An Analysis Of The Relationship Between Academic Achievement And Emotional Intelligence Among Higher Secondary Students

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Abstract:

This study aimed to examine the relationship between emotional intelligence and academic achievement among higher secondary school students in the Aligarh district of Uttar Pradesh. The objectives were to determine the levels of emotional intelligence and academic achievement, as well as to assess the significant relationship between these two variables. Utilizing a quantitative approach and a descriptive survey method, the study sampled 120 students, equally divided between boys and girls, using stratified-random sampling. Data was collected using the Emotional Intelligence Scale developed by Anukool Hyde, Sanjyoth, and Upinder Dhar (2002), while academic achievement was assessed based on students' scores from their most recent examination. Statistical analyses, including mean, SD, t-tests, and Pearson product-moment correlation, were employed. There is a significant negative difference in emotional intelligence and academic achievement between boys and girls, and the study also uncovered a significant positive correlation between emotional intelligence and academic achievement among higher secondary students.

Key Words – Emotional Intelligence, Academic Achievement, Higher Secondary School Student.

I. INTRODUCTION

In today's educational environment, academic achievement is frequently regarded as the main measure of a student's success. However, recent studies indicate that factors beyond cognitive abilities, such as Emotional Intelligence (EI), may significantly influence academic outcomes. Emotional Intelligence, which involves the ability to identify, understand, and manage one's own emotions as well as those of others, has emerged as an important predictor of various life outcomes, including academic success. Daniel Goleman popularized the concept of Emotional Intelligence, highlighting the crucial role of emotional competencies in

achieving personal and professional success. These competencies include self-awareness, self-regulation, motivation, empathy, and social skills. While traditional indicators of academic success, such as Intelligence Quotient (IQ) and standardized test scores, primarily assess cognitive abilities, El encompasses skills that enhance interpersonal relationships, stress management, and overall well-being, all of which can influence academic performance.

Research has increasingly underscored the connection between Emotional Intelligence (EI) and academic achievement. Studies indicate that students with higher EI levels are better equipped to manage academic stress, work effectively with peers, and stay motivated, all of which contribute to better academic results. However, despite the growing evidence, the relationship between EI and academic performance remains intricate and requires further exploration, especially in diverse educational environments. This research paper aims to investigate the link between Emotional Intelligence and academic success among school students. By examining how different aspects of EI correlate with students' academic performance, the study seeks to enhance our understanding of the role emotional competencies play in educational achievement. The findings could inform educational strategies and interventions designed to improve both emotional and academic outcomes for students. The research will utilize quantitative methods to analyze data from a sample of students, employing established EI scales and academic performance metrics. Through identifying patterns and correlations, this study aims to shed light on how EI impacts academic achievement and to identify potential areas for educational enhancement and support.

II. LITERATURE REVIEW

Study conducted by Parker, J. D. A., Summerfeldt, L. J., Hogan, M. J., & Majeski, S. A. (2004) showed that higher levels of emotional intelligence are significantly related to higher academic achievement among college students. Emotional intelligence was found to be a better predictor of academic success than traditional intelligence measures. Research by Petrides, K. V., Frederickson, N., & Furnham, A. (2004). showed that students with higher emotional intelligence tended to perform better academically. Emotional intelligence was especially important in managing stress and motivation, which are critical for academic success. The study conducted by Perera, H. N., & DiGiacomo, M. (2013). suggests that emotional intelligence contributes to students' academic success by improving their ability to manage emotions, set goals, and sustain motivation. Study

by Lam, L. T., & Kirby, S. L. (2002) found out that middle school students with higher emotional intelligence had better academic outcomes, suggesting that emotional intelligence is a key factor in academic success at this educational level. The research by Downey, L. A., Mountstephen, J., Lloyd, J., Hansen, K., & Stough, C. (2008). in the research paper title "Emotional Intelligence as a predictor of Academic Achievement in Senior Secondary School" showed that emotional intelligence is a significant predictor of academic achievement among secondary school students, with particular emphasis on how emotional management skills contribute to academic success. The study by Brackett, M. A., Mayer, J. D., & Warner, R. M. (2004) found that college students with higher emotional intelligence had better academic outcomes, including higher grades and better social relationships. This longitudinal study by Qualter, P., Whiteley, H., Hutchinson, J. M., & Pope, D. J. (2007) tracked students over time and found that emotional intelligence was a predictor of academic performance, particularly in managing academic stress. Study by Kauts, A., & Saroj, R. (2010) investigated the relationship between emotional intelligence and academic achievement among secondary school students in Punjab, India. It found a significant positive correlation between the two variables, suggesting that higher emotional intelligence is associated with better academic performance. This study by Bhattacharya, A., & Banerjee, S. (2014) explored the relationship between emotional intelligence and academic achievement among medical students in India. It found that students with higher emotional intelligence tended to perform better academically, particularly in handling stress and maintaining motivation. The research by Kulkarni, P., & Shinde, P. (2017) explored the relationship between emotional intelligence and academic performance among school students in Maharashtra, India. The findings indicated a significant positive correlation between emotional intelligence and academic achievement. The study by Golecha, R., & Singh, M. (2016) investigated how emotional intelligence and academic stress interact to influence academic achievement among students in India. It found that emotional intelligence plays a crucial role in managing academic stress and improving academic performance. Conducted in Rajasthan, the study by Jain, A., & Jain, S. (2015) analyzed the impact of emotional intelligence on the academic achievement of university students, revealing a positive correlation between emotional intelligence and higher academic performance. The study by Singh, D., & Kaur, M. (2008) examined the emotional intelligence levels of intermediate students in Hyderabad and their impact on academic achievement. The findings revealed a strong positive relationship between emotional intelligence and academic performance. The study by Nair, N. S., & Subhashini, P. (2016) explored the relationship between emotional intelligence and academic achievement among college students in Kerala, India. It found that students with higher emotional intelligence achieved better academic results. Study by Singh, N., & Kaur, P. (2011) explored differences in emotional intelligence and academic achievement between rural and urban students in Punjab. It found that emotional intelligence was a strong predictor of academic success in both groups, with some differences between rural and urban settings.

III. RESEARCH DESIGN

This research paper will have following three objectives:

- 1. To compare the emotional intelligence of higher secondary students in relation to their gender.
- 2. To compare the academic achievement of higher secondary students in relation to their gender.
- To find out the relation between the emotional intelligence and academic achievement of higher secondary school students.

Research Hypothesis for this study are as follows:

HO₁: There is no significant difference in emotional intelligence between boys and girls higher secondary school students. HO₂: There is no significant difference in academic achievement between boys and girls higher secondary school students. HO₃: There exists no significant relation between emotional intelligence and academic achievement.

The research instruments used in the survey questionnaire is Emotional Intelligence Scale. This scale is developed and standardized by Anukool Hyde, Sanjyot Pethe and Upinder Dhar (2002). The 34 statements are rated on a five-point scale. The subjects were required to respond to each item in terms of "Strongly disagree, Disagree, Neutral, Agree, strongly agree." The test meant for knowing the difference between individuals. The 10 sub- scales are i.e. 1) Selfawareness, 2) Empathy, 3) Self- Motivation, 4) Emotional stability, 5) Managing Relations, 6) Integrity, 7) Selfdevelopment, 8) Value orientation, 9) Commitment, 10) Altruistic Behaviour. This is well known test having high reliability (split-half reliability 0.88) and high validity (0.93). Academic achievement data consisted of the total percentage of marks obtained in their previous year annual examination. Descriptive survey method was used to study the variation in emotional intelligence and academic achievement in relation to gender and relationship between emotional intelligence and academic achievement of students. A total of 120 students of 2 different school in Aligarh, NS International and Brilliant Public School were taken as sample. Mean, SD and t-test were used to examine the difference of emotional intelligence level and academic achievement between boys and girls. At last, the investigator used Pearson's product moment correlation to find out the significant relationship between emotional intelligence and academic achievement of higher secondary students.

IV. FINDING OF THE STUDY

This study aimed to explore the relationship between emotional intelligence and academic performance among higher secondary students. In this research, emotional intelligence was considered the independent variable, while academic achievement was viewed as the dependent variable. The analysis was conducted based on specific objectives.

Objective 1: To compare the emotional intelligence of higher secondary students in relation to their gender.

In order to achieve this objective, Null hypothesis was formulated. Mean, SD and t test were employed. Data are given in table-1.

Table 1: Mean comparison between Boys and Girls students on Emotional Intelligence

Group	N	Mean	Standard Deviation	t-value	Level of significance
Boys	60	109.02	13.10	2.45	Significant at 0.05
Girls	60	114.54	11.12		level

Table-1 shows that the mean and standard deviation of emotional intelligence among boys and girls secondary school students are 109.02, 13.10 and 114.54, 11.12 respectively. The calculated t-value is 2.45 which is greater than the table value at 0.05 level. It shows that there exists significant difference in emotional intelligence among boys and girls secondary school students. Hence, the null hypothesis there is no significant difference in emotional intelligence between boys and girls higher secondary school students is rejected. The findings are further supported by Figure 2.

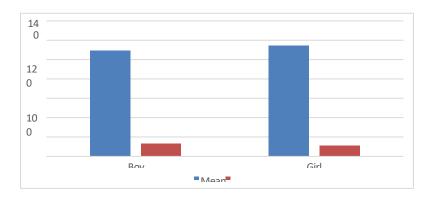


Figure: 1 Gender wise distribution of Emotional Intelligence

Objective 2: To compare the emotional intelligence of higher secondary students in relation to their gender.

In order to achieve this objective, Null hypothesis was formulated. Mean, SD and t test were employed. Data are given in table-2.

Table 2: Mean comparison between Boys and Girls students on Academic Achievement

Grou p	N	Mean	Standard Deviation	t-value	Level of significance
Boys	60	67.34	9.86	1.26	Significant at 0.05
Girls	60	72.45	7.45		level

Table-2 shows that the mean and standard deviation of academic achievement among boys and girls secondary school students are 67.34, 9.86and 72.45, 7.45 respectively. The calculated t-value is 1.26 which is greater than the table value at 0.05 level. It shows that there exists significant difference in academic achievement among boys and girls secondary school students. Hence, the null hypothesis there is no significant difference in academic achievement between boys and girls higher secondary school students is rejected. The findings are further supported by Figure 2.

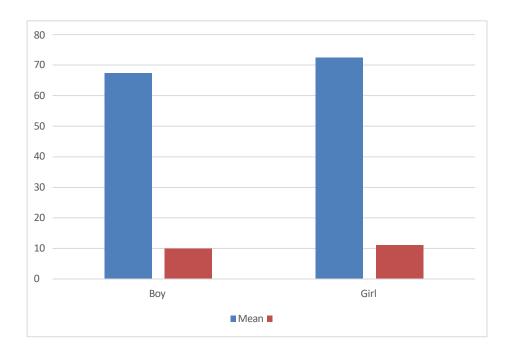


Figure: 2 Gender wise distribution of Academic Achievement

Objective 3: To find out the relation between the emotional intelligence and academic achievement of higher secondary school students.

In order to achieve this objective, Null hypothesis was formulated. To assess the significant relationship between emotional intelligence and academic achievement among higher secondary students, the researcher employed Pearson's correlation coefficient and calculated the r value.

Table 3: Correlation between Academic Achievement and Emotional Intelligence

N	Variables	Coefficient of Correlation	Level of significance
120	Academic Achievement and	0.372	Significant at 0.05
	Emotional Intelligence		level

The Table 3 reveals that coefficient of correlation (r) between emotional intelligence and academic achievement of secondary school students is 0.372 which is positive and significant at 0.05 level of significance. So, the hypothesis "There exists no significant relation between emotional intelligence and academic achievement." is rejected. Thus, it can be interpreted that there is significant and positive relationship between emotional intelligence and academic achievement of secondary school students. So, it can be concluded that more the emotional intelligence more the academic achievement. The results gave an indication that

the level of emotional intelligence increases with advancement in academic progression of the students.

V. CONCLUSION

In this research, significant mean difference was found between boys and girls high school students on the Emotional Intelligence. Girls were having better Emotional Intelligence than Boys students. On the Academic results, significant mean difference was found between boys and girls high school students. Girl students were having better academic achievement than their counterparts, boys' student. It was also found out that there is a positive correlation between Emotional Intelligence and Academic Achievement. The finding was fully supports by the findings of researchers. (Parker, J. D. A., Summerfeldt, L. J., Hogan, M. J., & Majeski, S. A. (2004), Petrides, K. V., Frederickson, N., & Furnham, A. (2004)., Perera, H. N., & DiGiacomo, M. (2013), Bhattacharya, A., & Banerjee, S. (2014), Golecha, R., & Singh, M. (2016), Nair, N. S., & Subhashini, P. (2016)). Majority of the study found positive relation between emotional intelligence and academic achievement. Based on the findings, emotional intelligence can be regarded as a key predictor of academic achievement.

For the present research problem, there exists certain limitation. The investigator has collected data only from two high schools in Aligarh district. The present study was confined to 120 students only, the problem could be further expanded by collecting the data from other schools. Further, the data for the study was collected from 11th and 12th class only. Other classes should also have been taken for investigation purposes. Hence, it is suggested that similar type of investigations taking into account on a large sample could be made by collection from more schools. It is also recommended that this study be conducted in other districts as well.

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