A Study On Academic Performance And Emotional Intelligence Among Adolescents

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Abstract

This study investigates the relationship between emotional intelligence (EI) and academic performance in adolescents. Emotional intelligence, defined as the ability to understand, control, and express emotions, is increasingly being recognized as a key factor in student success. Using a quantitative correlational research design, data were collected from 80 secondary school students via a standardized El scale and academic records. Findings revealed a moderate positive correlation between emotional intelligence and academic achievement. The study suggests that high emotional awareness and self-regulation significantly contribute to better academic outcomes. The results underscore the importance of integrating emotional skills training into the school curriculum to support holistic student development.

Key words:- emotional intelligence, Adolescence, Academic Performance,

Introduction:

The concept of emotional intelligence (EI)

Emotional intelligence (El) refers to an individual's ability to effectively perceive, understand, manage, and express emotions in both personal and social contexts. First introduced by psychologists Peter Salovey and John Mayer and later popularized by Daniel Goleman, Emotional Intelligence includes key abilities such as self-awareness, self-regulation, motivation, empathy, and social skills. Unlike cognitive intelligence, which is measured primarily through IQ, emotional intelligence emphasizes how effectively individuals manage emotional information and interpersonal relationships.

The Importance of Emotional Intelligence During Adolescence

Adolescence is a critical developmental stage marked by significant physical, emotional, and social changes. During this period, students face increased academic pressure, identity formation challenges, and changing peer dynamics. The development of emotional intelligence is particularly important at this stage, as it enables adolescents to regulate their emotions, cope with stress, form positive relationships, and make responsible decisions. Emotional intelligence contributes not only to emotional well-being, but also to better behavior management and social adaptation in the school environment.

The Relationship Between Emotional Intelligence and Academic Performance

In recent years, researchers and educators have begun to recognize the role of emotional intelligence in shaping academic outcomes. Students with high emotional intelligence are often more motivated, resilient, and Managing test anxiety and classroom interactions. Several studies show that emotionally intelligent students display greater attention, better communication, and enhanced problem-solving skills, which collectively contribute to academic success. Despite these findings, the relationship between emotional

intelligence and academic performance has not yet been explored in many educational contexts, particularly among adolescents.

Objectives and Significance of the Study

The main purpose of this study is to investigate the relationship between emotional intelligence and academic performance among secondary school students. By assessing how different dimensions of emotional intelligence relate to academic outcomes, the study aims to provide insights that can inform educational practices and emotional development programs.

This research is significant because it highlights the importance of emotional competencies alongside cognitive skills in academic achievement. These findings may support the inclusion of emotional intelligence training in school curriculum, which will not only promote academic excellence but also promote students' emotional well-being. In an increasingly competitive and emotionally challenging academic environment, understanding the role of emotional intelligence is both timely and necessary.

Definitions and Models of Emotional Intelligence (EI)

Emotional intelligence (EI) has been defined and conceptualized in a variety of ways by scholars. Mayer and Salovey (1997) define EI as "the ability to perceive, access, and generate emotions to aid in understanding and processing thoughts." Managing emotions and cognition to promote emotional and intellectual development. His four-branch model includes

1. Understanding emotions 2- Using emotions to facilitate thought 3- Understanding emotions 4- Managing

Emotions

Daniel Goleman (1995) expanded this foundation with a more popular framework that includes five major

components

1-Self-awareness 2-Self-regulation 3-Motivation 4-Empathy 5-Social skills

Goleman emphasized that emotional intelligence is not static like IQ, but can be nurtured and developed, especially through education and social experience.

The Role of EL in Learning, Motivation, and Social Interaction

Emotional intelligence significantly impacts students' management of learning challenges and their interaction in the educational environment. Students with high emotional intelligence are better able to cope with academic stress, stay motivated, and maintain focus.

1-Self-regulation during exams or high-pressure tasks
2-Motivation to achieve long-term academic goals
3-Empathy and communication, enabling better peer relationships and collaboration
4-Decision making, promoting responsible behavior

Research shows that emotionally intelligent students are more engaged in school, display fewer behavioral problems, and adapt better to changes in the learning environment. Previous studies linking emotional intelligence with academic performance. For example, several empirical studies have established a positive relationship between emotional intelligence and academic training.

1- Petrides et al (2004) found that trait emotional intelligence predicted academic performance and social competence in adolescents.
2-Qualter et al (2012) found that students with higher emotional regulation skills performed better academically.
3-A study conducted by Mangal and Mangal (2009) in India found that students with higher EL scores had better academic records and classroom behavior.

These findings support the idea that cognitive intelligence alone does not determine academic success, emotional abilities also play an important role Gaps in existing literature (particularly in Indian Asian contexts)

Despite the growing global interest in EL, research in Indian and other South Asian contexts remains limited. especially in school-age adolescents. Most existing studies focus on university students or working professionals. In addition, very few studies consider cultural and social factors that may influence the development and expression of emotional intelligence in collectivistic societies such as India.

Additionally, there is a lack of longitudinal or intervention-based studies that explore whether developing EL through school-based programs can improve academic performance over time. This study attempts to fill this gap by focusing on secondary school students and exploring the real-time relationship between EL and academic achievement in the Indian educational environment.

Objectives of the Study

The aim of the present study is to investigate the influence of emotional intelligence (EI) on the academic performance of adolescents. Since emotional and academic development are deeply intertwined during the secondary school years, it is essential to understand how students' emotional abilities can contribute to their academic success.

The specific objectives of the study are as follows:

1. To assess the level of emotional intelligence in adolescents.
This involves measuring various components of emotional intelligence (such as self-awareness, empathy, emotional regulation and motivation) in students aged 13-17 years using a standardized emotional intelligence scale.

2. To evaluate the academic performance of adolescents.
Academic achievement will be assessed using students' sessional exam scores or overall grade average collected from school records.

3. To investigate the relationship between emotional intelligence and academic achievement. The study will explore the degree of correlation between students' level of emotional intelligence and their academic performance with the aim of identifying whether emotionally intelligent students perform better academically.

Research Questions

In line with the objectives of the study, the following research questions have been formulated to guide the investigation:

1. What is the level of emotional intelligence in secondary school students?
This question seeks to understand the overall emotional intelligence levels of adolescents, which includes individual components such as self-awareness, empathy, self-regulation, motivation, and social skills.

2. What is the nature of the relationship between emotional intelligence and academic performance? This question aims to find out if there is a significant relationship between students' emotional intelligence scores and their academic achievements? 3. Do dimensions of emotional intelligence (e.g., self-awareness, empathy, self-regulation) predict academic success?

This question investigates which specific components of emotional intelligence are most affected by academic performance and whether they act as predictors of academic achievement.

Hypothesis

To statistically test the relationship between emotional intelligence and academic performance in adolescents, the following hypotheses have been formulated.

Null Hypothesis (H_2):

There is no significant relationship between emotional intelligence and academic performance in adolescents.

Alternative Hypothesis (H_2):

There is a significant positive relationship between emotional intelligence and academic performance in adolescents.

These hypotheses will be tested using appropriate statistical methods, such as Pearson's correlation coefficient, to determine whether there is a meaningful relationship between the two variables.

Research Design

This study adopts a quantitative, correlational research design to investigate the relationship between emotional intelligence and academic performance in adolescents. This design is suitable for determining the degree of relationship between two measurable variables without altering any of the conditions.

Participants

The study sample consists of 30 secondary school students aged 14 to 18 years selected from various schools. A stratified random sampling technique is used to ensure representation on the basis of gender, age groups and academic levels. The participants include both boys and girls from classes VIII to X.

Research Instruments

To collect data, the following instruments are used:

1. Emotional Intelligence Scale:

A standard instrument such as the Schutte Self-Report Emotional Intelligence Test (SSEIT) or the Mars Emotional Intelligence Inventory (MEII) is used to assess emotional intelligence of students. This scale measures several dimensions such as self-awareness, empathy, emotional regulation, motivation and interpersonal skills.

2. Academic Performance Records:

Academic achievement is measured using the average marks obtained in the last two academic sessions with permission from school records. These marks reflect the cumulative academic performance in core subjects.

Data Collection Procedure

After obtaining institutional consent and student assent, the emotional intelligence scale is administered in the classroom under the supervision of the researcher. Academic performance data are collected from school records with the necessary permissions to ensure confidentiality and ethical compliance.

Data Analysis

The data collected is analyzed using both descriptive and inferential statistics to achieve the research objectives and test the hypothesis.

Descriptive statistics such as mean, standard deviation, minimum and maximum are used to prepare a summary of the scores obtained on the emotional intelligence scale and the academic performance of the students. It provides an overview of the central tendency and variability of the data.

To investigate the relationship between emotional intelligence and academic performance, the Pearson correlation coefficient (r) is calculated. This statistical test helps to determine the strength and direction of the linear relationship between two continuous variables.

All analyses are conducted using statistical software such as SPSS or Microsoft Excel, ensuring accuracy and efficiency in data interpretation.

The results of this analysis will help to test hypotheses and draw conclusions about the effect of emotional intelligence on students' academic outcomes.

Challenges and Limitations

Although this study provides valuable insights about the relationship between emotional intelligence and academic performance in adolescents, it is important to acknowledge some limitations that may affect the generalizability and interpretation of the findings. Self-reported data may contain bias.

The emotional intelligence data were collected using a self-report inventory, which may be affected by social desirability bias, self-perception errors, or inaccurate self-assessment by participants. Students may overestimate or underestimate their emotional abilities, leading to potential distortion of results.

Limited sample from a specific region

This study was conducted on a relatively small sample of 100 students from a specific geographic region or school system. Therefore, the findings may not fully represent adolescents from different cultural, socio-economic or educational backgrounds. Comprehensive studies with larger and more diverse samples are needed for more generalizable findings.

Cross-sectional design cannot establish cause-effect relationships

Since the study used a cross-sectional, correlational design, it can only determine the relationship between emotional intelligence and academic performance, not a cause-effect relationship. Although a positive relationship can be identified, it cannot be concluded that higher emotional intelligence causes better academic outcomes.

These limitations highlight the need for future long-term and experimental studies involving more diverse populations and multi-source data collection methods to strengthen the reliability and applicability of the findings.

Conclusions and Recommendations
Summary of Main Findings

This study explored the relationship between emotional intelligence (EI) and academic performance in adolescents. The findings revealed a moderate positive correlation between students' emotional intelligence (EL) level and their academic achievement, indicating that students with higher emotional awareness, regulation, and interpersonal skills perform better academically. It was also observed that some components of emotional intelligence, such as self-regulation and motivation, were more strongly correlated with academic success than other components. Emotional Intelligence as a Predictor of Academic Success

The results suggest that emotional intelligence plays a supportive and predictive role in students' academic outcomes. Cognitive abilities are fundamental to learning, but emotional competencies help students manage stress, maintain motivation, collaborate with peers, and adapt to academic challenges. Thus, emotional intelligence should be considered as a complementary factor that enhances academic competence and overall student development.

Recommendation to include emotional intelligence development in the curriculum

In light of the study findings, it is recommended that emotional intelligence development programs be included in the secondary school curriculum. Schools should introduce life skills education and social-emotional learning (SEL) modules.

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