

SMART MINDS, STRONG EMOTIONS: A STUDY ON THE LINK BETWEEN EMOTIONAL INTELLIGENCE AND ACADEMIC PERFORMANCE AT SECONDARY LEVEL IN PAKISTAN

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Abstract

Emotional intelligence is a significant construct in educational psychology and is considered essential for success in learning, teaching, and professional life. At the secondary level, it is closely linked to students' academic performance, highlighting the need for schools to foster students' emotional competencies. This study aimed to examine the relationship between emotional intelligence and academic performance among 10th-grade students in Lahore, Pakistan. A quantitative research design was employed, and 300 students were selected through a stratified random sampling technique from ten schools in Lahore District. Daniel Goleman's (1998) competence model was used as the theoretical framework, and the Emotional Intelligence Scale (EIS) adapted from Iqbal (2022) was utilized for data collection. Academic performance was measured using the final scores from the 9th-grade Board of Intermediate and Secondary Education (BISE) Lahore 2024 examination, covering six compulsory subjects: Tarjumat-ul-Quran, Urdu, English, Pakistan Studies, Mathematics, and Islamiyah. Descriptive statistics were computed, and Pearson's correlation was applied using SPSS. The results revealed that female students were more emotionally stable and achieved higher academic scores than male students. Overall, emotional intelligence showed weak, non-significant correlations with total academic achievement and individual subjects, with only self-awareness demonstrating a meaningful positive relationship with performance. Strong correlations were found among the academic subjects themselves, indicating consistent achievement across them. These findings suggest that factors other than emotional intelligence, such as cognitive abilities or instructional quality, may have a greater influence on students' academic success.

Keywords: Academic performance, Emotional intelligence, Secondary students

Introduction

Emotional intelligence (EI) has gained substantial attention in educational research due to its significant influence on students' academic and personal development (Bereded et al., 2025). Traditionally, academic achievement has been attributed primarily to cognitive abilities; however, recent studies highlight the vital role of non-cognitive factors particularly emotional intelligence in shaping students' learning outcomes. At the secondary level, students encounter academic pressure, emotional challenges, and social demands, all of which require emotional competence to manage effectively. The academic success of secondary school students has traditionally been attributed to cognitive abilities such as intelligence quotient (IQ), memory, and logical reasoning. However, contemporary educational research increasingly acknowledges that non-cognitive factors, particularly Emotional Intelligence (EI) and socialization processes, play a significant role in influencing students' academic outcomes (Petrides et al., 2004; Rehman et al., 2025).

Emotional intelligence is broadly defined as the ability to recognize, understand, manage, and utilize emotions in oneself and others. It includes interpersonal skills, emotional regulation, empathy, and decision-making. Azizi et al., (2005) emphasized that one reason for low academic performance among students is a lack of interpersonal intelligence a key component of EI which affects their ability to communicate and resolve problems effectively (Lazwal, 2023).

Despite growing interest, empirical findings on the relationship between emotional intelligence and academic achievement remain inconsistent. Some studies report a strong positive association (Qaiser et al., 2019), while others find no significant link (Abu Alkhayr et al., 2022). A few studies even suggest a negative or indirect relationship (Bilimale et al., 2024; Mavroveli & Sánchez-Ruiz, 2011). These conflicting results indicate the need for further investigation, particularly in different cultural and educational settings.

In the context of Pakistan, secondary school students often face declining academic achievement. Educational practices tend to focus heavily on rote memorization and cognitive load, while neglecting the emotional and psychological well-being of students. This imbalance not only hinders academic success but also impairs critical thinking and personal growth. Studies from the BISE Lahore region consistently report low performance at the secondary level, emphasizing the need to explore underlying non-cognitive factors such as emotional intelligence.

Goleman 1995 defined Emotional Intelligence as the competency to manage oneself and one's relationships with others, lead effectively, foster teamwork, and anticipate future challenges. Each of these abilities contributes positively to individual productivity and overall performance. According to Hamid (2025), emotionally competent individuals tend to demonstrate greater self-confidence and resilience in both academic and social contexts. In Pakistan's secondary schools, where students face academic stress, emotional instability, and limited support systems, the integration of emotional intelligence training is a pressing need. Such training can enable students to regulate emotions, build meaningful peer relationships, and enhance learning outcomes. Addressing emotional development alongside academic instruction is essential for nurturing well-rounded and high-performing learners in the Pakistani education system.

Recent studies also support the growing importance of EI in academic contexts. Shengyao et al. (2024) demonstrated that emotional intelligence significantly contributes to academic performance, reinforcing its relevance in modern educational systems. Therefore, investigating the role of emotional intelligence in students' academic success is both timely and necessary. Psychologists have conceptualized emotional intelligence in various ways. Palmer et al. (2009) noted that EI is understood as a combination of emotional and social skills. Goleman (2001) described it as a set of non-cognitive competencies, while Petrides and Furnham (2001) emphasized it as a personality trait reflecting one's capacity to process emotional information. Mayer et al. (2008) further defined EI as a form of social intelligence that enables individuals to perceive, manage, and use emotions to guide thinking and behaviour effectively.

The quick rise of emotional intelligence (EI) from being little known to widely popular led many researchers to study it separately, each with their own definitions. This caused confusion and conflicting results because the different theories and measurements of EI were so different that they often seemed to describe different things. As a result, findings across different levels and contexts have been inconsistent and difficult to compare. It is needed to explore at secondary level in Lahore.

Adolescence is the stage of development that falls between the end of childhood and the beginning of adulthood, usually ranging from about ages 11–12 to 22–24. It starts with prepuberty and puberty a time marked by rapid physical growth and the development of reproductive maturity. While these terms originally referred only to biological changes, in developmental psychology they also include the psychological changes that occur during this period (Panju, 2010, p. 56).

Given this background, the present study aims to examine the relationship between emotional intelligence and academic performance among secondary school students in Lahore, Pakistan.

Objective of the study

1. To measure the relationship between emotional intelligence and academic performance

Literature review

Emotional intelligence

The idea of emotional intelligence (EI) traces back to Thorndike's (1920) concept of social intelligence, defined as the ability to understand and manage people effectively. Later, Gardner (1983) expanded this through his theory of multiple intelligences, introducing intrapersonal and interpersonal intelligence—skills related to understanding oneself and others. Sternberg (1988) contributed with his notion of contextual intelligence, focusing on effectively navigating life.

Salovey and Mayer (1990) introduced the term "emotional intelligence" as a subset of social intelligence. They described it as the ability to monitor one's own and others' emotions, to differentiate among them, and to use emotional information to guide thinking and actions. In 1997, they refined this into four key abilities: perceiving emotions, using emotions to facilitate thinking, understanding emotions, and managing emotions.

Goleman (1995) popularized emotional intelligence by highlighting its importance in personal, social, and professional success. He argued that IQ accounts for only 20% of life success, while the remaining 80% is influenced by emotional and social intelligence. According to Goleman, emotionally intelligent individuals are better at managing themselves and relationships, working in teams, leading others, and handling challenges. They are confident, resilient, optimistic, and capable of managing stress and negative emotions—traits that contribute to better performance and stronger relationships.

Emotional intelligence (EI) has been conceptualized in multiple ways within psychological research (Palmer et al., 2009). Some scholars define EI broadly as a set of non-cognitive competencies that integrate both emotional and social behaviours (Goleman, 2001). Others conceptualize EI as a personality trait, highlighting an individual's perceived capacity to identify, interpret, and effectively use emotion-related information (Petrides & Furnham, 2006). Another perspective situates EI within the broader framework of social intelligence, emphasizing the ability to understand and regulate one's own emotions as well as those of others, and to apply this emotional understanding to guide thought processes and behaviours (Mayer et al., 2008).

Academic Performance

Academic performance is closely linked to the quality of teaching and serves as an important indicator of how effectively students, teachers, and educational institutions achieve their learning objectives. It reflects the extent to which students acquire the knowledge, skills, and abilities intended by the teacher (Singh et al., 2024). According to Kasmiati et al. (2025), academic achievement represents the level of accomplishment a student attains after completing a learning process.

Academic success is a multifaceted construct that encompasses both individual performance and the overall effectiveness of the education system. It is a key measure of educational progress, with significant implications for personal development and societal advancement (Jamali et al., 2013). In this context, emotional intelligence (EI) is increasingly recognized as a vital contributor to academic success, school adjustment, and students' psychological well-being (Saklofske et al., 2012).

In today's competitive and demanding educational environments surrounded by digital technologies, academic success has gained even greater importance. Students across all levels encounter growing pressure from academic workloads, standardized assessments, college admission requirements, societal expectations, and personal challenges (Rehana, 2018; Abbas et al., 2019). The academic success of secondary school students has traditionally been attributed to cognitive abilities such as intelligence quotient (IQ), memory, and logical reasoning. However, contemporary educational research increasingly acknowledges that non-cognitive factors, particularly Emotional Intelligence (EI) and socialization processes, play a significant role in influencing students' academic outcomes (Petrides et al., 2004; Rehman, Munawar, & Haider, 2025).

Emotional intelligence and Academic performance

Cognitive abilities such as standardized test scores and GPAs have long been used as important measures of academic success in the educational landscape. However, recent changes in the education system have led educators to seek factors beyond cognitive ability (Maccann et al., 2020). Among these, EI has garnered increasing attention for its potential to enhance students' learning outcomes (Maccann et al., 2020; Bereded et al., 2025).

Social and emotional abilities are recognized as important in educational settings worldwide, from preschool to university level. For example, in the United States, most institutions provide comprehensive training programs to improve emotional intelligence (EI) skills. Students must learn to identify and label their own and others' emotions, as well as a variety of socially related skills (Nica and Sabie, 2023).

In Africa, EI is widely recognized as an important factor across various sectors, including academic achievement. For instance, in Kenya, children are introduced to the concept of EI through guidance and counselling, as well as through both short- and long-term training programs aimed at enhancing students' perception, expression, control, and use of emotions (Karimi et al., 2020). Similarly, in Nigeria, EI has been integrated into the school curriculum as essential for cultivating well-rounded citizens capable of navigating the daily demands of life (Bukar et al., 2023).

Kasmiati et al. (2025) conducted a quantitative study to examine the relationship between emotional intelligence and academic achievement among 9th-grade students at SMP Negeri 1 Maiwa in Indonesia. Using an ex post facto design with a correlational approach, the researchers collected data from a population of 77 students, out of which a sample of 65 was selected through random sampling. The study focused on the subject of Indonesian Language and used a Likert-scale emotional intelligence questionnaire along with academic records to assess achievement. The findings revealed no significant correlation between emotional intelligence and academic achievement.

A study was conducted in Spain by Caballero-García and Sánchez Ruiz (2025) explored the relationship between emotional intelligence (EI), subjective well-being (SWB), and academic achievement (AA) among university students in Madrid. The study involved a sample of 300 students aged 18 to 47 and employed a quasi-experimental pre/post-test design with

experimental and control groups. The results indicated that students initially displayed medium to high levels of EI, SWB, and academic achievement.

Singh et al. (2024) conducted a cross-sectional study in India to explore the relationship between emotional intelligence, academic achievement, and academic stress among college students in India. The study was carried out at NIMS College of Physiotherapy and included a sample of 134 undergraduate students both male and female intelligence was measured using the WONG Emotional Intelligence Scale, academic achievement was assessed through students' last semester percentages, and academic stress was evaluated using the Student Inventory Scale. The findings revealed negative correlations among the variables.

Bereded, Abebe, and Negasi (2025) conducted a correlational study to examine the relationship between emotional intelligence (EI) and academic achievement, with academic engagement as a mediating variable. The study involved 1,351 first-year undergraduate students from Wollo University, using the TEIQue-SF and UWES-S scales for data collection. Results revealed that EI was positively associated with both academic engagement and academic achievement. Structural equation modeling showed that academic engagement partially mediated the relationship between EI and achievement, with both variables explaining nearly half of the variance in academic performance. The study highlights the importance of fostering EI and engagement to enhance student outcomes.

Bereded et al. (2025) found a positive relationship between emotional intelligence and academic achievement. Academic engagement was also positively related to both emotional intelligence and achievement. The study concluded that academic engagement partially mediates the effect of emotional intelligence on academic performance.

Accordingly, several studies have been conducted to examine the relationship between EI and academic achievement. However, the empirical evidence regarding this relationship remains unclear. For example, some researchers demonstrated a strong positive association between EI and academic achievement some studies showed negative relationship (Abu Alkhayr et al., 2022). Some studies reported a negative relationship between EI and academic achievement (Bilimale et al., 2024) while others reported no significant relationship between EI and AA.

Emotionally intelligent students are better at handling academic stress, maintaining motivation, building positive peer relationships, and overcoming challenges, all of which are crucial for academic success at the secondary school level (Rehman, Munawar, & Haider, 2025).

Significance of the study

The study is significant for secondary school students, as it highlights how developing emotional intelligence can help them address psychological issues that hinder their academic performance and disrupt the smooth functioning of the learning process. The findings are also valuable for teachers at secondary, elementary, and primary levels, as well as for students, school administrators, educational policymakers, subject specialists, and curriculum developers, by providing insights into strategies that can foster both emotional well-being and academic success.

Theoretical Framework

This study is grounded in the Emotional Competency Model developed by Daniel Goleman (1998), which provides a comprehensive understanding of emotional intelligence (EI) and its impact on human behaviour and performance. Originally conceptualized by Mayer and Salovey in the 1990s, EI was later expanded by Goleman into a more applied and behaviour-based framework that links emotional competence with effectiveness in school, work, and interpersonal relationships.

Goleman's model consists of five core domains of emotional intelligence:

1. Self-awareness – the ability to recognize and understand one's own emotions and their influence on thoughts and actions.
2. Self-regulation – the capacity to manage one's emotions, impulses, and behaviours in constructive ways.
3. Motivation – the internal drive to achieve goals, persist in the face of challenges, and maintain a positive attitude toward learning.
4. Empathy – the ability to understand the emotions and perspectives of others and to respond appropriately.
5. Social skills – the ability to build and manage healthy relationships, communicate effectively, and work collaboratively.

These five domains are particularly relevant in the context of secondary education, where students are not only required to achieve academic goals but also navigate emotional, social, and psychological challenges. In Pakistan's secondary schools, students often face high academic pressure, limited counseling support, and emotionally underdeveloped classroom environments. Therefore, applying Goleman's Emotional Intelligence framework allows for a deeper understanding of how emotional competencies can influence students' academic performance and psychological well-being.

Goleman (2001) emphasized that emotionally competent individuals are more likely to demonstrate leadership, self-confidence, adaptability, and academic resilience. These traits are essential for students coping with stress, building positive peer relationships, and staying engaged in the learning process. Research has shown that emotional intelligence supports better classroom behaviour, enhanced motivation, and higher academic achievement—particularly in contexts where emotional challenges may interfere with learning.

This theoretical framework provides the foundation for examining the relationship between emotional intelligence and academic performance among secondary school students in Pakistan. It offers a structured approach to assess how students' emotional capabilities contribute to their overall academic success.

Conceptual Framework

For the current study, emotional intelligence was measured using five factors: self-awareness, self-regulation, motivation, empathy, and social skills. To assess the academic performance of 10th-grade students, marks from six compulsory subjects were considered. These subjects included English, Urdu, Tarjuma-tul-Quran, Islamiyah, Pakistan Studies, and Mathematics. The academic performance data were obtained from the Board of Intermediate and Secondary Education (BISE) Lahore 9th-grade result (2024). The relationship between emotional intelligence and academic performance was analysed based on these measures. As showed in figure 1.

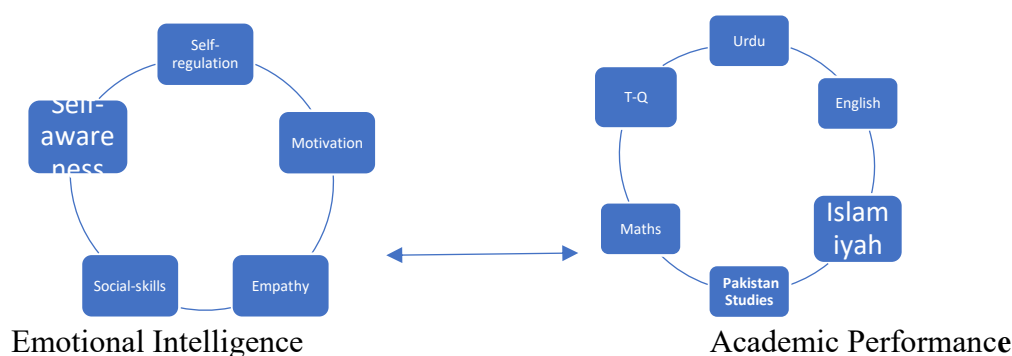


Figure 1 Conceptual frame Work

Methodology

Procedure

The study was employed a positivistic research approach to measure the relationship between emotional intelligence and academic performance.

Population and sampling procedure

All 10th-grade students in the Lahore District constituted the population of the study. The district comprises five tehsils: Raiwind, Cantt, Model Town, City, and Shalimar. A simple random sampling technique was employed to select schools, with the inclusion criterion that they offered both Science and Arts streams. From each tehsil, two schools were chosen—one for boys and one for girls—resulting in a total of 10 schools.

Within these selected schools, students were chosen using a stratified random sampling technique. According to Creswell and Creswell (2018), stratified random sampling ensures representation from key subgroups within a population. The strata were based on the Science and Arts groups to ensure proportional representation. From the overall population, a total of 300 students were selected as the sample for the study.

Instrument

The primary instrument for this study was a questionnaire designed to assess students' emotional intelligence, based on Daniel Goleman's five core dimensions: self-awareness, self-regulation, motivation, empathy, and social skills. The questionnaire comprised 25 items in total: self-awareness (4 items), self-regulation (4 items), motivation (6 items), empathy (7 items), and social skills (4 items). All items were rated on a 5-point Likert scale, allowing respondents to indicate their level of agreement from "Strongly Disagree" to "Strongly Agree." The Emotional Intelligence Scale (EIS) was adapted from the work of Iqbal (2022). Originally developed for the secondary level within a cultural context, the scale was slightly modified for use at the school level. A translated version was also prepared to facilitate students' understanding. The scale was reviewed by three experts, and necessary adjustments were made before finalization. Following these procedures, the instrument was ready for data collection. According to Iqbal (2022), the scale demonstrated strong internal consistency, with a Cronbach's alpha of 0.91, confirming its reliability and validity.

For measuring students' academic performance, scores in six compulsory subjects were considered: Urdu, English, Mathematics, Tarjuma-tul-Quran, Pakistan Studies, and Islamiyah. These subjects were selected because they are taught to both Arts and Science streams. The data were obtained from the official BISE Lahore gazette for the 9th-grade examination results.

Data Collection and Ethical Considerations

For the purpose of the study, the researcher personally visited the selected schools to collect data, obtaining prior permission from the school administration. Informed consent was secured from students before participation, and the objectives of the study were clearly explained to them. Students were assured that participation was voluntary. All ethical considerations were strictly followed, ensuring that the data would be used solely for academic and research purposes. The confidentiality and anonymity of participants were maintained throughout the study, and no identifying information was disclosed in the reporting of results.

Data Analysis

In this study, statistical analyses were carried out to ensure precise and meaningful interpretation of the findings. Using SPSS, descriptive statistics were first generated to present a clear summary of students' emotional intelligence and academic performance, highlighting

patterns of central tendency and variation within the data. Emotional intelligence and academic performance, highlighting patterns of central tendency and variation within the data. To explore the relationship between emotional intelligence and academic performance the Pearson correlation was employed with the factors of emotional intelligence and with academic performance including six subjects.

Table 1: *Distribution of Students by Academic Group*

Group	Frequency	Percent
Science	186	62.0
Arts	114	38.0
Total	300	100.0

Table 1 showed 62% belonged to the Science group ($n = 186$), while 38% were from the Arts group ($n = 114$). This indicates that the majority of the students in the sample were enrolled in the Science stream.

Table 2
Distribution by Gender

Gender	Frequency	Percent
Male	138	46.0
Female	162	54.0
Total	300	100.0

Table 2 showed gender wise sample distribution of the students such as male were (46%) while female was (54%).

Table 3
Pearson Correlation between emotional intelligence and academic achievement

Variables	<i>N</i>	<i>r-value</i>	<i>p-value</i>
Emotional intelligence & academic achievement	300	.084	.149

The table 3 Shows the Pearson correlation coefficient between Emotional Intelligence (EI) and Academic Achievement is $r = .084$, based on a sample of 300 students. This value indicates a very weak positive relationship between the two variables.

However, the $p\text{-value} = .149$, which is greater than the significance level of 0.05, means that this correlation is not statistically significant. In other words, there is no meaningful evidence to suggest that emotional intelligence and academic achievement are significantly related in this sample. Although there is a slight positive trend, emotional intelligence does not show a significant influence on academic achievement among these students.

Table 4
Pearson Correlation between self-awareness and academic achievement

Variables	<i>N</i>	<i>r-value</i>	<i>p-value</i>
Self-awareness & academic achievement	300	.185**	.001

** Correlation is significant at the 0.01 level (2-tailed).

A Pearson correlation was conducted to examine the relationship between self-awareness and academic achievement among students showed in table 4. Results revealed a significant positive correlation, $r = .185$, $p = .001$, indicating that higher levels of self-awareness are associated with higher academic achievement. Although the strength of the correlation is weak, it is statistically significant at the 0.01 level.

This finding supports the idea that emotional intelligence components such as self-awareness contribute positively to students' academic success.

Table 5

Correlation between self-regulation and academic achievement

<i>Variables</i>	<i>N</i>	<i>r-value</i>	<i>p-value</i>
Self-regulation & academic achievement	300	-.065	.259

A Pearson correlation was performed to examine the relationship between self-regulation and academic achievement. The results showed in table 5 a non-significant negative correlation, $r = -.065$, $p = .259$. This indicates that there is no statistically significant relationship between students' self-regulation and their academic performance.

Although the correlation is negative, the strength of the relationship is very weak and not significant at the conventional alpha level of .05. These findings suggest that, in this sample, self-regulation does not play a meaningful role in predicting academic success.

Table 6

Correlation between motivation and academic achievement

<i>Variables</i>	<i>N</i>	<i>r-value</i>	<i>p-value</i>
Motivation & academic achievement	505	.102	.077

A Pearson correlation was conducted to assess the relationship between motivation and academic achievement. The results of table 6 indicated a positive but non-significant correlation, $r = .102$, $p = .077$. Although the direction of the relationship suggests that higher motivation may be associated with higher academic performance, the correlation is weak and does not reach statistical significance. This suggests that, within this sample, students' motivation levels were not strongly or significantly related to their academic achievement.

Table 7

Pearson correlation between empathy and academic achievement

<i>Variables</i>	<i>N</i>	<i>r-value</i>	<i>p-value</i>
Empathy & academic achievement	505	.109	.058

**** $p < .001$ (2-tailed)**

A Pearson correlation was conducted to examine the relationship between empathy and academic achievement. The results of table 7 showed a weak positive correlation, $r = .109$, $p = .058$. Although the relationship suggests that students with higher empathy may perform slightly better academically, the result is not statistically significant. This indicates that, in this sample, empathy does not show a meaningful or reliable association with academic performance, though it is close to the threshold and may warrant further investigation in future studies.

Table 8

Pearson correlation between social-skills and academic achievement

<i>Variables</i>	<i>N</i>	<i>r-value</i>	<i>p-value</i>
Social-skill & academic achievement	505	.019	.738

A Pearson correlation was conducted to assess the relationship between social skills and academic achievement. The results of table 8 revealed a very weak positive correlation, $r =$

.019, $p = .738$. However, this relationship is not statistically significant, as the p -value is far above the conventional threshold of .05. This indicates that, within this sample, social skills do not have a meaningful or significant association with academic performance.

Table 9

Gender wise difference between Emotional Intelligence and Academic Performance

Emotional intelligence & Academic Performance	Gender	N	M	SD	t-value	df	p-value
Emotional Intelligence	Male	138	3.92	0.48	-4.280	298	.000
	Female	162	4.12	0.33			
Total Quran	Male	138	58.12	23.20	-5.147	298	.000
	Female	162	70.45	18.28			
Urdu	Male	138	47.35	17.87	-7.174	298	.000
	Female	162	61.52	16.31			
English	Male	138	41.92	20.16	-4.775	298	.000
	Female	162	52.59	18.52			
Islamiyah	Male	138	58.48	23.49	-2.817	298	.005
	Female	162	65.78	21.37			
Pak. Studies	Male	138	49.01	22.59	1.365	298	.173
	Female	162	45.60	20.64			
Math	Male	138	33.54	24.15	-4.249	298	.000
	Female	162	45.27	23.54			

Results of table 9 indicated that females scored significantly higher than males in emotional intelligence ($M = 4.12$, $SD = 0.33$ vs. $M = 3.92$, $SD = 0.48$), $t(298) = -4.28$, $p < .001$. Similarly, females outperformed males in Total Quran ($t(298) = -5.15$, $p < .001$), Urdu ($t(298) = -7.17$, $p < .001$), English ($t(298) = -4.78$, $p < .001$), Islamiyat ($t(298) = -2.82$, $p = .005$), and Mathematics ($t(298) = -4.25$, $p < .001$). No significant gender difference was found in Pakistan Studies ($t(298) = 1.37$, $p = .173$). These findings suggest that female students generally have higher emotional intelligence and perform better in most academic subjects, with the exception of Pakistan Studies.

Table 10

Subject wise difference between Emotional Intelligence

Emotional intelligence & Academic Performance	Subjects	N	M	SD	t-value	df	p-value
Emotional Intelligence	Science	186	4.04	0.39	0.762	298	.447
	Arts	114	4.00	0.46			
Total Quran	Science	186	67.16	21.54	2.463	298	.014
	Arts	114	60.89	21.10			
Urdu	Science	186	57.05	17.69	2.484	298	.014
	Arts	114	51.66	19.19			
English	Science	186	54.11	20.01	7.787	298	.000
	Arts	114	37.21	14.91			
Islamiyah	Science	186	69.67	21.55	7.754	298	.000
	Arts	114	50.60	19.17			
Pak. Studies	Science	186	53.16	21.93	6.546	298	.000
	Arts	114	37.41	17.05			
Math	Science	186	41.14	26.83	1.146	298	.253
	Arts	114	37.80	20.06			

Independent samples *t*-tests were conducted to compare emotional intelligence and academic performance between science and arts students according to table 10. No significant difference was found in emotional intelligence scores between science ($M = 4.04$, $SD = 0.39$) and arts students ($M = 4.00$, $SD = 0.46$), $t(298) = 0.76$, $p = .447$. Similarly, mathematics performance did not differ significantly between the two groups, $t(298) = 1.15$, $p = .253$. However, science students scored significantly higher than arts students in Total Quran ($t(298) = 2.46$, $p = .014$), Urdu ($t(298) = 2.48$, $p = .014$), English ($t(298) = 7.79$, $p < .001$), Islamiyat ($t(298) = 7.75$, $p < .001$), and Pakistan Studies ($t(298) = 6.55$, $p < .001$). These results indicate that while emotional intelligence levels were similar across subject groups, science students generally outperformed arts students in most academic subjects except mathematics.

Table 11: *Correlation between emotional intelligence and subjects*

Variables	EI	T. QURAN	URDU	ENGLISH	ISLAMIYAT	PAK.STUDIES	MATH
EI	1	.060	.072	.082	.009	-.015	.094*
T. QURAN		1	.295**	.304**	.340**	.263**	.261**
URDU			1	.637**	.653**	.645**	.695**
ENGLISH				1	.694**	.691**	.679**
ISLAMIYAT					1	.700**	.588**
PAK.STUDIES						1	.660**
MATH							1

According to table 11, Pearson correlation analysis revealed that emotional intelligence (EI) had a small positive correlation with Mathematics ($r = .09$, $p < .05$), while its correlations with Translation of the Holy Quran, Urdu, English, Islamiyah, and Pakistan Studies were weak and non-significant ($r_s = -.02$ to $.08$, $p > .05$). The strongest association of EI was with Mathematics, though the effect size was small.

Significant moderate to strong positive correlations were observed among the academic subjects themselves, with coefficients ranging from $r = .26$ to $r = .70$ ($p < .01$). Urdu scores were strongly related to English ($r = .64$, $p < .01$), Islamiyah ($r = .65$, $p < .01$), Pakistan Studies ($r = .65$, $p < .01$), and Mathematics ($r = .70$, $p < .01$). Similar strong associations were found among English, Islamiyah, Pakistan Studies, and Mathematics.

Findings of the Study

The findings showed that emotional intelligence, as a whole, does not have a significant impact on students' academic achievement. Among the different components of emotional intelligence, only self-awareness was found to have a meaningful positive relationship with academic performance, suggesting that students who are more self-aware tend to perform better academically. In contrast, self-regulation, motivation, empathy, and social skills did not demonstrate significant associations with academic achievement. Although empathy and motivation showed slight positive trends, these were not strong enough to be considered statistically meaningful. Social skills and self-regulation showed little to no relationship with academic performance. Overall, the findings indicate that while emotional intelligence may play a role in students' academic success, its influence may depend more on specific components—such as self-awareness—rather than the overall emotional intelligence construct. The results revealed that emotional intelligence had weak positive correlations with students' performance in all individual subjects, including Taruma-tul-Quran, Urdu, English, Islamiyah, Pakistan Studies, and Mathematics. However, none of these relationships were statistically

significant, indicating that emotional intelligence, in general, does not have a meaningful influence on academic performance across specific subjects in this sample.

In contrast, strong and statistically significant positive correlations were found among the academic subjects themselves. Students who performed well in one subject tended to perform well in others. Particularly high correlations were observed between Urdu and English, Urdu and Mathematics, English and Islamiyah, and English and Pakistan Studies. These results indicate a high level of consistency in students' academic performance across various subjects. Overall, the findings suggest that while emotional intelligence does not appear to significantly impact performance in individual subjects, students tend to show consistent academic achievement across subjects, reflecting the influence of other cognitive or instructional factors.

Discussion

The study found that overall emotional intelligence had no significant relationship with students' academic achievement. Among its components, only self-awareness showed a significant positive association with academic performance, while self-regulation, motivation, empathy, and social skills did not. Emotional intelligence also showed weak, non-significant correlations with individual subject scores. However, students' performance across subjects was strongly and positively correlated, indicating consistent academic achievement in all subjects regardless of emotional intelligence levels. The study found positive but non-significant relationships between Emotional Intelligence (EI) and all individual academic subjects. Among these, Urdu showed the strongest positive correlation with EI, followed by English, Mathematics, and Tajweed-ul-Quran. Although none of the correlations reached statistical significance, the results indicate a slight positive trend, suggesting that higher emotional intelligence may be associated with better performance in these subjects. The results of this study are difficult to compare with previous research due to the confusion and conflicting findings in the literature. This inconsistency is largely attributed to the use of different theories and measurement tools for emotional intelligence (EI), which often define and assess the construct in varying ways. As a result, outcomes across different levels and educational contexts remain inconsistent and difficult to interpret. In the present study, the relationship between emotional intelligence and academic achievement was found to be statistically insignificant. These findings align with those of Kasmia (2025), who also reported no significant correlation between EI and academic achievement among ninth-grade students. Similarly, Caballero-García and Sánchez Ruiz (2025) concluded that although emotional attention and life satisfaction predict a small portion of academic success, the overall influence remains limited. Furthermore, Singh et al. (2024) also reported a lack of significant association between EI and academic achievement, reinforcing the notion that emotional intelligence alone may not be a strong predictor of academic performance in all contexts. In contrast Berded et al. (2025) found a positive relationship between emotional intelligence and academic achievement.

Conclusion

This study concluded that emotional intelligence, as a whole, does not significantly impact students' academic performance; however, the component of self-awareness does show a meaningful positive relationship with academic performance. Although empathy and motivation showed slight positive trends. This indicates that students who are more self-aware

are better able to manage their learning and succeed academically. Other emotional intelligence components—such as motivation, empathy, social skills, and self-regulation did not demonstrate significant influence. The conclusion is that emotional intelligence has a weak and non-significant correlation with performance in individual subjects, indicating it may not be a strong predictor of subject-specific academic success. In contrast, strong and statistically significant relationships observed among academic subjects themselves, suggesting that students' academic achievement tends to be consistent across different disciplines, likely due to cognitive abilities, teaching methods, or learning environments. To enhance academic achievement, it is recommended that educational programs focus on developing students' self-awareness as part of emotional intelligence training. Furthermore, strengthening cognitive and instructional strategies may play a more substantial role in improving overall academic performance.

Recommendations

- To Strengthen Self-Awareness Skills reflective practices, goal-setting activities, and progress tracking to help students better understand their strengths and academic performance.
- Promote Cross-Subject Skill Transfer to teachers for best instructions and teaching and Design interdisciplinary and activities that allow students to apply skills and knowledge from one subject to others.
- Ensure Consistent Academic Support to students and peer study groups to assist students in subjects where they face difficulties, ensuring balanced progress across all subjects.
- Integrate Emotional Intelligence Training Strategies with academics on enhancing self-awareness while linking emotional skills with academic preparation and performance.
- Organize workshops and partnerships to support students' study habits, motivation, and academic consistency beyond the classroom.
- Uses of formative assessments and data-driven approaches to track student progress and provide timely interventions.
- Improve the learning environment, reduce distractions, and ensure equitable access to educational resources for all students.

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