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ACADEMIC ACHIEVEMENT OF HIGHER SECONDARY STUDENTS IN RELATION TO THEIR EMOTIONAL INTELLIGENCE AND GENDER

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Abstract: The present descriptive study was conducted with the aim of studying the effect of emotional intelligence and gender on academic achievement of higher secondary students. A sample of 540 Class 11th students (270 males, 270 females) was selected using Unproportionate Stratified Random Sampling Method from 12 Co-education, Hindi Medium Higher Secondary Schools (randomly selected using lottery method) of Durg-Urban area. Emotional Intelligence of selected respondents was measured using Emotional Intelligence Inventory (EII-MM) by Mangal & Mangal (2018) and for academic achievement their Class 10th Board marks were collected from school records. For descriptive statistics – mean and SD and for inferential statistics - 't' values were computed using SPSS Version 23. The study results reveal significant main effects of emotional intelligence and gender on academic achievement of higher secondary students.

Keywords: Emotional Intelligence, Gender, Higher Secondary Students, Academic Achievement

Introduction:

Academic achievement occupies a pivotal place at all levels of students' educational life. It is the indicator of progress made by the learners in acquiring new knowledge. Academic achievement of students gains immense importance at higher secondary level as good academic achievement at this stage ensures better occupational and economic success in adult life. Research studies have revealed several factors that influence the academic achievement of students like students' IQ, socio-economic status, parental assistance, mental health, self-motivation, teacher-student relationship and personality. Previously, among all the mentioned factors, IQ was regarded as the main determinant of academic success of the students. However, many recent and emerging studies have revealed that IQ alone cannot be considered the reliable predictor of students' academic achievement (Craggs, 2005).

Researchers argue that IQ which is related to only cognitive abilities of the students cannot be accredited for overall success of students. Investigations have shown that Emotional Intelligence (EI) and Social Intelligence also play an important role in students' academic performance. Goleman (1996) claimed that only 20% of an individual's success can be attributed to his IQ. This claim of Goleman has prompted many researchers and educationists to explore and identify those factors which contribute to remaining 80% of individual's success. Researchers have also been eager to find out how emotional intelligence of a student helps him in learning better and perform academically. Schutte et.al. (2002) suggested that all areas of life are usually affected by high emotional intelligence such as work, education and relationships. Afridi & Ali (2019) advocated that higher emotional intelligence in students leads to better educational outcomes. Salovey & Grewal (2005) claimed that individuals with higher level of emotional intelligence are usually strong, stable and have positive emotional well-being. The students with positive state of emotional well-being are more open to new experiences which leads to better learning.

Present times are bringing newer challenges and newer demands for the higher secondary students due to regularly changing educational scenario. Keeping in mind the predominant role of emotional intelligence in personal, social and academic growth of learners and importance of academic achievement at this academic level, the present study is an attempt to examine the impact of emotional intelligence and gender on academic achievement of higher secondary students.

Delimitations:

The present study is conducted on 540 Class 11th students selected from 12 Co-educational Hindi Medium Higher Secondary Schools of Durg-Urban area. The study is restricted to one demographic variable i.e. gender. Emotional Intelligence Inventory (EII-MM) by Mangal & Mangal (2018) has been used to measure emotional intelligence of respondents. Only two levels of emotional intelligence – high and low, have been studied.

Objectives:

The present study was conducted on basis of following objectives:

1. To study the effect of Emotional Intelligence on Academic Achievement of Higher Secondary Students.
2. To study the effect of Gender on Academic Achievement of Higher Secondary Students.

Hypotheses:

Based on the objectives of the study, following hypotheses were formulated by the researcher for the present study:

H₀₁: There exists no significant effect of Emotional Intelligence on Academic Achievement of Higher Secondary Students.

H₀₂: There exists no significant effect of Gender on Academic Achievement of Higher Secondary Students

Methodology:

The present descriptive study conducted using survey method focuses on Academic Achievement of Higher Secondary Students in relation to their emotional intelligence and gender.

Population:

The population of present study comprises of all class 11th students studying in Higher Secondary Schools in Durg-Urban area.

Sample:

For the present investigation, the sample was collected from 12 Co-educational Hindi Medium Higher Schools randomly selected using lottery method. From these schools 540 class 11th students were randomly selected using Unproportionate Stratified Random Sampling method. The respondent students were stratified on basis of gender hence equal number of students from each gender i.e. 270 male and 270 female students were selected as sample.

Variables:

There are two independent variables and one dependent variable in this descriptive survey study. Independent variables are Emotional Intelligence and Gender while dependent variable is Academic Achievement.

Tool:

In the present study, emotional intelligence of the respondents was measured by Emotional Intelligence Inventory (EII-MM) by Mangal & Mangal (2018). The inventory is designed both in Hindi and English to measure emotional intelligence (total as well as dimensions) of 16+ school, college and university students. The Hindi version of the inventory was used for data collection. The inventory has 100 items (48 Positive, 52 Negative), with 25 items from each dimension – Intrapersonal Awareness, Interpersonal Awareness, Intrapersonal Management and Interpersonal Management. Each item must be answered Always, Sometimes or Never. The reliability of emotional intelligence inventory examined by Split half method is 0.89, by K-R formula (20) is 0.90 and by Test-retest method is 0.92 (All results were significant at 0.01 level of significance). Validity of the inventory was established by adopting factorial and criterion approach.

Statistical Techniques for Data Analysis:

To test the hypotheses and to assess whether significant difference in academic achievement scores of higher secondary students existed in relation to emotional intelligence and gender - mean, standard deviation and 't' values were computed using SPSS Version 23.

Analysis and Interpretation of Data:

The present study examines the main effects of Emotional Intelligence and Gender on Academic Achievement of Higher Secondary Students. The data to test the significance of hypotheses was collected from Class 11th students of Co-education, Hindi Medium Higher Secondary Schools of Durg-Urban area. From the collected raw data, mean, SD and 't' values were calculated, which are shown in tables below.

- **Academic Achievement of Higher Secondary Students in relation to Emotional Intelligence**

To study the effect of Emotional Intelligence on Academic Achievement of Higher Secondary Students mean, SD and 't' values were calculated which have been summarized below.

Table No. 1

Comparison of Academic Achievement Scores of Higher Secondary Students in relation to Emotional Intelligence

Comparison Group	N	Mean	Std. Deviation	df	t-value	Level of Significance
High EI	268	88.78	7.427	538	4.083	.01
Low EI	272	85.92	8.827			

Table 1 shows that the mean and standard deviation of academic achievement scores of higher secondary students having High EI are 88.78 and 7.427 respectively and for those having Low EI are 85.92 and 8.827 respectively. As obtained t-value (4.083) is greater than table value of 't' (2.58) at .01 level of significance, so it is significant. The significant 't' value indicates that emotional intelligence lays significant effect on academic achievement of higher secondary students.

“The null hypothesis H₀₁ is rejected.”

• Academic Achievement of Higher Secondary Students in relation to Gender

The 't' test was applied to assess whether significant difference existed in academic achievement scores of higher secondary students with respect to gender. Mean and SD were also calculated. The obtained values have been shown below.

Table No. 2

Comparison of Academic Achievement Scores of Higher Secondary Students in relation to Gender

Comparison Group	N	Mean	Std. Deviation	df	t-value	Level of Significance
Male	270	86.17	8.002	538	-3.299	.01
Female	270	88.50	8.404			

On comparing the academic achievement scores of male and female higher secondary students shown in **Table No. 2**, it can be stated that academic achievement of female students (M =88.50, S.D. = 8.404) is greater than academic achievement of male students (M = 86.17, S.D. = 8.002). The obtained t-value was also found significant at 0.01 level of significance which leads to the conclusion that academic achievement of higher secondary students is significantly impacted by gender.

“The null hypothesis H_0 is rejected.”

Discussion:

The present study conducted with the objective of evaluating the effect of emotional intelligence and gender on academic achievement of higher secondary students reveals that individually emotional intelligence and gender lay significant effect on the academic achievement of higher secondary students. A positive impact of emotional intelligence on academic achievement of higher secondary students was revealed in study results. Similar results were unveiled in research findings of Singh (2015), Acharya (2015), Ali (2016), Tyagi & Gautam (2017), Dayal & Muddgal (2017) and Al-Qadri & Zhao (2021) where students with higher academic achievement were found to possess higher EI levels compared to students having lower academic achievement. Contrary to this proposition, Cheema (2016) found a positive but insignificant relationship between emotional intelligence and academic achievement of students and hence concluded that a student having high academic achievement might not necessarily be emotionally intelligent too.

Mean of academic achievement scores of female higher secondary students was found higher than the male higher secondary students. Thus, significant effect of gender on academic achievement of higher secondary students and better academic achievement of girls than boys was proposed. Similar superiority of girls over boys in academics was revealed in research findings of Tabbodi, Rahgozar & Abadi (2015), Dev (2016), Rathee & Thakran (2019) and Kaushal & Yadav (2021) while Singh (2015) and Islam & Khan (2015) found no significant difference in academic achievement of male and female students. Differences in Mental Health (Talwar & Das, 2014), Happiness (Tabbodi, Rahgozar & Abadi, 2015), General Mental Ability, Home Environment and Interest (Dev, 2016), Frustration (Rathee & Thakran, 2019) and Creativity (Kaushal & Yadav, 2021) were highlighted as factors which led to differences in academic achievement among girls and boys.

Conclusion:

The results of present descriptive study have disclosed that academic achievement of higher secondary students is significantly impacted by their emotional intelligence levels. Significant differences in academic achievement among male and female higher secondary students were also revealed where academic achievement of girls was found better than boys. In view of present research findings and based on review of previous studies, the researcher proposes inclusion of educational programs for training of emotional stability (Jyothi & Sharmila, 2022) and development of emotional intelligence skills (Nwadinigwe & Azuka-Obieke, 2012 and Chew, Zain & Hassan, 2013) in school curriculum for enhancing academic achievement of higher secondary students.

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