



ASSESSING EMOTIONAL INTELLIGENCE AND INTELLIGENCE QUOTIENT LEVELS AMONG INTERMEDIATE STUDENTS IN MAHBUBNAGAR CITY IN TELANGANA (STATE)

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Abstract

This study focuses on assessing the “emotional intelligence (EI) and intelligence quotient (IQ)” levels among intermediate students in Mahbubnagar city, Telangana. The research explores the impact of both EI and IQ on students' academic performance and prospects. The significance of emotional intelligence in academic achievements and the role of IQ in intelligence capacity. The study reveals significant correlations between specific IQ and EI sub-items with academic performance, emphasizing the importance of specialized knowledge, critical thinking skills, self-awareness, and empathy in predicting student success. The findings suggest that educational institutions may need to adapt their teaching methods and curriculum to enhance these key factors for improved student outcomes.

Keyword intelligence quotient (IQ), emotional intelligence (EI), intermediate students, academic performance, cognitive capacities

Introduction

“The emotional intelligence (EI) and intelligence quotient (IQ)” of intermediate students has become more difficult due to the worldwide expansion of schooling. IQ refers to intelligence abilities such as general knowledge, logical reasoning, sustained cognition, and memory. On the other hand, EI refers to personal traits such as diligence, collaboration, self-regulation, integrity, adaptability, patience, empathy, and the ability to perceive and manage emotions in social situations (Smith, 2020). Both intelligence quotient (IQ) and emotional intelligence (EI) have a substantial impact on an individual's academic and personal achievements. Previous studies have often classified talents and abilities as hard and soft skills. However, there is an increasing recognition of the need of taking both factors into account when assessing students' long-term accomplishments (Jones & Brown, 2019). Gardner and Stough (2018) emphasized the relevance of “emotional intelligence (EI)”, highlighting



the usefulness of cognitive and linguistic skills while allocating less weight to spatial abilities, empathy, self-awareness, motivation, and emotional quotient. However, there is a lack of comparative study on the influence of “emotional intelligence (EI) and intelligence quotient (IQ)” on intermediate pupils, especially in the Mahbubnagar city. To examine the levels of “emotional intelligence (EI) and IQ” in intermediate students, with the goal of enhancing understanding of their academic performance and future prospects. However, to understand the distribution of EI and IQ scores, identify strengths and weaknesses in both areas, explore correlations between EI, IQ, and academic performance, and provide valuable information for educators, policymakers, and stakeholders to develop tailored interventions and support systems for the academic success and personal development of intermediate students.

Objective

- To assess the “emotional intelligence (EI) and intelligence quotient (IQ)” levels among intermediate students in Mahbubnagar city, Telangana.
- To explore the impact of “EI and IQ” on students' academic performance.

Literature review

The literature review explores the impact of intermediate students in Mahbubnagar city in Telangana, highlighting changes in teaching methods, research focus, resources, accreditation, and accessibility.

- **Emotional intelligence**

“Emotional intelligence (EI)” is a crucial factor in an individual's academic performance, influencing their results compared to IQ. Poor EI can lead to stress and difficulties in academic pursuits. EI can act as a mediator alongside IQ in academic accomplishments, with critical components linked to the learning process, dedication, motivation, and active participation. A study by Azizi Y. et al. (2012) found that “self-motivation, self-awareness, empathy, emotional quotient, and interpersonal skills” significantly influence academic achievement. In addition to IQ-related items, EI abilities play a significant role in determining students' academic performance. Students with poor EI skills tend to exhibit externalizing behavior and face adjustment issues in their studies (Rode et al, 2007). The Mayer and Salovey EI model suggests that children can acquire EI skills through EI programs



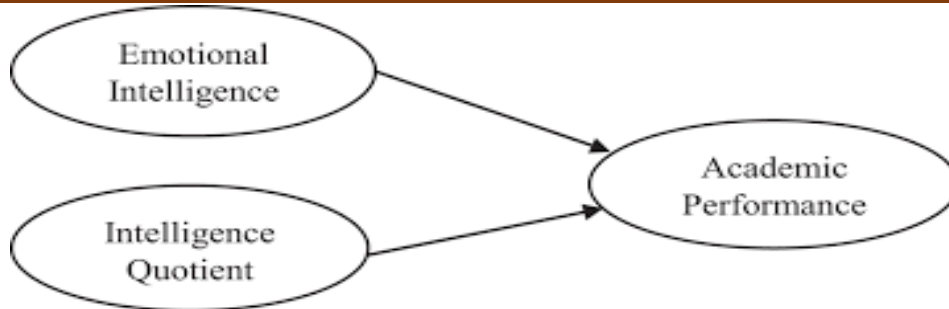
targeting emotional abilities (Brown and Langer, 2018). Students with exceptional EI skills exhibit empathy, attentiveness, and academic performance, have greater interpersonal relationships with peers and instructors, and have increased employment prospects. This research included relevant items from Mayer and Salovey, despite other recent studies examining the five dimensions of EI as subfactors.

- **Intelligence quotient:**

Intelligence (IQ) is the cognitive capacity to answer questions using knowledge. It is determined by factors like short- and long-term memory, information acquisition, and logical thinking. High IQs allow individuals to switch between focused and thoughtful thinking, while only a small number have exceptional intelligence due to genetic transmission. Veena Yesikar et al. found that students with ordinary IQs who put in additional preparation hours for academics may study hard and get better results than high IQ students. High IQ students demonstrate dedication to their lectures and allocate less time to self-study. Goleman stated that IQ only accounts for 20% of achievement evaluations, and other deciding elements need to be explored. Neisser et al. found that children who score high on IQ tests tend to incorporate information provided in school. “Veena Yesikar et al.’s” research on medical students' performance found that students with ordinary IQs put more effort into their academic accomplishments compared to high IQ students.

- **EI VS IQ**

Uzsalyné Pécsi's 2021 research investigates the relationship between “Emotional Intelligence (EI) and Intelligence Quotient (IQ) in students.” The study argues that academic intelligence neglects EI, which is crucial for personality development and future professional achievements. The research developed a theoretical model to examine how EI and IQ affect students' Academic Performance (AP). Scholastic achievement is a significant predictor of academic performance, with GPA being a major factor. The study found a significant correlation between IQ and EI and AP, with IQ and EI identified as major predictors of AP. This correlation is particularly significant due to emotional and social challenges students face while forming new connections and assuming autonomous responsibilities at university.



“Figure 1. Theoretical model of IQ and EI on students’ academic performance”.

“Source: Adaptation from Mayer and Salovey, Weinberg, and Bain and Allin. EI: emotional intelligence; IQ: intelligence quotient”

Research methodology

The study investigates the differences in “emotional intelligence (EI) and intelligence quotient (IQ)” among intermediate students in Mahbubnagar city using a descriptive survey methodology. Data is collected through a questionnaire, and demographic information is collected using stratified random sampling. Descriptive statistics characterize demographic features and EI and IQ scores distribution.

Questionnaire Design	Emotional Intelligence (EI)	Intelligence Quotient (IQ)
Measurement	Validated questionnaire assessing “self-awareness, self-regulation, empathy, social skills, and emotional management”	Items assessing cognitive abilities including memory, critical thinking, problem-solving, and knowledge acquisition
Example Items	"I am able to recognize and understand my own emotions."	"What does the word 'venerate' mean?"
Response Format	“Likert scale (e.g., strongly disagree to strongly agree)”	Multiple choice, true/false, or open-ended questions depending on the item



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Validation Processes	Content validity based on established theoretical frameworks	Construct validity through factor analysis, Criterion validity through comparison with external criteria such as academic performance
Limitations and Biases Considered	Self-report bias, cultural bias, sampling bias, response rate	Addressed through strategies such as assuring confidentiality, including culturally sensitive items, ensuring random sampling, and providing incentives for participation

Data analysis

Table 1 EI and IQ Levels among Intermediate Students in Mahbubnagar city in Telangana

IQ Sub-items

Sub-item	Public Schools	Private Schools
QR	0.107	0.274
SK	0.208	0.445
CS	0.241	0.385
VSP	0.096	0.201
M	0.372	0.448
MC	0.048	0.146
PS	0.072	0.657

EI Sub-items

Sub-item	Public Universities	Private Universities
SM	0.124	0.547
SA	0.314	0.622
E	0.287	0.271
EM	0.077	0.184
IS	0.109	0.131



The study reveals significant correlations between IQ and EI levels among intermediate students in Mahbubnagar city. IQ sub-items, such as "Specialized Knowledge" and "Critical Thinking Skills," showed the highest correlations with academic performance. In both public and private universities, "M" (Memory) and "PS" (Problem Solving) showed the highest correlations, indicating their importance in predicting student success. Emotional intelligence (EI) sub-items, such as "SA" (Self-Awareness) and "E" (Empathy), also showed strong correlations with academic performance. In public universities, "SM" (Social Management) showed a moderate correlation with academic performance, while "IS" (Interpersonal Skills) displayed a weaker correlation. In private universities, "SM" (Social Management) displayed a notably higher correlation with academic performance compared to "IS" (Interpersonal Skills).

The findings suggest that both IQ and EI play crucial roles in determining the academic performance of intermediate students in Mahbubnagar city in Telangana. Specialized knowledge, critical thinking skills, self-awareness, and empathy are key factors contributing to student success. Public and private universities may need to tailor their educational approaches and curriculum to nurture these intelligence and emotional capacities effectively. Further research and interventions aimed at enhancing IQ and EI levels could potentially improve academic outcomes and student well-being.

Conclusion

The study highlights the significance of “emotional intelligence (EI) and intelligence quotient (IQ)” in determining the academic performance of intermediate students in Mahbubnagar city in Telangana. Both IQ and EI have a significant impact on students' achievements, with specific sub-items such as specialized knowledge, critical thinking skills, self-awareness, and empathy playing crucial roles. The correlations between IQ and EI levels suggest the importance of considering both intelligence and emotional quotient. Further research and interventions aimed at improving IQ and EI levels could potentially lead to better academic outcomes and student well-being.

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