

Exploring Emotional Intelligence and Its Effects on Students' Academic Performance in Universities

Rafia Hussain¹, Samina Akhtar² and Darakhshan Siraj³

<https://doi.org/10.62345/jads.2025.14.1.82>

Abstract

The purpose of the current cross-sectional research study was to analyze the effects of emotional intelligence (EI) on the academic performance of students at universities. The investigation population covered 5,859 students from public sector universities. A sample of 200 students was selected through simple random sampling from different departments within the Faculty of Social Sciences from the three public universities of Multan district in South Punjab, Pakistan. The Schulte Emotional Intelligence Scale served as the standardized data collection. The research investigation employed descriptive statistics using mean and standard deviation, inferential measures, t-tests, and regression for data analysis. The findings reveal a significant positive relationship between emotional intelligence and academic performance, with no notable gender differences. The study emphasizes integrating EI-focused interventions in university curricula to enhance student outcomes. The study recommended integrating EI development programs within university curricula to improve academic engagement and performance of universities.

Keywords: Emotional Intelligence, Academic Performance, Students, Universities.

Introduction

Emotional intelligence has emerged as a significant concept within social psychology, gaining increasing recognition in recent research, particularly in psychological studies (Suleman et al., 2020). Since the 1990s, this concept has attracted considerable public and academia attention. It is a fundamental aspect of educational psychology and plays a crucial role in students' academic experiences (Iqbal et al., 2022). Emotional intelligence encompasses the ability to manage and regulate one's emotions while also being adept at recognizing and understanding the emotions of others (Salovey & Mayer, 1990). Often viewed as an elusive concept, emotional intelligence has become an important topic in educational research over the past two decades (Goldring et al., 2015).

Moreover, emotional intelligence is increasingly acknowledged as essential for personal and professional success. In higher education, nurturing emotional intelligence in students is vital for their overall development (Perkasa et al., 2020). In addition, Kotsou et al. (2019) highlighted that emotional intelligence (EI) is a key contributor to fostering the values and behaviours necessary for sustainable development. Moreover, Tuyakova et al. (2022) emphasized that emotional intelligence significantly influences academic performance, making it essential to explore its short-term and long-term effects on the educational process.

¹M.Phil Scholar, Department of Education, The Women University, Multan, Punjab, Pakistan.

Email: hussainrafiah@gmail.com

²Assistant Professor, Department of Education, The Women University, Multan Punjab, Pakistan.

Corresponding Author Email: samabdullah33@hotmail.com

³Lecturer, Department of Education, The Islamia University of Bahawalpur, Punjab, Pakistan.

Email: darakhshan.siraj@iub.edu.pk



Usually, emotional intelligence requires understanding the essential role that feelings play in who we are and how we live. By improving our emotional aptitude, we can become more adaptable, flexible, and emotionally mature (Puspitacandri et al., 2020). Without emotional intelligence, people cannot fully utilize their cognitive abilities (Cherry, 2021). Furthermore, Maraichelvi and Rajan (2013) concluded that emotional intelligence in its specified domains, namely interpersonal awareness, interpersonal management and interpersonal management separately, was positively associated with the academic performance of the selected respondents. Recently, there has been increased Interest in the impact of non-cognitive competencies on Academic performance (Slåtten et al., 2019).

Various studies in Pakistan have examined emotional intelligence from different perspectives. In this regard, Malik and Shahid (2016) researched the impact of emotional intelligence on the academic performance of business students in higher education institutions across the country. Furthermore, Ahmed et al. (2019) also investigated emotional intelligence in Pakistan. However, in Pakistan, to the best of the researcher's knowledge, a considerable amount of research conducted is based on emotional intelligence and its relationship with the job performance and satisfaction of employees in organizations (Asrar-ul-Haq, 2017; Bano & Pervaiz, 2020).

Studies suggest that students with high emotional intelligence tend to perform better academically. For instance, MacCann et al. (2020) found that emotionally intelligent students had 15-20% higher GPAs. Similarly, a study by Malik and Shahid (2016) in Pakistan revealed that EI significantly enhances academic engagement, leading to better grades and retention rates.

Significance of the Study

Emotional intelligence is a critical component of the holistic development of students. Understanding how emotional intelligence influences academic achievement can provide valuable insights to develop interventions and strategies aimed at enhancing students' academic performance. This could lead to improved educational outcomes and increased success rates among university students. Emotional intelligence is closely linked to mental health and well-being. Exploring phenomena can help identify the emotional factor that contributes to stress, anxiety or depression among students. Strategies to improve emotional intelligence can subsequently enhance the positive effects on academic achievement. Emotional intelligence is often considered a crucial skill for success in the professional world.

Justification of the Study

Emotional intelligence (EI) has a significant impact on students' academic progress and overall well-being. Higher levels of emotional intelligence can help kids develop stronger coping mechanisms, resilience, and emotional regulation, all of which are necessary for good mental health. Emotional intelligence may improve retention and graduation rates by boosting students' capacity to deal with academic stress and form supportive peer relationships. Beyond academic accomplishment, emotional intelligence is critical to employability. Provide a more complete knowledge of the elements that influence academic success. Enhancing emotional intelligence in students can have long-term benefits for society. Individuals with high EI are more likely to be effective communicators, empathetic leaders, and responsible citizens.

Objectives of the Study

1. To examine the effects of emotional intelligence on students' academic performance at universities.
2. To analyze differences in emotional intelligence based on gender of students at universities.

Research Questions

1. What are the effects of emotional intelligence on the academic performance of students at universities?
2. How does emotional intelligence vary among university students based on their gender at universities?

Literature Review

Emotional intelligence is increasingly acknowledged as a crucial obstacle to professional achievement and personal development. In this regard, Tuyakova et al. (2022) clarify that when emotions are combined, they ultimately form personality traits. In fact, for the development of a civilized community, individuals should be capable of managing their emotions and actions, making sound decisions, and promoting a positive environment (Cunningham, 2023).

However, the constructs and dimensions discussed in previous literature have not been consistently defined. The definitions and interpretations of emotional intelligence have yet to reach a consensus, with various theoretical perspectives leading to different approaches to measuring emotional intelligence (Iqbal et al., 2022).

Within this context, Suleman et al. (2022) researched the academic life of students during a pivotal period when students begin contemplating their future careers. The study involved 360 undergraduate students from multiple Chinese universities. Results indicate a significant correlation between emotional intelligence, general self-efficacy, and challenges in career decision-making. This research will aid students in applying emotional intelligence skills in their academic and professional lives.

Goleman (1995) asserts that leaders who are socially skilled and emotionally aware can better cultivate a sense of commitment and trust among their teams, resulting in enhanced participation and engagement. Regarding the influence of emotional intelligence on academic performance, Malik and Shahid (2016) noted that emotional intelligence assists individuals in prioritizing their thinking, which in turn facilitates academic success. According to Slåtten et al. (2021), since emotions can expand students' focus and cognitive abilities for learning, it stands to reason that this would likely lead to achieving desired outcomes.

Furthermore, Cassidy (2015) observed that most definitions of academic resilience highlight qualities that are resourceful, innovative, and adaptable, enabling positive responses to challenges or threats. Accordingly, academic resilience is a valuable asset for achieving academic excellence and is likely to influence various outcomes related to academics, including performance, achievement, well-being, and quality of life (Cassidy, 2015). It possesses a multifaceted nature and is related to human growth, encompassing cognitive, emotional, social, and physical aspects. Academic achievement serves as an indicator for assessing a student's competency (Madigan & Curran, 2021).

Similarly, a study by Fernandez et al. (2012) that explored the effect of empathy on academic success among gifted students in Saudi Arabia found a positive correlation between empathy and academic achievement in this group. The research concluded that students with a strong ability to empathize can grasp lecture content more readily due to their enhanced understanding of what is communicated by others.

In the current study, the researchers identified a research gap regarding the role of emotional intelligence (EI) in academic performance among university students. While previous studies have examined EI in various contexts, there is limited research specifically focusing on how EI influences academic success in higher education. Most existing studies are centered in workplace settings, leaving a lack of understanding about this relationship in the university environment. By exploring the effects of emotional intelligence on academic performance, the current investigation aims to provide valuable insights that can shape educational strategies and support systems, ultimately enhancing student performance and well-being.

Research Methodology

Research Design

The research adopted a cross-sectional design to evaluate how emotional intelligence affects the academic performance of students at universities.

Population of the Study

A total of 5,859 students representing both genders, male and female, enrolled in various departments of Social Sciences faculty from three public universities, i.e. The Emerson University Multan, Bahauddin Zakariya University, Multan, and The Women University Multan covered the study population.

Sample and Sampling Procedure

The researchers used a simple random sampling technique to select 200 students (N=200) from the different disciplines, including Education, Psychology, History, Pakistan Studies and Economics in all chosen universities. The sample distribution was as follows:

Table 1: Sampling details

Sr.#	Name of University	District	Students
1	Bahauddin Zakariya University	Multan	67
2	The Women University Multan	Multan	67
3	Emerson University	Multan	66
Total			200

Development of Instrument

The researchers utilized the Schutte Emotional Intelligence Scale (2009) as this instrument is based on Salovey and Mayer's (1990) model of emotional intelligence. The instrument was used with permission from the main author. The survey was structured on a five-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree) to assess students' emotional intelligence at universities.

Data Collection and Administration

The researcher personally distributed the questionnaire to students available on campus. Out of 200 distributed questionnaires, 187 were returned after obtaining participants' informed consent. The purpose of the study was explained to the participants, ensuring their confidence and understanding before data collection. The research did not involve any ethical or moral concerns that could affect the respondents.

Validity of the Instrument

The instrument utilized was a standardized and valid tool, however, it was sent to educational experts to ensure its appropriateness for the investigation.

Reliability of the Instrument

The internal consistency of the instrument was measured through Cronbach's Alpha, which was recorded as 0.733, indicating good reliability measures

Pilot Testing

A pilot study was carried out before the final implementation of the research. For this purpose, fifty students took part in the pilot test, which was conducted for the accuracy and clarity of the research instrument.

Ethical Considerations

The study adhered to ethical research principles, including:

- Obtaining informed consent from participants before data collection.
- Ensuring the confidentiality of participants' responses.
- Avoid any form of coercion or pressure on participants.
- Maintaining data security and anonymity of responses.

Data Analysis

The data was analyzed utilizing the SPSS (Statistical Package for Social Sciences) software. The emotional intelligence of students was measured by analyzing descriptive statistics, which included mean, standard deviation, frequencies and percentages. In addition, inferential statistical techniques were used in the following order:

1. Descriptive Statistics (Mean, Standard Deviation, Frequency, Percentages)
2. T-Test (Gender-based Comparison)
3. Regression Analysis (Determining the predictive power of EI on Academic Performance)

Table 2: Gender-wise distribution of Respondents

Gender	Frequency	Percentage
Male	72	36.0
Female	128	64.0
Total	200	100.0

The data in table 1 shows a gender distribution with 36% male and 64% female respondents. Females constitute a majority in the sample. With a total of 200 respondents, this gender breakdown provides insight into the composition of the surveyed population.

Table 3: T-test for Gender-Wise Analysis of Students' Emotional Intelligence

			Gender	N	Mean	Std. Deviation	Std. Error Mean	t	Sig. (2-tailed)	Mean Difference
Factors										
Emotional intelligence.	Male	72	57.5139	8.66593	1.02129	-.677	.499	-.93924		
	Female	128	58.4531	9.81150	.86722					
Regulation of emotions	Male	72	23.8056	3.83328	.45176	-.063	.950	-.03819		
	Female	128	23.8438	4.30059	.38012					
Utilization of emotions	Male	72	16.4028	2.28689	.26951	.790	.431	.36372		
	Female	128	16.0391	3.51017	.31026					

Table 3 illustrates the comparison of mean scores for emotional intelligence for male (n=72) and female (n=128) respondents. Across all categories, there's no significant gender-based difference in mean scores, with emotional intelligence (p=.499), regulation of emotions (p=.950), and utilization of emotions (p=.431) exhibiting comparable means between genders. These findings indicate similar levels of emotional intelligence and regulation among male and female respondents, suggesting no significant gender-based disparities in emotional skills within the surveyed population.

Regression**Table 4: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.645 ^a	.416	.413	7.20200

a. Predictors: (Constant), dependent variable

In the given table 4, the model, with its predictor variable(s), has 41.6% of the variability. R-squared, which considers the sample size, remains at 41.3%, indicating the model's reliability in explaining the variance. The standard error of 7.202 reflects the average discrepancy, suggesting its overall estimation accuracy. The findings suggest that while explaining an important portion of the variance in the dependent variable (41.6%), it maintains its reliability (adjusted R-squared of 41.3%) even after considering the number of predictors, with a standard error of 7.202, indicating moderate accuracy in prediction.

Table 5: ANOVA for Regression Model Significance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7328.340	1	7328.340	141.286	.000 ^b
	Residual	10270.015	198	51.869		
	Total	17598.355	199			

a. Independent Variable: Emotional intelligence.

b. Predictors: (Constant), dependent variable

In table 5, the regression analysis reveals a significant relationship between the predictor variable (presumably represented by "Model 1") and the dependent variable, Emotional Intelligence. F-statistic (141.286) and the associated p-value ($p < .001$). The coefficient of determination (R-squared) would likely be high, 73.28% of the variance in Emotional Intelligence. These findings suggest that the predictor variable is a strong determinant of Emotional Intelligence scores. The intercept term (Constant) is included as a predictor in the model, and its interpretation would be that it represents the expected value of Emotional Intelligence when the predictor variable is zero. However, since the specific nature of the predictor variable is not provided, further interpretation regarding its influence on Emotional Intelligence cannot be determined without additional context.

Table 6: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta		
1	(Constant)	15.669	3.607		4.344	.000
	dependent variable	1.061	.089	.645	11.886	.000

a. Independent Variable: Emotional intelligence.

In the above given table 6, the model, (EI) and a predictor variable (referred to as "dependent variable" are examined. The results indicate a significant positive association between the predictor and EI. Specifically, for each unit increase in the predictor variable, EI is expected to increase by approximately 1.061 units. The standardized coefficient (Beta) further emphasizes the importance of the predictor, indicating that it explains a substantial proportion of the variability in EI scores. The intercept term is also statistically significant, suggesting that when the predictor variable is zero, the estimated mean EI score is approximately 15.669. Overall,

these findings highlight the predictive power of the included variable in determining EI, providing valuable insights into factors influencing emotional intelligence levels.

Discussion

The present study revealed the positive effects of emotional intelligence (EI) and academic performance among university students. This study's findings indicate that higher levels of EI are associated with improved academic outcomes, as evidenced by the results of the investigation. These results align with previous research by Kong and Zhao (2013), which demonstrated that EI play a critical role in academic success.

Moreover, the ability to perceive, regulate, and utilize emotions appears to enable students to experience positive emotions more frequently and intensely, fostering better academic engagement. Prior studies suggest that female students generally exhibit higher EI than their male counterparts (Fernandez et al., 2012). However, according to the results in the current study, gender-based analysis indicated no significant differences between male and female students in emotional intelligence levels. These findings suggest that although female students scored slightly higher in EI overall, the differences were not statistically significant. These results contrast with previous research suggesting stronger EI scores for female students, particularly in stressful situations (Goleman, 1995). A possible explanation for this discrepancy could be because of cultural and contextual factors that may influence emotional intelligence development differently in different countries.

These results align with prior research by Malik and Shahid (2016), emphasizing that emotional intelligence positively influences academic success by fostering self-regulation and motivation. Furthermore, Goleman's (1995) theory suggests that emotionally intelligent individuals manage stress effectively, which may explain the observed correlation with higher academic performance. Additionally, the lack of gender differences in EI levels supports previous findings by Fernandez et al. (2012), indicating that both male and female students develop EI skills at comparable rates in academic settings.

Conclusion

The results demonstrated that emotional intelligence had a positive effect on students' academic achievement. This does mean that emotional intelligence plays a part in determining someone's future success. So, in educational institutions, individual development programs may be structured by the administration to train the students to improve academic achievement in emotional skills for affluent results; no significant difference was observed between males and females. Thus, it is pertinent to mention that academicians should incorporate curricula that may encourage emotional intelligence skills development among both genders in higher education institutions. As a result, instructors should be more aware of their emotions and use them to improve their academic achievement in educational institutions.

Based on the study findings, the following recommendations are proposed:

- Universities should introduce emotional intelligence programs to improve students' self-awareness and emotional regulation skills.
- Institutions should provide counselling sessions for students who struggle with emotional regulation and stress management.
- Teachers should be trained to integrate emotional intelligence awareness into their teaching methods to support student well-being.

References

- Ahmed, Z., Asim, M., & Pellitteri, J. (2019). Emotional intelligence predicts academic achievement in Pakistani management students. *The International Journal of Management Education*, 17(2), 286-293.

- Asrar-ul-Haq, M., Anwar, S., & Hassan, M. (2017). Impact of emotional intelligence on teachers' performance in higher education institutions of Pakistan. *Future Business Journal*, 3(2), 87-97.
- Bano, Z., & Pervaiz, S. (2020). The relationship between resilience, emotional intelligence and their influence on psychological well-being: A study with medical students. *Pakistan Armed Forces Medical Journal*, 70(2), 390-394.
- Cassidy, S. (2015). Resilience building in students: The role of academic self-efficacy. *Frontiers in Psychology*, 6, 15-3128.
- Cunningham, R. W. H. L. (2023). Creating interactive sociocultural environments for self-regulated learning. *Self-Regulation of Learning and Performance: Issues and Educational Applications*, 17, xx-xx.
- Fernandez, R., Salamonson, Y., & Griffiths, R. (2012). Emotional intelligence as a predictor of academic performance in first-year accelerated graduate entry nursing students. *Journal of Clinical Nursing*, 21(23-24).
- Goldring, E., Cravens, X., Porter, A., Murphy, J., & Elliott, S. (2015). The convergent and divergent validity of the Vanderbilt Assessment of Leadership in Education (VAL-ED), instructional leadership, and emotional intelligence. *Journal of Educational Administration*, 53(2), 177-196.
- Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. Bantam Books.
- Iqbal, J., Asghar, M. Z., Ashraf, M. A., & Yi, X. (2022). The impacts of emotional intelligence on students' study habits in blended learning environments: The mediating role of cognitive engagement during COVID-19. *Behavioral Sciences*, 12(1), 14.
- Kong, F., & Zhao, J. (2013). Affective mediators of the relationship between trait emotional intelligence and life satisfaction in young adults. *Personality and Individual Differences*, 54(2), 197-201.
- Kotsou, I., Mikolajczak, M., Heeren, A., Grégoire, J., & Leys, C. (2019). Improving emotional intelligence: A systematic review of existing work and future challenges. *Emotion Review*, 11(2), 151-165.
- Maccann, C., Jiang, Y., Brown, L., Double, K., Bucich, M., & Minbashian, A. (2019). Emotional intelligence predicts academic performance: A meta-analysis. *Psychological Bulletin*, 146(1), 1–33. <https://doi.org/10.1037/bul0000219>
- Madigan, D. J., & Curran, T. (2021). Does burnout affect academic achievement? A meta-analysis of over 100,000 students. *Educational Psychology Review*, 33, 387-405
- Malik, S. Z., & Shahid, S. (2016). Effect of emotional intelligence on academic performance among business students in Pakistan. *Bulletin of Education and Research*, 38(1), 197-208.
- Maraichelvi, A., & Rajan, S. (2013). The relationship between emotional intelligence and academic performance among final-year undergraduates. *Universal Journal of Psychology*, 1(2), 41-45.
- Perkasa, D. H., Abadi, F., & Shandy, D. F. A. (2020). The effect of emotional intelligence, servant leadership, and organizational commitment on organizational citizenship behavior: A study of the South Tangerang City Education and Culture Office. *Atlantis Press*, 97-102.
- Puspitacandri, A., Soesatyo, Y., Roesminingsih, E., & Susanto, H. (2020). The effects of intelligence, emotional, spiritual, and adversity quotient on the graduate quality in Surabaya Shipping Polytechnic. *European Journal of Educational Research*, 9(3), 1075-1087.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9(3), 185-211.
- Slåtten, T., Lien, G., Evenstad, S. B. N., & Onshus, T. (2021). Supportive study climate and academic performance among university students: The role of psychological capital, positive emotions, and study engagement. *International Journal of Quality and Service Sciences*, 13(4), 585-600.
- Suleman, Q., Syed, M. A., Mahmood, Z., & Hussain, I. (2020). Correlating emotional intelligence with job satisfaction: Evidence from a cross-sectional study among secondary school heads in Khyber Pakhtunkhwa, Pakistan. *Frontiers in Psychology*, 11, 240.
- Tuyakova, U., Baizhumanova, B., Mustapaeva, T., Alekeshova, L., & Otalbaeva, Z. (2022). Developing emotional intelligence in student teachers in universities. *Humanities & Social Sciences Communications*, 9(1).