



An Attempt To Analyse The Relationship Between Intelligence, Personality, Emotional Intelligence, And Academic Achievement Of School Students: With Special Focus To Anantapur District

Chigicherla Muthyalappa Research Scholar, Department of Education, Dr. A. P. J. Abdul Kalam University, Indore, Madhya Pradesh.

Dr. Osmita Hati Supervisor, Department of Education, Dr. A. P. J. Abdul Kalam University, Indore, Madhya Pradesh.

ABSTRACT

This research investigates the predictive relationship between intelligence, personality traits, emotional intelligence, and academic achievement among secondary school students. The study aims to explore how these factors collectively influence students' performance in their academic endeavors. Understanding the combined impact of intelligence, personality, and emotional intelligence on academic achievement can inform targeted interventions and support systems that foster students' holistic development. By recognizing and harnessing these predictors, educators can design tailored strategies to enhance students' learning experiences and promote academic excellence among secondary school students. In conclusion, this study sheds light on the intricate relationship between intelligence, personality traits, emotional intelligence, and academic achievement among secondary school students. By unraveling the collective influence of these factors, the research contributes valuable insights to the field of education, offering avenues for empowering students and optimizing their academic potential.

Keywords: Emotional intelligence, Personality, Performance, Academic, Students.

I. INTRODUCTION

Analyzing the relationship between intelligence, personality, emotional intelligence, and academic achievement is a complex and intriguing area of research that has garnered significant attention from scholars and educators. Numerous studies have been conducted to understand how these factors interact and influence an individual's academic performance.

Intelligence, commonly measured through IQ tests, has long been associated with academic achievement. Higher intelligence levels are often linked to better academic outcomes, as individuals with higher cognitive abilities tend to grasp complex concepts

5530 | **Chigicherla Muthyalappa** **An Attempt To Analyse The Relationship Between Intelligence, Personality, Emotional Intelligence, And Academic Achievement Of School Students: With Special Focus To Anantapur District**

more quickly, solve problems efficiently, and demonstrate strong critical thinking skills. Personality traits can also impact academic achievement. For instance, traits like conscientiousness, openness to experience, and agreeableness are found to be positively correlated with higher academic success. Conscientious individuals are generally more organized and disciplined, leading to effective study habits and time management. Openness to experience may encourage intellectual curiosity, while agreeableness can facilitate better relationships with teachers and peers.

Emotional intelligence, which involves the ability to recognize and manage emotions, plays a crucial role in academic achievement as well. Students with higher emotional intelligence are better equipped to handle stress, maintain focus, and cope with challenges, fostering a conducive learning environment.

Moreover, the relationship between these factors is often bidirectional. Academic success can enhance a student's confidence, positively impacting their personality and emotional intelligence. Conversely, personality traits and emotional intelligence can influence how a student perceives and approaches academic tasks, affecting their performance.

It is essential to consider other influencing variables, such as socio-economic background, home environment, and access to educational resources, as these can also contribute significantly to academic achievement.

To comprehensively analyze the relationship between intelligence, personality, emotional intelligence, and academic achievement, researchers employ various quantitative and qualitative research methods, including standardized tests, surveys, interviews, and longitudinal studies. The findings from these studies can help educators develop targeted interventions and support systems to enhance student learning and foster overall academic growth.

In conclusion, the relationship between intelligence, personality, emotional intelligence, and academic achievement is intricate and multifaceted. A comprehensive understanding of these interactions can lead to valuable insights that promote effective educational practices and support students in reaching their full academic potential.

II. REVIEW OF LITERATURE

Revathy.P (2021) The importance of cognition and trait emotional intelligence in higher secondary pupils, as well as their relationship to academic accomplishment, are investigated in this study. The impact of demographic characteristics such as gender, location, language of instruction, and student birth order on the chosen variables was also investigated. For data collection, the study used a survey method. A total of 313 higher secondary school students (150 boys and 163 girls) were included in the study. The Need for Cognition Scale (Cacioppo et al., 1984) and the Trait Emotional Intelligence Questionnaire–short form (TEIQue–SF; Petrides, 2009) were utilized in the investigation.

5531 | Chigicherla Muthyalappa An Attempt To Analyse The Relationship Between Intelligence, Personality, Emotional Intelligence, And Academic Achievement Of School Students: With Special Focus To Anantapur District

Boys and girls have similar needs for cognitive and trait emotional intelligence, according to the findings. In addition, academically, girls outpaced boys. Trait emotional intelligence has a considerable impact on academic achievement, according to the findings. The need for cognition and trait emotional intelligence also have a statistically significant link.

D.Elavarasi (2020) The current study looked at secondary school pupils' emotional intelligence and academic achievement in Chennai, Tamil Nadu, India. Using a multi-stage sampling procedure, 952 secondary school students in Chennai, India were chosen to collect data using the Emotional Intelligence Test (EIT - Sharma, 2011). Furthermore, the total marks achieved in their IX and X standard annual examinations are used to measure secondary school pupils' academic achievement. Using the SPSS Package, the data was analyzed for correlation. The findings of this study demonstrated a link between emotional intelligence and academic achievement in secondary school students. School education is an important element of everyone's academic life and a turning moment for them. At this point, a student's academic performance is critical in determining the next step of their education, which in turn shapes their career. Academic accomplishment is one of the most important results of the educational system, and it also has a significant impact on the lives of students (Kell, Lubinski & Benbow, 2013). It is a combination of the student's emotional and social lives. According to Suvarna & Bhata (2016), Bhat (2013), and Al-Zoubi & Younes (2015), a student's low academic accomplishment is influenced by a variety of characteristics such as personality, intelligences, opportunity, motivation, interest, aptitude, self-concept, study habits, self-esteem, and attitude. Personal, environmental, and family variables all contribute to pupils' poor success levels (AlZoubi&Younes, 2015). Our entire educational system is focused and devoting greater emphasis to student academic accomplishment, particularly from secondary to higher secondary school (Bhat, 2013). Furthermore, academic accomplishment is seen as a critical criterion for assessing one's capacity and achievement (Bhat, 2013), as well as a critical indicator of individual differences (Al-Zoubi & Younes, 2015). As a result, it occupies an important position in the sphere of education among student life.

Iram Afridi (2019) The goal of this research was to discover the link between emotional intelligence and academic achievement. This survey included 384 students from secondary and high secondary schools. Academic accomplishment and Emotional Intelligence have a strong association, with a p-value of 0.01. The mean difference in emotional intelligence score between students who had high academic scores and students who received low academic scores was found to be high, 58.57, as compared to 56.93 for students who received low academic scores. There was also a substantial link between Emotional Intelligence and academic scores ($r=0.130$). Higher emotional intelligence, according to the findings, correlates to greater educational outcomes. A person with a high level of Emotional Intelligence may experience a powerful, steady, and positive emotional state. Students who are in a good emotional state are more open to new experiences, which leads to more learning, according to study.

5532 | Chigicherla Muthyalappa – An Attempt To Analyse The Relationship Between Intelligence, Personality, Emotional Intelligence, And Academic Achievement Of School Students: With Special Focus To Anantapur District

Sebastian Bergold (2018) Above and beyond intelligence, personality influences academic success. However, research into the probable interaction effects of personality and intelligence in predicting academic accomplishment is limited, as is research into the distinction between broad and narrow personality traits in this context. To fill this study gap, two studies with 11th grade students (Study 1: N = 421; Study 2: N = 243) were conducted. The students took the Intelligence-Structure-Test 2000 R, which measures general reasoning ability, as well as the Five Factor Model Personality Inventory. Grade Point Average was used to measure academic accomplishment. Study 1 found that Conscientiousness and intelligence interacted when predicting academic accomplishment, with a larger link between intellect and academic achievement when students scored higher on the Conscientiousness measure. Study 2 verified the findings of Study 1 and discovered that Neuroticism has a moderating influence (stronger association between intelligence and academic achievement with lower values on the Neuroticism scale). Analyses at the facet level produced far more distinct results than analyses at the domain level, implying that for predicting academic achievement, examining personality aspects should be chosen over investigating personality domains.

Pia Rosander (2014) In a longitudinal study of a Swedish upper secondary school population, the researchers wanted to see if personality could predict academic performance. Final grades from obligatory school and upper secondary school were used to evaluate academic success during a three-year period. After controlling for general intelligence, the Big Five personality characteristics (Costa & McCrae, 1992) – particularly Conscientiousness and Neuroticism – were found to predict overall academic achievement. Conscientiousness, as tested at the age of 16, appears to be able to explain changes in academic achievement at the age of 19. The influence of neuroticism on conscientiousness suggests that being a little neurotic is preferable to being steady when it comes to achieving good marks. The study builds on earlier research by examining the Big Five's association with academic success over a three-year span. The findings suggest ways for educators to improve educational outcomes.

III. PROPOSED METHOD

Sample

A total of 120 students in the tenth grade of a secondary school participated in this study. Using a stratified random selection technique, the sample was drawn from seven different educational institutions in the city of Anantpur, Andhra Pradesh, India. The pupils' ages ranged from 14 to 16.

Measuring Tools

The following assessments were used to gauge pupils' cognitive abilities, emotional maturity, and well-being:

5533 | Chigicherla Muthyalappa An Attempt To Analyse The Relationship Between Intelligence, Personality, Emotional Intelligence, And Academic Achievement Of School Students: With Special Focus To Anantapur District

Intelligence: Intelligence was evaluated with the use of the Test of General Mental Ability (Intelligence). The respondents' personalities were evaluated using a Hindi version of the Junior/Senior High School Personality Questionnaire (HSPQ) developed by Kapoor and Srivastava (2004).

Emotional Intelligence: The level of emotional intelligence was evaluated with the use of the Emotional Intelligence Scale (EIS). The EIS is a product of the work of Hyde, Pathe, and Dhar (2007).

Academic Achievement: A student's academic performance is evaluated in part by their mark percentage in Grade 9.

Research Design And Procedure

The multivariate ex-post-facto study design was chosen because of the ex-post-facto and multivariate character of academic attainment. A questionnaire was distributed to all of the participants. In-person interviews and test-taking cooperation requests were made by the researcher. All questions could be answered in the time allotted to respondents. The investigator made sure that all the questions were answered before taking the response sheets back. The volunteers were applauded for their helpfulness.

Following the guidelines of the exam handbook, the test takers' replies were tallied. (Academic success was the dependent variable, and the study's predictors were IQ, EQ, and other measures of mental acuity.)SPSS-17 was used for the statistical analysis of the results. The association between the predictor factors and the outcome variable was analyzed using bivariate correlation and Stepwise multiple regression.

IV. RESULTS AND DISCUSSION

Carl Pearson's product moment correlation was used to investigate the nature and depth of the connection between IQ, EQ, and academic success. Tabulated below are the findings of these analyses.

Table 1: Pearson's correlation of intelligence, personality and emotional intelligence with academic achievement

Variables	Academic Achievement
Intelligence	.811**
Factor A	.164*
Factor B	.462**

Factor C	.261**
Factor D	-.071
Factor E	.034
Factor F	.149*
Factor G	.275**
Factor H	.004
Factor I	-.097
Factor J	.022
factor O	-.211**
factor Q2	.306**
factor Q3	.275**
factor Q4	-.284**
Emotional Intelligence	.149*

** significant at 0.01 level

* significant at 0.05 level

According to Table 1, there is a substantial and positive relationship between intelligence and academic success. Affection (A), intellect (B), emotional stability (C), zeal (F), diligence (G), independence (Q2), and self-control (Q3) are all positively connected with academic success. There is a negative and substantial relationship between the personality traits of anxiety (O) and tension (Q4) and performance in school. There is a favorable and statistically significant relationship between emotional intelligence and scholastic performance.

Table 2 displays the results of a stepwise multiple regression analysis. A multiple R of 0.851 was found in the summary of the model. The significance of this number indicates the quality of the correlation between academic performance and the collection of predictor factors. The correlation between these two variables is highly significant ($F = 84,163, p .000$). We calculated an R^2 value of 0.719, which is the multiple determination coefficient. It indicates that the collection of predictor factors has predicted 72.30 percent of the variation in academic performance. As a result, 27.70 percent of the total variance is unpredictable ($K^2 = 1-R^2$). The population-weighted estimate of R^2 is 0.711, which is

5535 | Chigicherla Muthyalappa An Attempt To Analyse The Relationship Between Intelligence, Personality, Emotional Intelligence, And Academic Achievement Of School Students: With Special Focus To Anantapur District

given by the statistic known as Adjusted R2. As a measure of our model's ability to generalize, we want the adjusted R2 to be equal to or extremely near to the value of R2. Because the Adjusted R2 value for this model (0.711) is so close to the observed R2 value (0.719), we may infer that its cross validity is rather good. This estimate has a standard deviation of 4.44041.

Table 2: Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.851	.719	.711	4.44041

Table 3 provides a summary of the analysis of variance for the association between the predictor factors and the students' performance in school. Table 3 shows that there is a statistically significant link between predictors and grades ($F(6,113) = 84.196, p = .000$).

Table 3: ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	9956.632	6	1659.439	84.163	.000
Residual	3805.368	113	19.717		
Total	13762.000	119			

Fisher's t-test was used to determine the significance of the unstandardized coefficient B. Intelligence ($t = 17.208, p = .000$), HSPQ factor B ($t = 4.264, p = .000$), EIS ($t = 2.278, p = .024$), HSPQ Q2 ($t = 2.732, p = .007$), HSPQ A ($t = -2.551, p = .012$), and HSPQ Q4 ($t = -2.271, p = .024$) all had statistically significant partial regression coefficients or weights,

Table 4: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.410	5.025		0.679	0.498
Intelligence	0.415	0.024	0.719	17.208	0.000
HSPQ factor B	1.208	0.283	0.181	4.264	0.000

Emotional Intelligence	0.023	0.010	0.089	2.278	0.024
HSPQ factor Q2	2.185	0.800	0.110	2.732	0.007
HSPQ factor A	-0.269	0.106	-0.104	-2.551	0.012
HSPQ factor Q4	-1.965	0.865	-0.092	-2.271	0.024

It was discovered that academic intelligence has the greatest bearing on academic success. This result agrees with previous ones.

In conclusion, there is a strong relationship between intellect, emotional intelligence, and personality qualities including self-sufficiency, warmth, and tension, all of which influence academic success. Since academic success is multifaceted, however, further research is needed to confirm the results of this one.

V. CONCLUSION

In conclusion, the study examining the predictive relationship between intelligence, personality, emotional intelligence, and academic achievement among secondary school students has provided valuable insights into the multifaceted nature of academic success. The findings highlight the significance of these factors in shaping students' performance and overall learning experiences.

The implications of this research are significant for educators, school administrators, and policymakers. Acknowledging the role of intelligence, personality, and emotional intelligence in shaping academic outcomes can inform the development of tailored interventions and support systems for secondary school students. Educators can design targeted strategies to nurture cognitive, emotional, and personality aspects, thereby enhancing students' overall learning experiences and academic achievements. However, it is essential to recognize the complexity of academic success, as multiple other factors may also contribute to students' achievements, such as socio-economic background, home environment, and motivation. Further research and longitudinal studies are warranted to delve deeper into these aspects and gain a more comprehensive understanding of the predictors of academic achievement.

In conclusion, this study underscores the importance of considering intelligence, personality traits, and emotional intelligence as interrelated factors in predicting academic achievement among secondary school students. By fostering a holistic approach to education, educators can nurture students' diverse abilities and create an

environment conducive to their academic growth and personal development. Ultimately, harnessing the potential of these predictors can empower students to reach their full potential and succeed academically, shaping a brighter future for themselves and society at large.

REFERENCES: -

1. Revathy.P, & N. Kalai Arasi. (2021). Need for Cognition and Trait Emotional Intelligence in Relation to Academic Achievement of Higher Secondary Students. *MIER Journal of Educational Studies Trends and Practices*, 11(1), 30–48. <https://doi.org/10.52634/mier/2021/v11/i1/1753>
 2. D.Elavarasi (2020) “EMOTIONAL INTELLIGENCE AND ACADEMIC ACHIEVEMENT AMONG SECONDARY GRADE STUDENTS” *TNTEU International Journal of Educational Research*,
 3. Iram Afridi (2019) “The Relationship of Emotional Intelligence with the Academic Achievement of Students” *Global Social Sciences Review (GSSR)* Vol. IV, No. III (Summer 2019) | Page: 257– 263
 4. Bergold, S & Steinmayr, R. (2018). Personality and Intelligence Interact in the Prediction of Academic Achievement, *Journal of Intelligence*, 6 (27), 1-18, doi:10.3390/jintelligence6020027
 5. Dr. Anjali Sharma (2017) “A study of Emotional Intelligence in Relation to Academic Achievement, Gender and Locality” *International Journal of Engineering Technology Science and Research IJETSR* www.ijetsr.com ISSN 2394 – 3386 Volume 4, Issue 7 July 2017
 6. Rosander, P., & Backstorm, M. (2014). Personality traits measured at baseline can predict academic performance in upper secondary three years later, *Scandinavian Journal of Psychology*, 55, 611-618, doi: 10.1111/sjop.12165
 7. Spinath, B., Eckert, C., & Steinmayr, R. (2014). Gender differences in school success: what are the roles of students’ intelligence, personality and motivation? *Educational Research*, 56 (2), 230-243, doi: 10.1080/00131881.2014.898917
 8. Mohammad K., Saber A. and Kayhan P. (2013). The relationship between accounting students’ emotional intelligence (EQ) and test anxiety and also their academic achievements. *European Journal of Experimental Biology*, 3(2), 585-591.
 9. Adekola B.O. (2012). Home and school factors as determinants of students’ achievement in senior secondary school english comprehension in four south
- 5538 | Chigicherla Muthyalappa An Attempt To Analyse The Relationship Between Intelligence, Personality, Emotional Intelligence, And Academic Achievement Of School Students: With Special Focus To Anantapur District**

western states. *Research Journal in Organizational Psychology & Educational Studies*. 1(5): 280-283, (ISSN: 2276-8475).

10. Weisberg, Y. J., DeYoung, C. G., & Hirsh, J. B. (2011). Gender differences in personality across the ten aspects of the Big Five, *Frontiers in Psychology*, 2 (178), 1-11, doi:10.3389/fpsyg.2011.00178