

# Emotional intelligence as predictor of resilience toward academic stress mitigation among Public and Private Medical College students

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## ABSTRACT

**Background:** Emotional intelligence is a crucial concept in management, business, engineering, nursing and medicine. It has gained more attention than personality and Intelligence Quotient. Understanding human emotions is essential for understanding emotional intelligence.

**Aim:** High-EQ individuals can combine intellectual and emotional skills to adapt to new situations and achieve goals. Individuals with high emotional intelligence can read interpersonal cues and manipulate others' emotions.

**Method:** The Comparative study is conducted in Rai Medical College Sargodha from April 2021 to August 2022 and population was the MBSS students. Provide more demographic and socioeconomic data on survey participants. Determine the emotional intelligence traits all respondents share. Determine the respondents' academic achievement and calculate an average. Thoroughly study how socioeconomic background affects emotional intelligence. Determine if respondents' socioeconomic profile affects academic performance. To examine and publish the relationship between emotional intelligence components and respondents' academic performance.

**Result:** The study reveals a significant correlation between gender and emotional intelligence, with women generally having greater emotional intelligence. The majority of respondents are male, with 97.14% attending public institutions and 2.5% attending private medical colleges. Age and educational degree also impact emotional intelligence, with 54.89% of respondents aged 18-19 and 36.73% aged 20-22. Higher education levels are associated with increased emotional intelligence.

**Conclusion:** Emotional intelligence and academic performance were positively correlated. Emotional regulation and adaptive emotions are linked, suggesting emotional intelligence may prevent ASD. The study shows that high-AR students naturally manage and use emotional information to perform better academically. This supports the COR-based theoretical claims linking AR, EI, and AP.

**Keywords:** Emotional intelligence, Stress, Behavioral science, Public Private medical college.

## INTRODUCTION

Emotional intelligence has been touted as a management and business panacea since its inception. The concept may also be crucial for engineers, nurses, lawyers, and physicians. Several authors believe that emotional intelligence can change education at all levels, including primary, secondary, and tertiary education. The authors believe emotional intelligence can change the entire educational system. Emotional intelligence has gained more attention and interest than personality and Intelligence Quotient. Because emotional intelligence has been studied in both scientific and non-scientific subfields of behavioural science, interest in the topic has grown<sup>1</sup>.

First understand human emotions to understand "emotional intelligence". Physiologically, feelings are understandable. As well as psychologically. Mental states can cause physiological changes like increased heartbeat, pulse rate, sweating, and others. Psychologically, it is a state of exhilaration or excitement characterized by extreme feelings<sup>4</sup>. Exhilaration is intense. Anger, sadness, anxiety, happiness, love, surprise, and disgust are the most common emotions. This list includes embarrassment and disgust. Modernists believe that people's feelings are constructive, while traditionalists believe they are destructive. Traditionalists believe feelings harm people. Our fates and those of other species depend on emotions. For instance, dread motivates one to realize the danger. Get out of there. For thousands of years, humans needed to use their emotions to survive. Technology makes people value their emotions less, straining personal and professional relationships. High-EQ people can combine their intellectual and emotional skills to adapt to new situations and achieve their goals.

The following table lists emotions and their survival-related motivations. Skilled individuals with high emotional intelligence because they can read interpersonal cues and use this information appropriately, they have higher emotional awareness<sup>2,6,7</sup>.

This skill allows people to read others' emotions. Sensitivity to personal emotions, they have heightened emotional awareness, but they react to events intuitively due to their inability to read interpersonal cues. Those who can emotionally numb themselves, interpreting interpersonal cues boosts their emotional intelligence. Despite this, they apply this knowledge appropriately in the situation. Skilled manipulators of others' emotions. They comprehend human emotions better<sup>5,8,11</sup>. They can read interpersonal cues and manipulate others to benefit themselves in situations where doing so would be wrong. Those with limited emotional literacy and difficulty expressing emotions they have less emotional awareness and life experience. Understand how people behave in different situations.

### Factors Affecting Academic Performance

1. Variables affecting students include gender, age, intelligence, anxiety, values, interest, aptitude, stress management, aspirations, career goals, leisure activities, physical and mental health, visual and hearing impairments, and emotional intelligence. Student environment variables Instructor factors like gender, age, intelligence, and anxiety
2. Variables affecting instructors include gender, age, academic qualification, training programmes, classroom management, emotional intelligence, attitude towards students, and number of exams and assignments.
3. The individual's family history includes factors such as family size, educational qualifications, occupations, socioeconomic status, number of siblings, family members who work, parent-child relationship, goals, and emotional support.

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4. Variables affecting instruction include curriculum, medium, personal attention, pedagogical tools, teacher's native language, and library/laboratory space.
5. Evaluation variables can include the number of students who completed the assessment.
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7. Variables affecting school climate include class size, coeducational or single-sex status, administrators' vision and mission, admission policy, location, academic culture, founders' vision, and student-teacher ratio.
8. Peer interaction, including peer group structure, academic culture, and founders' vision for the school. Pressures, a history of student violence, competition between student groups, student homogeneity or heterogeneity, and other factors may contribute.

**Practical Implication:** Students with high AR tend to use creative methods to cultivate positive emotions, supporting theories that high AR students' natural ability to control and use emotional information to improve performance. COR-based theoretical claims explaining AR, EI, and AP have been validated, and the findings support the importance of EI in academic settings.

## RESEARCH METHODOLOGY

After Institutional Ethical Review Board permission, this comparative study was conducted in Rai Medical College Sargodha from April 2021 to August 2022 and population was the MBSS students. Provide more demographic and socioeconomic data on survey participants. Determine the emotional intelligence traits all respondents share. Determine the respondents' academic achievement and calculate an average. Thoroughly study how socioeconomic background affects emotional intelligence. Determine if respondents' socioeconomic profile affects academic performance. To examine and publish the relationship between emotional intelligence components and respondents' academic performance.

**Fieldwork and data collection:** Data were filtered to remove incomplete or unusable questionnaire data. The remaining 500 questionnaires were processed using several data analysis methods to convert quantitative data. Analysis results help researchers interpret data and support hypotheses. All analyses are done using SPSS because it helps researchers calculate and analyse quantitative data more efficiently. This study used descriptive analysis, chi-square test, Independent-Samples T-Test, One Way ANOVA, and structural equation modelling. Two statistical analysis strategies were used for this study. Multivariate analysis infers data and descriptive statistics explain variables. This statistical analysis section includes four sub-sections: frequency analysis, factor analysis, t-test, ANOVA, and SEM for determining the degree of relationship between study variables. SPSS 23 was used for descriptive and inferential analysis in this study.

## RESULTS

There is a statistically significant correlation between an individual's gender and their level of emotional intelligence. It is a widely believed belief that women possess greater emotional intelligence than men. This holds true in the vast majority of instances. In addition, we operate on the assumption that female students demonstrate a higher level of academic accomplishment than male students.

According to the data presented in the table contained above, fifty percent of respondents are male, 97.14% attend public institutions and two point five percent attend Private Medical Colleges. In contrast, females make up 50% of the total number of respondents; of these females, 97.5% are students at public institutions and 2.5% are graduates of Private Medical Colleges. According to the data shown previously, the current climate, which

affords men and women equal opportunity, has resulted in roughly the same number of men and women enrolling in Medical-level higher education programs.

The respondents' age is one of the essential profile variables, which impacts the level of emotional intelligence more. In general, the respondents with higher age have learnt more through experience, and their level of emotional intelligence may increase to an appreciable level. Hence, age is included as one of the profile variables. The respondents' age is confined to 18 to 19 years, 20 to 22, and more than 22 years. The distribution of respondents based on their age clearly reveals that the majority of the respondents (54.89%) involved in the study are in the age group of 18 to 19, followed by 36.73% are in the age of 20 to 22, and 8.36% are in the age group of more than 22 years. In this maximum of the respondents who are in the age of 17 to 19 are studying in- Public Medical Colleges.

Educational degree increases the knowledge and skill among the individual. Higher the academic degree an individual possesses, it is generally understood that the emotional intelligence level will also increase. Hence, the educational degree is included as one of the profile variables. The respondents' academic degree is confined to under- graduation, post-graduation, FCPS, MCPS, M Phil (Master of Philosophy) and PhD (Doctor in Philosophy). The above table Publics that 54.69% of the respondents are under- graduates; among them, 97.76% are from Public Medical Colleges, and 2.23% are from Private Medical Colleges. Out of the total, 37.14% are post-graduate students, in that 98.35% are from Public Medical Colleges, and 2.2% are from Private Medical Colleges. As far as higher studies are concerned, 8.16% of the respondents are doing MPhil and PhD among which 7.5% are studying in the Public Medical Colleges, and 2.85% are studying in Private Medical Colleges.

The overall satisfaction of the relevance of courses taken by the Medical students may impact the respondents' academic performance. If an individual takes a course relevant to his/her interest, there are more chances of increased happiness and will, in turn, increase academic performance. The distribution of general satisfaction among the students towards the relevance of course studying is presented in Table 1.

Table 1: Happy with the relevance of the courses

Relevance of courses	Public Medical Colleges	Private Medical Colleges	Total
Yes	402(97.34%)	11(2.66%)	413(84.29%)
No	76(98.70%)	1(1.30%)	77(15.71%)
Total	478(97.55%)	12(2.45%)	490(100%)

Table 1 presents the opinion of the respondents about happiness with the relevance of their courses. Out of a total, 84.29% are happy about the relevance of their courses; among them, 97.34% are from Public Medical Colleges, and 2.66% of them are studying in Private Medical Colleges. Only 15.71% are not happy about their courses' relevance; out of the 97.34% are from Public Medical Colleges, and 2.66% are from Private Medical Colleges. The opinion on the quality of teaching may have an impact on the academic performance of the respondents.

Table 2: Opinion on the quality of teaching

Quality of teaching	Public Medical Colleges	Private Medical Colleges	Total
Yes	394(97.8%)	9(2.2%)	403(80.6%)
No	92(94.8%)	5(5.2%)	97(19.4%)
Total	478(97.2%)	14(2.8%)	490(100%)

Table 2 gives the statistics on the respondents' opinion about the quality of teaching in their respective colleges. Overall, 80.6% are satisfactory on the quality of teaching; among them, 97.8% are from Public Medical Colleges, and 2.2% are from Private Medical Colleges. Only 19.4% are not happy with the quality of teaching; out of the 94.8% are from Public Medical Colleges, and 5.2% are from Private Medical Colleges.

**Overall educational experience among the respondents:** The respondents' overall educational experience plays a vital role in influencing the level of emotional balance and increasing academic performance and vice versa. The overall educational experience among the respondents is classified into happy and not happy. The distribution of the respondents is shown in Table 3.

Table 3: Overall educational experience

Overall educational experience	Public Medical Colleges	Private Medical Colleges	Total
Happy	406(97.6%)	10(2.4%)	416(83.2%)
Not happy	80(95.2%)	4(4.8%)	84(16.8%)
Total	478(97.2%)	14(2.8%)	490(100%)

Regarding the overall educational experience, table 3 shows that 83.2% are happy, among them 97.6% are from Public Medical Colleges, and 2.4% are from Private Medical Colleges. Only 16.8% are not happy with the overall educational experience; out of the 95.2% are from Public Medical Colleges, and 4.8% are from Private Medical Colleges.

**DISCUSSION**

Academic resilience (AR) and emotional intelligence (EI) are essential for student success in academic environments. AR refers to a student's mental capacity to anticipate and adapt to challenging situations, while EI focuses on the ability to handle educational challenges<sup>13,17,19</sup>. AR is developed through critical observation and maladjustment rehabilitation in challenging situations, while EI is the cognitive skill and capacity to manage emotions to achieve desired results<sup>21,22</sup>.

AR is determined by internal factors such as personality variables and intelligence, as well as external resources from family, the educational organization, and the broader environment. EI includes traits and skills that help process and use emotional information to drive cognition and action. Emotion detection is a key skill in EI, which involves integrating, expressing, and using one's own emotions to drive behavior in cognitive processes like interpersonal communication and problem-solving<sup>16</sup>.

High-EQ students can control their emotions, making good decisions and being motivated to act appropriately. Academic performance also depends on EI, as it affects a person's ability to influence, engage, collaborate, and function in any academic setting. Emotional intelligence depends on how well a person controls their emotions and their ability to do so. Developing EI requires a strong commitment to changing thoughts and behavior, which can only come from training and growth<sup>19,21,23</sup>.

Therefore, there is a push to develop children's emotional competencies to succeed in school and life. Academic performance, also known as academic success or achievement, is a crucial aspect of student learning and development. Grades and GPA are commonly used as performance indicators, but they lack a practical and acknowledged subjective assessment method. Studies have shown that course grades and GPA are linked to cognitive and non-cognitive traits, personality, learning styles, social capital, study habits, involvement, and gender. Academic resilience (EI) is often linked to academic performance, with studies showing that AR students have more productive academic trajectories, better grades, more academic satisfaction, and lower dropout intentions due to better involvement. However, no research supports the claim that AR predicts EI. Resilience and emotional intelligence (EI) are linked, with studies showing that resilient people have positive emotions and develop adaptive emotion-related skills needed to adapt to changing academic demands and circumstances. Academic life is emotionally taxing and difficult, making it emotionally draining. The conservation of resources (COR) theory suggests that students who invest time, effort, and attention in AR can improve EI to manage emotional information under stressful educational conditions to achieve AP. Increased AR mitigates stressor effects on AP, and the

developmental AR process allows students to show positive emotion in challenging academic environments.

In conclusion, AR allows learning, boosts EI, and makes adaptive actions easier, leading to better performance and higher AP exam scores. Numerous studies have examined the relationship between emotional intelligence (EI) and academic performance (AP), although there is a lack of empirical research combining EI, AR, and AP. Studies have found both positive and non-significant EI-AP links in academic settings, making directionality uncertain. However, recent research supports the positive relationship between EI and AP, supporting previous studies. Resilience is a key component of PsyCap, and high AR students are more likely to develop EI processes to adapt to difficult situations. Emotional regulation and adaptive emotion production are interdependent, and emotional intelligence may protect against autism spectrum disorder. The positive relationship between EI and AP supports previous studies, and positive feelings are linked to emotional health improvement, thought-action repertoire development, and EI process expansion. AR-AP positive interaction aligns with theories that AR is an internal strength or resource students should use to improve AP<sup>25</sup>.

Students with high AR tend to use creative methods to cultivate positive emotions, supporting theories that high AR students' natural ability to control and use emotional information to improve performance. COR-based theoretical claims explaining AR, EI, and AP have been validated, and the findings support the importance of EI in academic settings.

**CONCLUSION**

The study found a positive correlation between academic achievement and emotional intelligence (EI). Emotional regulation and adaptive emotions are linked, suggesting that emotional intelligence may protect against autism spectrum disorder. The study supports the positive interaction between AR and academic performance, indicating that students with high AR have a natural ability to manage and use emotional information for better performance. This supports the theoretical claims developed in accordance with COR to explain the link between AR, EI, and AP.

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**MMK Bhati:** Data, write up, revision, **JG:** Write up, abstract, **MI:** Introduction writing, **TIB:** Data analysis, Discussion, **SA & MI:** Data analysis, Data Collection

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**REFERENCES**

1. Abdullah MC, Elias H, Mahyuddin R, Uli J. Emotional intelligence and academic achievement among Malaysian secondary students. *Pak. J. Psychol. Res.* 2004 Dec 1;19(3/4):105.
2. Olatoye RA, Akintunde SO, Yakasi MI. Emotional intelligence, creativity and academic achievement of business administration students. *Electron. J. Res. Educ. Psychol.* 2010;8(2):763-86.
3. Allam Z. Emotional intelligence at workplace: a psychological review. *Glob. Manag. Rev.* 2011 Feb 1;5(2).
4. Amelang M, Steinmayr R. Is there a validity increment for tests of emotional intelligence in explaining the variance of performance criteria?. *Intelligence.* 2006 Sep 1;34(5):459-68.
5. Andrei F, Mancini G, Mazzoni E, Russo PM, Baldaro B. Social status and its link with personality dimensions, trait emotional intelligence, and scholastic achievement in children and early adolescents. *Learn Individ Differ.* 2015 Aug 1;42:97-105.
6. Aneja N. Higher education in the Era of globalization: the case of India. *Gyanodaya: Int. j. acad. res. progress.* 2010;3(1):58-66.
7. Senthil BA, Raghavendra SN. An Empirical Study on Measuring the Trait Emotional Intelligence of B-School Students in South India. *J. Organ. Behav.* 2017 Jul;16(3):52-64.

8. Austin EJ, Evans P, Goldwater R, Potter V. A preliminary study of emotional intelligence, empathy and exam performance in first year medical students. *Pers. Individ. Differ.* 2005 Dec 1;39(8):1395-405.
9. Austin EJ, Saklofske DH, Mastoras SM. Emotional intelligence, coping and exam-related stress in Canadian undergraduate students. *Aust. J. Psychol.* 2010 Mar;62(1):42-50.
10. Avhad S. Emerging Issues and Challenges in Higher Education. *natl. mon. refereed j. res. commer. manag.* 2013;2.
11. Baba MM, Siddiqi MA. Emotional intelligence and decision making effectiveness: An empirical study of institutions of higher learning. *Amity Global Business Review.* 2017;12:81-9.
12. Zahed-Babelan A, Moenikia M. The role of emotional intelligence in predicting students' academic achievement in distance education system. *ProcediaSocBehav Sci.* 2010 Jan 1;2(2):1158-63.
13. Manstead AS. The psychology of social class: How socioeconomic status impacts thought, feelings, and behaviour. *Br J Soc Psychol.* 2018 Apr;57(2):267-91.
14. O'Connor PJ, Hill A, Kaya M, Martin B. The measurement of emotional intelligence: A critical review of the literature and recommendations for researchers and practitioners. *Front. Psychol.* 2019 May 28;10:1116.
15. Gilar-Corbi R, Pozo-Rico T, Sánchez B, Castejón JL. Can emotional intelligence be improved? A randomized experimental study of a business-oriented EI training program for senior managers. *PloS one.* 2019 Oct 23;14(10):e0224254.
16. AP DM, Perwez DS, TNVR DS. Emotional Intelligence: An Empirical Study Among Post-Graduate Students. *Int. J. Manag.* 2020;11(9).
17. MacCann C, Jiang Y, Brown LE, Double KS, Bucich M, Minbashian A. Emotional intelligence predicts academic performance: A meta-analysis. *Psychol. Bull.* 2020 Feb;146(2):150.
18. Johar N, Ehsan N, Khan MA. Association of emotional intelligence with academic performance of medical students. *Pakistan Armed Forces Medical Journal.* 2019 Jun 25;69(3):455-59.
19. Piqueras JA, Mateu-Martínez O, Cejudo J, Pérez-González JC. Pathways into psychosocial adjustment in children: Modeling the effects of trait emotional intelligence, social-emotional problems, and gender. *Front. Psychol.* 2019 Mar 12;10:507.
20. Kauts DS, Kaur N. Effect of teacher's focused guidance on attainment of the lesson objectives in mathematics among secondary school students in relation to their intelligence and locus of control. *Int. J. Soc. Sci.* 2019;9(2):618-38.
21. Yekinni SA, Ogbuanya TC. Advancing the Emotional Intelligence of Technology Education Students for Socio-Behavioural Adjustment. *InNew Insights Into Emotional Intelligence 2022* Oct 25. IntechOpen.
22. Halimi F, AlShammari I, Navarro C. Emotional intelligence and academic achievement in higher education. *Journal of Applied Research in Higher Education.* 2021 May 4;13(2):485-503.
23. Cohn B. Colonialism and its forms of knowledge: The British in India. *InThe New Imperial Histories Reader 2020* Jul 24 (pp. 117-124). Routledge.
24. Sánchez-Álvarez N, Berrios Martos MP, Extremera N. A meta-analysis of the relationship between emotional intelligence and academic performance in secondary education: A multi-stream comparison. *Front. Psychol.* 2020 Jul 21;11:1517.
25. Rabha B, Saikia P. Emotional intelligence and academic performance of higher secondary school students: A study in Kamrup district, India. *The Clarion-International Multidisciplinary Journal.* 2019;8(1):34-42.

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