju.M, 2016). Emotional intelligence provides a great opportunity to be continuously developed to improve the quality of academic performance of learners. To get high academic performance, teachers can develop students' emotional intelligence. Schools can consider the level of emotional intelligence of students to get prospective students who have good academic performance so that in the future, they will become graduates

who have high quality performance that can be accounted for in higher education or society. If subsequent researchers conduct the same research to pay more attention to a more representative sample target, they can use elementary or junior high school students. Developing EI in students significantly impacts academic achievements positively in students. EI equip them with more skills that are necessary to adapt to the environment, managing stress factors and developing healthy relationships. Traditionally academic success depended on the intellectual ability of the students but now it is recognized that EI plays a vital role in students overall performance in academic (Alsharari, N. M., & Alshurideh, M. T., 2021). Research and theories have shown that students with high EI can handle effectively the academic life. They express qualities like motivation, time management, and strong interpersonal skills. All these qualities support them to shine in their academic performance too. Furthermore, policymakers, teachers and parents should support initiatives to increase the EI level in students to enhance their well being Farooq, M., and Asim, I., 2020). By doing so, the students are empowered to reach their fullest potential in their academic and social life (Soliveres, R., Giráldez-Hayes, A., & Parejo, J. L., 2021).

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