

Research Paper

Analytical Study of The Impact of Emotional Intelligence on The Academic Performance of Secondary and Senior Secondary Level Students

Dr. Shaista Begum^{1*}

ABSTRACT

This research aims to explore the relationship between emotional intelligence (EI) and academic performance among school students. Emotional intelligence defined as the ability to recognize, understand and manage one's own emotions as well as the emotions of others, has been increasingly recognized as a crucial factor in personal and professional success. However, its role in academic settings remains under-explored. This study seeks to fill this gap by examining how different dimensions of EI contribute to Students academic achievements. Utilizing a sample of 40 participants (20 boys and 20 girls) aged 15-18, the research employs the emotional intelligence inventory (EII) to assess academics performance. A two-way ANOVA was conducted to analyze the data, investigating differences in academic performance across varying degrees of emotional intelligence. The result revealed a significant positive correlation between overall EI scores and academic performance ($r = 2.70, p > 0.01$). Specially, intrapersonal skills and stress management emerged as the strongest predictors of high academic achievement. Students with higher intrapersonal skills, which include self-awareness and self-regulation, tended to perform better academically, suggesting that the ability to manage one's own emotions effectively plays a critical role in learning an academic success. Similarly, stress management skills, which involve coping strategies and emotional resilience, were found to be crucial in navigating academic pressure and maintaining high performance. These results with students reporting that EI skills such as time management, emotional regulation, and interpersonal communication significantly impacted their academic outcomes. Many students highlighted that managing stress and maintaining a positive attitude were essential for sustaining motivation and focus during challenging periods. Moreover, strong interpersonal skills facilitated better relationship with peers and instructors, contributing to a supportive learning environment. This research has significant implications for educators, policymakers and students. By recognizing the importance of emotional intelligence in academic settings, educational institutions can develop targeted programs to support students' emotional development alongside their intellectual growth. Such initiatives could lead to improved academic performance, reduced stress levels and overall better well-being for students. Furthermore, these findings underscore the need for a holistic approach to education that values emotional and social skills as much as cognitive abilities.

¹Assistant professor, Department of psychology Monad university, Hapur, India

*Corresponding Author

Received: November 10, 2024; Revision Received: December 16, 2024; Accepted: December 20, 2024

Analytical Study of The Impact of Emotional Intelligence on The Academic Performance of Secondary and Senior Secondary Level Students

Keywords: *Emotional Intelligence, Academic Performance, School Students, Intrapersonal Skills, Stress Management, Higher Education*

It is generally understood that a person's success and achievement (active mental) are based on his intelligence quotient or IQ. One who has a higher IQ generally has more achievements in life. But from modern research it has become more clear that whatever success a person achieves in his life, only 20% is due to IQ and 80% is due to emotional intelligence. In recent research emotional intelligence has been conceptualized in two distinct ways. First, it has been conceptualized as a set of abilities for processing emotional information. Second, it has been conceptualized as a set of personality traits. In some areas even people with less intelligence are more successful than people with more intelligence. American psychologist Thorndike first paid attention to this. On the basis of his study, he divided the intelligence of humans into three categories - motor or mechanical intelligence, abstract intelligence and social intelligence. Garrett termed Thorndike's motor or mechanical intelligence as concrete intelligence. In 1995 the American Dialect Society (1999) selected Emotional Intelligence as the most useful term.

DEFINITIONS: "Emotional Intelligence (EI) 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 relationship."

'Goleman' "Emotional intelligence is the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge and to reflectively regulate emotions so as to promote emotional and intellectual growth."

'Mayer and Salovey' "Emotional intelligence is the personal ability to perceive, understand and apply the power of knowing the mood as the ground of forces and data to build up association to influence people".

'Bar-On'-Academic performance refers to the measurement of the learning level achieved by students and is considered as a key indicator of the effectiveness of educational institutions. It is influenced by various factors including social, psychological, educational, economic, family, personal and institutional factors.

Academic performance refers to the measurable achievement and proficiency of students in various educational factors, typically assessed through grades, test scores and other indicators of learning, understanding and skill mastery within a particular academic setting.

"Academic performance as the level of knowledge shown in an area or subject compared to the norm, and it is generally measured using the grade point average". **"Torres and Rodriguez' 2006 (quoted by Willcox, 2011).**

"Academic performance refers to an individual's achievement and success in educational settings, typically measured by grades, test scores, or other indicators of learning and knowledge acquisition."

REVIEW OF LITERATURE

Studies related to emotional intelligence (EI): Mayer, Caruso and Salovey's (2000) ability model, emotional intelligence refers to the abilities used to process information about one's own emotions and the emotions of others.

In **Professor Reuven Bar-On's (2000)** personality trait model of emotional intelligence, distinctions are made between five domains: the interpersonal, the intrapersonal, adaptability, stress management and mood. In each of these domains there are specific skills which collectively constitute what he refers to as emotional and social intelligence.

Reuven Bar-On (1997) has developed a questionnaire- The Emotional Quotient Inventory- to evaluate emotional intelligence. The questionnaire contains 133 items.

Dr. Richard Cooper (1996/1997) developed an instrument called. The Emotional Quotient Map or EQ Map, which evaluates the respondent's current environment, emotional literacy, EQ competencies, EQ values and attitudes and EQ outcomes.

Studies related to academic Performance: Petrides et al. (2004) have looked at the relationship between trait, emotional intelligence, academic performance and cognitive ability, and found that EI moderates the relationship between academic performance and cognitive ability.

Parker et al. (2004) in their studies concluded that various elements of EI used as predictors of academic success. They found that highly successful students scored higher than the unsuccessful group on three subsets of EI (interpersonal ability, stress management and adaptability).

A study Conducted by **Rode et al. (2007)** predicted that emotional intelligence was related to academic performance for two reasons. First, academic performance involves a great deal of ambiguity. Second, the majority of academic work is self-directed, requiring a high level of self-management. Therefore, individuals with high EI would perform better academically.

Johnson (2009), he proposed that EI enables the students to develop good interpersonal relationships and to have social support which also helps students to perform well in their examination.

RESEARCH METHODOLOGY

Problems

1. Finding reliable ways to measure emotional intelligence (EI) in secondary and senior secondary level students.
2. Understanding how emotional intelligence (EI) influences academic performance in students in this age group.
3. Exploring how factors like gender, age affect the relationship between emotional intelligence (EI) and academic performance.

Hypothesis

1. A clear correlation exists between high EI scores and improved academic performance amongst secondary and senior secondary level students.

Analytical Study of The Impact of Emotional Intelligence on The Academic Performance of Secondary and Senior Secondary Level Students

2. EI has a more pronounced impact on the academic performance of secondary students compared to senior secondary students.
3. The influence of the EI on academic performance varies based on gender and age with certain groups benefiting more from high (EI) emotional intelligence.

Research design: The factorial design of 2×2 with 4 cells was used. There were two independent variables i.e., gender and grade level. The first factor was varied in two ways (girls and boys). The second factor was grade level i.e., secondary and senior secondary. There was one dependent variable- academic performance.

Variables

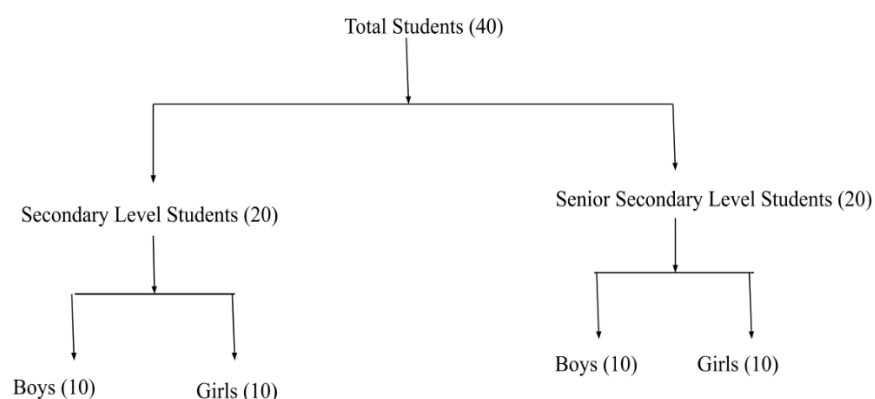
Independent Variables

1. Gender
 - Boys, Girls
2. Grade level
 - Secondary level, Senior secondary level

Dependent Variable

- Academic performance

Sample and subjects: 40 Samples were selected, these were divided in two groups. Each group belongs to secondary and senior secondary students. Each sample is a group of 20 subjects divided into two groups where 10 were boys and 10 were girls.



Selection of the samples: The students of the following schools were selected-

1. DAV public school Meerut.
2. All Saints public school Meerut.
3. I.G.N. Inter College Meerut.

Tools of research: In order to measure (EI) Emotional intelligence, E.I. Questionnaire/ Inventory by Dr. S.K. Mangal and Mrs Shubhra mangal were used and manual.

Procedure:

The data collection work of the present research work was conducted in different schools. We requested help from the teacher and they kindly agreed to do so and allowed us to select the classroom. The booklet of E I I was arranged on a table. First of all, the experimenter tried to establish a good report with samples. Then, the experimenter distributed E I I to the

Analytical Study of The Impact of Emotional Intelligence on The Academic Performance of Secondary and Senior Secondary Level Students

students. The students asked to give their personal details on the cover page of the answer sheet. Before answering, they were asked to follow the instructions and to clear any sort of doubts if they had. After that, they were asked to start. It was checked before submission of the questionnaire that all the samples had answered all the items.

Scoring: The answering of EII is based on the four points/areas i.e., Interpersonal awareness, Intrapersonal awareness, Interpersonal management and Intrapersonal management carry the YES and NO answer with 1 and 0 score respectively. The sum of score shows the EI of the samples.

RESULT

The purpose of the present study is to find out the EI of secondary and senior secondary boys and girls. Study the Emotional Intelligence (EI), EII (Emotional Intelligence Inventory) is used. The result was analyzed by using Two-Way analysis of variance (ANOVA). The computed means are given in the table.

Table 1: Mean EI score of the sample of secondary and senior secondary boys and girls.

Variables	Grade level	Mean	Gender	Mean
1	Secondary level	64	Boys	66.65
2	Senior secondary	62.25	Girls	59.65

Result of 2X2 analysis of variance are summarized in table-2

Table 2: Showing the results of 2x2 Analysis of variance

Source of variance	Sum of square (Ss)	Degree of freedom (d.f.)	Mean squares (MSB)	f-Ratio
A	30.625	1	30.625	10449(1.45)
B	483.025	1	483.025	22.85
AxB	38.025	1	38.025	1.80
BSS	551.675	3	183.892	2.70
WSS	2461.7	36	68.38	

Not significant at 0.01 level, 0.05

Effect of emotional intelligence on secondary level: Analysis of variance reveals that the F value of grade (secondary) level is [(1.45) 1.449,1] $P < 0.1$. It means that the F ratio for the independent variable grade level is found to be not significant at 0.01 level of significance. The significant value of F leads us to conclude that the grade level is an effective factor in determining EI of the person / student. Thus, the null hypothesis is not rejected and the substantive hypothesis has not been retained. The mean EI score for the grade level was calculated and presented in table 3.

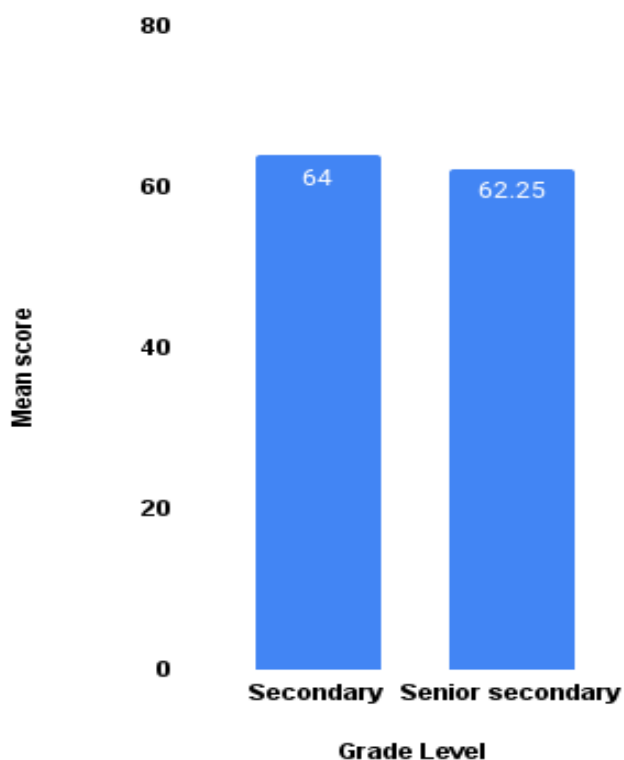
Table 3: Mean EI score of grade level i.e., secondary and senior secondary level students

Grade level	Mean score
Secondary	64
Senior secondary	62.25

Table-3 shows that the mean score of secondary level student's samples are 64 and senior secondary level student's samples are 62.25. It is clear that EI is found more / higher in the samples which are secondary level students. The characteristics of the data become more

Analytical Study of The Impact of Emotional Intelligence on The Academic Performance of Secondary and Senior Secondary Level Students

clear when these means are represented graphically showing the independent variables and dependent variable as shown in figure-1.



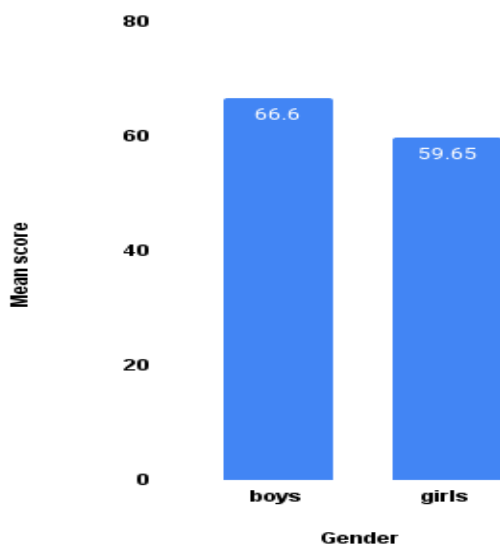
Effect of emotional intelligence (EI) on senior secondary level: Table-2 Analysis of variance shows that the F value for the gender was found to be (1,22.85) $P > 0.1$ level. It means that the EI on senior secondary level is also an influential factor in determining EI of the samples and the null hypothesis is rejected and substantive hypothesis is retained. That mean EI score for boys and girls were computed and presented in table 4.

Table 4: Mean EI score for girls and boys

Gender	Mean score
Boys	66.6
Girls	59.65

Above table shows that mean EI scores for boys and girls are 66.6 and 59.65 respectively. It is clear that there is a significant difference in EI of boys and girls. These results confirmed by the graphical representation in figure - 2.

Analytical Study of The Impact of Emotional Intelligence on The Academic Performance of Secondary and Senior Secondary Level Students



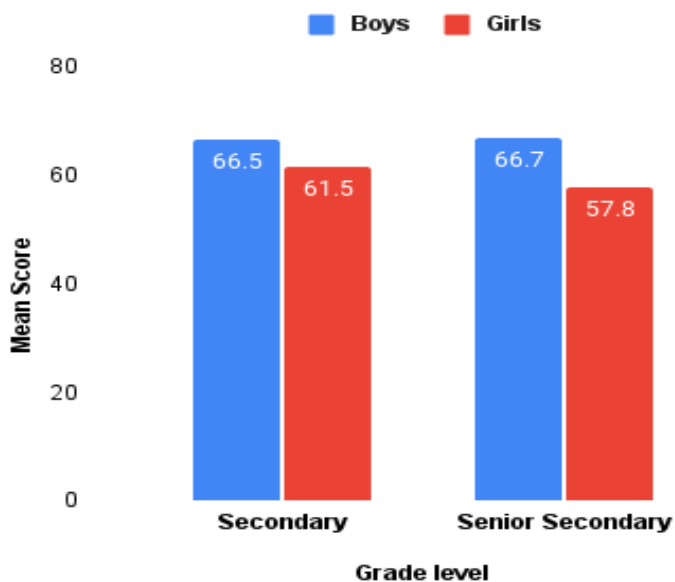
Interaction effect: Since 2x2 factorial design was conducted, there is only one Two Way interaction effect that is AxB.

Interaction effect of secondary and senior secondary level boys and girls: The F value of the interaction effect of both grade level of boys and girls is found (1.80) $P > 0.01$ level F ratio enables the researchers to reject the null hypothesis and accept the substantive hypothesis. The mean EI score are computed and presented in table 5.

Table 5- The mean EI score of the interaction effect of secondary and senior secondary students

Grade level	Boys	Girls
Secondary	66.5	61.5
Senior secondary	66.7	57.8

The results get confirmed by the graphical representation in figure-3.



Analytical Study of The Impact of Emotional Intelligence on The Academic Performance of Secondary and Senior Secondary Level Students

Summary of the results are:

1. The EI of the samples significantly affects academic performance. The girl's samples are found less taken than boys.
2. The factor gender is found to be an influential factor in EI.
3. The interaction effect of secondary level students and senior secondary level students or the interaction effect of grade level and gender affect the EI significantly in academic performance.

DISCUSSION

The impact of EI on the academic performance of secondary and senior secondary students has been a subject of increasing interest. EI, defined as the ability to recognise, understand, manage and utilize emotions effectively, is hypothesized to play a crucial role in a student's academic success. This discussion synthesizes finding from various studies to explore the relationship between EI and academic performance at these educational levels.

In present research, girls are less affected by emotional intelligence rather than the boys in comparison. Boys are more bold and risk taker during life and are ready and confident than girls. Sometime girls feels inferior than boys.

A study by Parker et al. (2004) concluded that students with higher EI tend to have better grades and are more likely to excel academically. Similarly, a comprehensive study highlighted that students with developed emotional skills perform better in exams and classroom activities. (Mayer and Salovey, 1997). In present study, both boys and girls are progressing in every field. They make their decision themselves. But boys are more risk taker than girls in performing activities. Another study by Qualter et al. (2009) indicated that students with higher EI levels are better at coping with academic stress, thus maintaining higher academic performance. This resilience is crucial during critical exam periods and in handling the pressure of senior secondary education. A study by Brackett et al. (2011) demonstrated that students with higher EI exhibited fewer behavioural problems and had better attendance records, leading to higher academic achievement. Students with higher EI are often better at managing interpersonal relationships which translates to improved social skills and behaviour in the classroom. A research by Mayer, Caruso and Salovey (1999), suggested that while both boys and girls benefit from high EI, the specific areas of impact may differ. Boys may benefit in terms of stress management and behavioural regulation, while girls may benefit more in terms of social relationship and emotional support.

CONCLUSION

The cumulative evidence underscores the significant impact of EI on the academic performance of secondary and senior secondary students. High levels of EI contribute to better academic outcomes through enhanced social skills, improved classroom behaviour, effective stress management and heightened motivation and self-regulation. These findings highlight the importance of integrating emotional intelligence training into educational curriculum to support student's holistic development and academic success.

REFERENCES

Carr, alan (2008) - *Positive psychology the science of happiness and human strengths*. Routledge London and New York. Pg. no. 107.

Analytical Study of The Impact of Emotional Intelligence on The Academic Performance of Secondary and Senior Secondary Level Students

- Carr, alan (2008)- *Positive psychology the science of happiness and human strengths*. Routledge London and New York. Pg. no. 108.
- CORE – *Aggregating the world’s open access research papers*. (2017). Core.ac.uk. <http://core.ac.uk>
- ERIC - *Education Resources Information Center*. (2019). Ed.gov. <http://files.eric.ed.gov>
- Free Group Study Rooms with Timer & Music | Fiveable*. (n.d.). Hours-5wmaazc8u-Thinkfiveable.vercel.app. <http://library.fiveable.me>
- Lal Proff. Raman Bihari and joshi, Dr. surendra chandra - *Growing up as a learner*. R.Lal Book Deepo Meerut. Pg. no. 235.
- Lal Proff. Raman Bihari and joshi, Dr. surendra Chandra- *Growing up as a learner*. R.Lal Book Deepo Meerut. Pg. no. 236.
- Singh, Arun kumar - “*Advanced general psychology*” Motilal Bnarsidas first addition 1997. Pg. no. 946.
- Singh, Arun kumar - “*Advanced general psychology*” Motilal Bnarsidas first addition 1997. Pg. no. 945.

Acknowledgement

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author(s) declared no conflict of interest.

How to cite this article: Begum, S. (2024). Analytical Study of The Impact of Emotional Intelligence on The Academic Performance of Secondary and Senior Secondary Level Students. *International Journal of Indian Psychology*, 12(4), 2087-2095. DIP:18.01.200.2024 1204, DOI:10.25215/1204.200