

# **A Quantitative Study to Ascertain Impact of Emotional Intelligence of MBA Students of Army Institute of Management Kolkata on their Academic Performance**

**Brig. Sujay Ranjan Chaudhuri (Retd.)**

Director

Army Institute of Management, Kolkata

director\_aimk@aim.ac.in

<https://doi.org/10.5281/zenodo.17838972>

## **ABSTRACT**

*The corporate sector has seen a rapid and disruptive shift in recent decades as a result of technological revolution and information explosion, which are occurring at an unprecedented rate. The future corporate landscape will be much more complex and uncertain, demanding the appointment of business executives with a whole different managerial skill set. Management education is an integral part of the corporate world. MBA students, as future business executives, are on the verge of starting their careers. Instilling emotional intelligence competencies in MBA students, the next generation of business leaders, is essential for empowering them not only to navigate the obstacles of the VUCA world, but also to create more effective and high-quality business results. Emotional intelligence will also serve as the foundational golden thread for the canvas of strategic corporate leadership. The goal of this study was to determine the effect of emotional intelligence on academic performance among MBA students at the Army Institute of Management, Kolkata. The study followed a quantitative correlational research strategy. The multiple linear regression method was employed as part of the quantitative analysis. An emotional intelligence questionnaire, consisting of thirty questions based on Daniel Goleman's trait-based emotional intelligence model, was used to compute four dimensions of emotional intelligence: self-awareness, self-management, social awareness, and relationship management. The findings showed that emotional intelligence has a significant effect on academic achievement. As a result, it is critical that students' levels of emotional intelligence be measured while they are still enrolled in business schools, and that appropriate training packages on emotional intelligence be introduced into the curriculum as needed.*

**Keywords:** *Emotional Intelligence, Self-Awareness, Self-Management, Social Awareness, Relationship Management, Emotional State, Academic Performance, Army Institute of Management, Kolkata, Pearson's Correlation, Multiple Linear Regression Analysis*

## **A. INTRODUCTION**

### **1.1. Background of the Study.**

The business world has seen a rapid and disruptive transformation in recent decades as a result of technological revolution and information explosion, which is occurring at an unprecedented speed. The future corporate landscape will be much more complex and uncertain, demanding the hiring of business executives with a completely different set of managerial skills. Future business leaders are being prepared at numerous business schools throughout the world. In their study, Joyner & Mann (2011) identified three significant obstacles that future company leaders will face: managing complicated and rapid change, making judgments in the face of uncertainty, and surviving in a hyper-competitive global economy. They went on to say that such leaders must develop the ability to think differently, lead differently, and create engaging work cultures for their businesses (Joyner & Mann, 2011).

Around the same time, there has been a growing interest in Emotional Intelligence (EI) and an increase in the number of research studies on EI after it was popularized by Dr. Daniel Goleman, an American psychologist, who determined that EI is a powerful predictor of an individual's performance in many domains. Carmeli (2003) proposed that company leaders with high EI create positive and proactive work attitudes, as well as unselfish behaviours. Zhou & George, (2003) echoed similar comments, arguing that such leaders can gainfully utilize emotions to facilitate cognitive processes, detect core problems, and capitalize on transitory chances.

Others believed that such leaders could improve (their) employees' performance by managing emotions, thereby fostering creativity, resilience, and confidence (Fredrickson, 2006), cultivating positive interactions between employees for enhanced cooperation (Barsade, 2002), better better coordination (Sy et al., 2005) and improved performance (Armenakis et al., 1993; Chen & Min, 2017). As a result, the need to build EI in future business leaders has

grown, and some business schools have already begun to incorporate EI into their curriculum (Joyner & Mann, 2011).

## **1.2. Problem Statement**

Given the importance of helping students improve their EI skills, Army Institute of Management, Kolkata, uses a planned curriculum that begins with the orientation and lasts for nearly the whole course. Along with a predetermined academic program, a series of lectures and workshops led by subject-matter specialists are held to deliver guided interventions to students. Determining if the four dimensions of EI have an impact on students' Academic Performance (AP) was deemed prudent because a significant amount of time and effort is spent helping students build much-needed EI competencies.

## **1.3. Definitions of Key Terms**

### **1.3.1. Academic Performance.**

AP is usually expressed as average scores of grades obtained in different subjects (e.g., GPA, SAT, etc.), reflecting a student's relative position with regard to his or her peers (Richardson, 1995).

### **1.3.2. Emotional Intelligence.**

EI is the capacity for recognising our own feeling and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships (Goleman et al., 2000).

## **B Literature Review**

### **2.1. Emotional Intelligence**

#### **2.1.1. Genesis and concept**

Although the term EI has been used in psychology for a while (Keefer et al., 2018), Mayer & Salovey (1995) did not develop the construct in its current form until 1990, indicating that people are capable of managing their emotions. After that, several other researchers—including Cooper & Sawaf (1997), Bar-On, (2004), Goleman, (1995), and, Weisinger & Cali, (1999) presented their own ideas about EI, which is now considered a psychological resource (Di Fabio & Saklofske, 2018, 2014; Görgens-Ekermans & Roux, 2021; Extremera et al., 2020). The roots of EI can be tracked down to the concept of “social intelligence”, coined by Thorndike (1920) to refer to: -

*“...the ability to understand and manage men and women, boys and girls - to act wisely in human relations”* (Thorndike, 1920).

Gardner (1983) included the concept of "social intelligence" as one of seven intelligences in his proposed "Multiple Theory," which integrates cognitive and emotional components of intelligence. Gardner (1983) further split social intelligence into two categories: intrapersonal and interpersonal intelligence. The former refers to the ability to understand oneself, including one's feelings, intentions, and motivations, and to use such information effectively in regulating one's life; the latter refers to the ability to effectively communicate with and respond to others, as well as understand others, including their moods and intentions (Klitgaard & Gardner, 1984). Many contended that the contrast between Gardner's interpersonal and intrapersonal intelligences contributed to the development of EI theory.

### **2.1.2. EI models**

EI is characterised by some researchers as an ability, involving the cognitive processing of emotional information (Mayer & Salovey, 1997a). This type of EI (also known as ability EI) is represented by Mayer & Salovey (1997b), who defined EI as a set of interrelated skills, as:

*“...the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth”* (Mayer, J., & Salovey, 1997).

An alternative proposal is that EI should be regarded as a much broader concept, encompassing personality traits, motivational factors, and many different social skills (e.g., Bar-On, 2004; Goleman, 1995; Goleman et al., 2002). Goleman, (1998), in the popular book *Working with Emotional Intelligence*, defined EI as

*“...the capacity for recognising our own feeling and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships”* (Goleman, 1998).

Therefore, there are two predominant models of EI: *the Ability Model* (e.g., Salovey & Mayer, 1997) and *Mixed or Trait-based Model* (e.g., Bar-On, 2004; Goleman, 1995). Ability EI model requires the use of maximum performance tests pertains primarily to the realm of cognitive ability (Petrides et al., 2004). The trait-based EI model combines emotional abilities with elements of personality, motivation, and social skill (Bar-On, 2004; Goleman, 1995). Trait-based EI model pertains to the realm of personality which can be assessed by self-report questionnaire (Petrides & Furnham, 2000). Both models rely on sufficient empirical support and coexist side by side in the areas of both empirical and applied research (Qualter et al., 2009).

## **2.2. Academic performance**

AP is influenced by a variety of cognitive and non-cognitive factors, including demographics, participation level, teacher-to-student ratio, stress, and motivation, among others, which can be classified as social, organizational, psychological, cultural, and economic (Njega et al., 2019). Traditionally, AP assessments have been conducted via examinations and a range of evaluations for different subjects during the academic year. It is typically expressed as the average score of grades received in several disciplines (e.g., GPA, SAT, etc.), representing a student's relative position in comparison to his or her peers (Richardson, 1995).

AP is seen as an excellent predictor of students' success in other situations, such as increased work possibilities, the ability to pursue higher academic courses, and so on (Droppert et al., 2019). Students' AP scores are a key component and factor in the accreditation process for any university or school. According to several studies, important indicators of AP include

previous academic achievements, demographics, environment, psychological characteristics, and so on (Kuh & Umbach, 2005).

### **2.3. Relationship between emotional intelligence and academic performance.**

EI equips and empowers students to manage stress and anxiety associated with tests and other evaluation systems, as well as enhance cooperation, mutual learning, and increase participation. (Romanelli et al., 2006; Gupta et al., 2023). In one study involving more than 3,500 first-year students of a public university, Jaeger & Eagan, (2007) discovered that interpersonal, stress management, and flexibility were major predictors of students' AP. They said that the capacity to deal with stressful events enables students to "manage the anxiety of tests, deadlines, competing priorities, and personal crises". It has been discovered that kids who are organically related with their school, teachers, and peers have attained higher levels of AP (Wentzel, 2022; Henderson & Mapp, 2002). Several studies have investigated the way EI impacts AP in primary schools (Arias et al., 2022), in secondary schools (Costa & Faria, 2023), in higher education (Halimi et al., 2020; Naseer et al., 2022), and in university (Chew et al., 2013; MacCann et al., 2019; Gupta et al., 2023). Recent studies have suggested that EI and self-esteem of students are associated with their AP (Tamannaifar et al., 2010), and, EI can be regarded as an indicator of AP (MacCann et al., 2019; Quílez-Robres et al., 2023; Torres Zapata et al., 2023). Several other research have proposed that self-motivation, self-awareness, and empathy are key predictors of AP (Oduwaiye et al., 2017).

Most studies (MacCann et al., 2019; Perera & DiGiacomo, 2015; Extremera et al., 2020; Van Rooy & Viswesvaran, 2004), have discovered EI to be positively related with AP, proposing that increased EI would result in higher AP. Parker, (2005) discovered that pupils with higher levels of social and emotional talents were academically more accomplished. Some scholars promote a strong and direct link between EI and AP (El-Adl & Alkharusi, 2020; Mustafa Ali Khalaf Ali, 2016; Mudiono, 2019; Njega et al., 2019; Preeti, 2013). Consequently, a few researchers assumed that EI is a superior predictor in identifying academically failing and successful pupils (Parker, 2005).

Other research, although conceding that the association exists, argue for a moderate or weak correlation, arguing that EI moderates academic achievement, but it is not the most useful predictor of it (Brackett & Mayer, 2003; Festus, 2012; Rode et al., 2007). There is a lot of

research that failed to find any association between EI and AP (Sharma & Jain, 2020). Newsome et al., (2000), during a study with 180 first-year psychology students, found virtually little correlation between EI and AP scores. Austin et al., (2005) found limited evidence that EI is linked with AP in a cohort of first-year medical students. Other studies conclude that the relationship is non-existent or non-significant (Hansenne & Legrand, 2012; Kashani et al., 2012; Pope et al., 2013). Finally, Kaliská, (2015), in fact, found negative significant correlations between ‘emotionality’ and performance.

At the MBA college level, EI is viewed as a crucial talent that assists students in managing and coping with the rigorous environment of academia (Mohzan et al., 2013). However, there is no academic consensus about the moderating or predictive significance of EI for AP (Quílez-Robres et al., 2023). Because no previous research findings have converged, conduct of this study was considered essential.

## **C RESEARCH METHODOLOGY**

### **3.1. Research objective**

The study is guided by the objective of analysing the impact of EI on AP of MBA students of Army Institute of Management, Kolkata.

### **3.2. Research question and hypotheses**

The research question of this study was as under: -

RQ : What is the impact of EI of MBA students of Army Institute of Management, Kolkata on their AP?

The hypotheses of this study were as under: -

$H_{10}$ : There is no significant impact of EI on AP among MBA students of Army Institute of Management, Kolkata.

H<sub>1a</sub>: There is a significant impact of EI on AP among MBA students of Army Institute of Management, Kolkata.

### **3.3. Research design**

Because the study's goal was to investigate the impact of EI on AP, correlational research was used as the quantitative design tool. In this study, EI is conceptualized according to the trait-based EI paradigm, represented by the work of Goleman and colleagues (Goleman, 1998; Boyatzis, Goleman, and Rhee, 2000). In this concept, the competencies are organized into following four dimensions.: -

- (1) Self-awareness entails understanding one's own internal states, preferences, resources, and intuitions. Self-awareness is considered the essential core ability of EI.
- (2) Self-management is the process of managing one's own internal states and resources.
- (3) Social awareness encompasses understanding and responding to others' emotions, needs, and concerns. It involves empathy.
- (4) Relationship management refers to the ability to elicit desired responses from others, which includes general communication skills, the ability to influence people, manage conflict, inspire others via a vision, catalyze change, collaboration, and teamwork.

### **3.4. Population and Sampling**

The sample consisted of 44 MBA students of Army Institute of Management, Kolkata, selected by random sampling. The sample constitutes 21 female students and 23 male students, all in the age group from 22 to 27 years.

### **3.5. Instrumentation**

Because the study was quantitative in nature, data was collected via a questionnaire. Questionnaire is the most cost-effective and popular instrument for collecting data (Singh et al., 2006). Another reason for adopting a questionnaire is that it is simple to administer and allows for data collection in the most convenient way (Gajbhiye et al., 2021).

An EI questionnaire consisting of thirty statements, based on Daniel Goleman's Trait based EI model was used to calculate four dimensions of EI, namely, self-awareness, self-management, social awareness, and, relationship management.

### **3.6. Data collection procedures**

Students were approached and informed that they had been chosen at random to be study participants. They were also given information about the study's purpose and instructions on how to respond to the five-point Likert scale items, which required them to rate their responses on a scale of 1 (Strongly Disagree) to 5 (Strongly Agree). After the questionnaires were distributed, respondents were given plenty of time to complete and submit them.

## **D DATA ANALYSIS**

### **4.1. Research variables**

The independent variables were four components of EI, namely self-awareness, self-management, social awareness, and relationship management, whereas the dependent variable was students' AP (Grade Point Average).

After the responses were collected, the received data were statistically analysed by using multiple linear regression method.

### **4.2. Correlation matrix (Pearson)**

	Academic Achievement	Self-Assessment	Self-Management	Social Awareness	Relationship Management
Academic Performance	1	-0.20379	-0.0742985	0.0430387	0.117509

Self-Awareness	-0.20379	1	0.790143	0.577827	0.631495
Self-Management	-0.0742985	0.790143	1	0.480907	0.599225
Social Awareness	0.0430387	0.577827	0.480907	1	0.852114
Relationship Management	0.117509	0.631495	0.599225	0.852114	1

#### 4.3. ANOVA table

Source	DF	Sum of Square	Mean Square	F Statistic	P-value
Regression (between $\hat{y}_i$ and $\bar{y}$ )	2	1.911409	0.955704	3.402557	0.0429383
Residual (between $y_i$ and $\hat{y}_i$ )	41	11.51601	0.280878		
Total (between $y_i$ and $\bar{y}$ )	43	13.427418	0.312266		

#### 4.4. Coefficient table

##### 4.4.1. Coefficient table iteration 1 (adjusted R-squared = 0.065)

	Coeff	SE	t-stat	lower t <sub>0.025(39)</sub>	upper t <sub>0.975(39)</sub>	Stand Coeff	p-value	VIF
b	8.007742	0.72487	11.047135	6.541553	9.473931	0	1.41664e-13	
Self-Assessment	-0.0872619	0.0427684	-2.040336	-0.173769	-0.000754643	-0.528557	0.0481289	3.086162
Self-Management	0.0123541	0.0285825	0.432227	-0.0454593	0.0701676	0.108197	0.667957	2.88167
Social Awareness	-0.0143269	0.034362	-0.416939	-0.0838306	0.0551769	-0.120058	0.679009	3.813058

Relationship Management	0.0645243	0.0408862	1.578143	-0.0181759	0.147224	0.488758	0.12261	4.410971
-------------------------	-----------	-----------	----------	------------	----------	----------	---------	----------

#### 4.4.2. Coefficient table iteration 2 (adjusted R-squared = 0.0843)

	Coeff	SE	t-stat	lower $t_{0.025}(40)$	upper $t_{0.975}(40)$	Stand Coeff	p-value	VIF
b	7.956779	0.707074	11.253113	6.52773	9.385828	0	5.75096e-14	
Self-Assessment	-0.0907232	0.0415194	-2.185082	-0.174637	-0.00680943	0.549523	0.0348002	2.969878
Self-Management	0.0145272	0.0278115	0.522347	-0.0416818	0.0707363	0.127229	0.60431	2.785847
Relationship Management	0.0512609	0.0254184	2.016687	-0.000111556	0.102633	0.388291	0.0504761	1.740766

#### 4.4.3. Coefficient table iteration 3 (adjusted R-squared = 0.101)

	Coeff	SE	t-stat	lower $t_{0.025}(41)$	upper $t_{0.975}(41)$	Stand Coeff	p-value	VIF
b	7.907438	0.694494	11.385902	6.504879	9.309997	0	2.85327e-14	
Self-Assessment	-0.0763383	0.0307951	-2.478912	-0.13853	-0.0141464	-0.462391	0.0173828	1.663302
Relationship Management	0.0540617	0.0246251	2.195394	0.0043304	0.103793	0.409507	0.0338521	1.663302

## 4.5. Validation

### 4.5.1. Residual normality

Linear regression assumes normality for residual errors. Shapiro-Wilk p-value equals **0.8705**. It is assumed that the data is normally distributed.

#### 4.5.2. Homoscedasticity - homogeneity of variance

The White test p-value equals **8.67262e-12** ( $F=50.516029$ ). It is assumed that the variance is not homogeneous.

#### 4.5.3. Multicollinearity - intercorrelations among the predictors ( $X_i$ )

There is no multicollinearity concern as all the VIF values are smaller than 2.5.

#### 4.5.4. Priori power - of the entire model (4 predictors)

Although the power to test the entire model is medium: 0.6004, we reject the  $H_0$ .

## E RESULTS

Results of the multiple linear regression indicated that there was a **weak, collective significant effect** between the Self-Assessment, Self-Management, Social Awareness, Relationship Management, and AP.

The individual predictors were examined further and indicated that **Self-Awareness** ( $t=-2.479$ ,  $p=.017$ ) and **Relationship Management** ( $t=2.195$ ,  $p=.034$ ) **were significant predictors in the model**, and Self-Management, and Social Awareness were non-significant predictors in the model.

$$F(2, 41) = 3.4, \quad p=.043, \quad R^2=0.14, \quad R^2_{adj}=0.1$$

$R^2$  equals 0.142351 means that the predictors ( $X_i$ ) explain 14.2% of the variance of Y. The coefficient of multiple correlation (R) equals 0.377295, which means that there is a weak correlation between the predicted data ( $\hat{y}$ ) and the observed data (y).

Since p-value (0.0429383)  $< \alpha$  (0.05), **we reject the  $H_0$  at the significance level of 0.05.**

## **F DISCUSSIONS**

The findings of this study illustrate the importance of EI in AP. The presence of a strong positive association between EI and AP shows that factors other than cognitive intelligence influence academic achievement. Self-awareness and relationship management have been shown as key determinants of AP. These findings suggest that students who are conscious of their own sentiments and emotions, as well as the capacity to elicit desirable responses from others, are better prepared to deal with the academic rigor of an MBA program.

The findings of the present study conform to the study conducted by Rozell et al., (2002) in which they found that there was a small but significant correlation between EI and academic achievement. Parker et al., (2004) also conducted a longitudinal study and they found the similar findings that several dimensions of EI could predict AP. Petrides et al., (2004) examined the relationship between EI, cognitive ability, and AP. They found that EI moderated the relationship between cognitive ability and AP. Barchard, (2003), in his study, found significant correlations between some of EI subscales and measure of AP. The findings are relevant for students, teachers, professors, educators, consultants, and parents who need to grasp the impact of EI in academics (Venkteshwar & Warrier, 2022).

## **G CONCLUSION**

EI must be regarded as a predictor of socio-emotional wellness, which is directly and indirectly related to other psychological constructs that affect the ability to adjust to changing circumstances (Quílez-Robres et al., 2023). Academic excellence is not the primary criterion for future success; communication, decision-making, leadership, and collaborative abilities are all necessary. Regardless, emotionally intelligent people lead happier and more productive lives.

The findings reveals that EI has a significant impact on AP. EI is without a doubt a type of intelligence that must be used and developed throughout one's life because it allows us to better comprehend not just ourselves but also people around us, establish connections with others, manage borderline situations, and decide how we respond or react.

Management education is an integral part of the corporate world. MBA students, as future business executives, are on the verge of starting their careers. Better emotional competences in MBA students may lead to better grooming as leaders, stronger personality development, and greater job happiness, in addition to improved AP. Slaski & Cartwright, (2003) revealed promising results indicating that EI may be taught and learned, as well as employed to improve an individual's well-being. Administrators and educators are starting to appreciate that noncognitive qualities like EI can play a significant role in both AP and life success.

There is a need to design and implement not only various intervention programs for the development of EI, but the feasibility of incorporating the same from an early age is advocated (Quílez-Robres et al., 2023). The author endorses the recommendation made by Venkteshwar & Warrier, (2022) that the Ministry of Human Resource Development (MHRD) may propose EI as a subject for high school students in order to improve their AP scores and overall quality of life.

## **H LIMITATIONS OF THE STUDY**

This study was conducted in the Army Institute of Management, Kolkata only and may limit the generalizability its findings.

***Disclosure of Interest :*** The author reports that there are no competing interests to declare.

***Consent:*** Necessary consent from the participants was obtained for undertaking the study. Participation in this study was completely voluntary.

## **REFERENCES**

Arias, J., Soto-Carballo, J. G., & Pino-Juste, M. R. (2022). Emotional intelligence and academic motivation in primary school students. *Psicología: Reflexão e Crítica*, 35(1). <https://doi.org/10.1186/s41155-022-00216-0>

Armenakis, A. A., Harris, S. G., & Mossholder, K. W. (1993). Creating Readiness for Organizational Change. *Human Relations*, 46(6). <https://doi.org/10.1177/001872679304600601>

Austin, E. J., Evans, P., Goldwater, R., & Potter, V. (2005). A preliminary study of emotional intelligence, empathy and exam performance in first year medical students. *Personality and Individual Differences*, 39(8). <https://doi.org/10.1016/j.paid.2005.04.014>

Barchard, K. A. (2003). Does Emotional Intelligence Assist in the Prediction of Academic Success. *Educational and Psychological Measurement*, 63(5), 840–858. <https://doi.org/10.1177/0013164403251333>

Bar-On, R. (2004). The Bar-On Emotional Quotient Inventory (EQ-i): Rationale, Description, and Summary of Psychometric Properties. *Measuring Emotional Intelligence: Common Ground and Controversy*.

Barsade, S. G. (2002). The ripple effect: Emotional contagion and its influence on group behavior. In *Administrative Science Quarterly* (Vol. 47, Issue 4). <https://doi.org/10.2307/3094912>

Brackett, M. A., & Mayer, J. D. (2003). Convergent, discriminant, and incremental validity of competing measures of emotional intelligence. *Personality and Social Psychology Bulletin*, 29(9). <https://doi.org/10.1177/0146167203254596>

Carmeli, A. (2003). The relationship between emotional intelligence and work attitudes, behavior and outcomes: An examination among senior managers. *Journal of Managerial Psychology*, 18(7–8). <https://doi.org/10.1108/02683940310511881>

Chen, J., & Min, H. (2017). The Effect Of Self-Efficacy On Emotional Intelligence And Well-Being Among Tour Guides. *World Academy of Science, Engineering and Technology International Journal of Social and Tourism Sciences*, 11(8).

Chew, B. H., Zain, A. M., & Hassan, F. (2013). Emotional intelligence and academic performance in first and final year medical students: A cross-sectional study. *BMC Medical Education*, 13(1). <https://doi.org/10.1186/1472-6920-13-44>

Cooper, R. K., & Sawaf, A. (1997). Executive EQ: Emotional Intelligence in Business. In *Library Journal* (Vol. 122, Issue 12).

Costa, A., & Faria, L. (2023). Trajectories of implicit theories of intelligence and emotional intelligence in secondary school. *Social Psychology of Education*, 26(1). <https://doi.org/10.1007/s11218-022-09695-6>

Di Fabio, A., & Saklofske, D. H. (2018). The contributions of personality and emotional intelligence to resiliency. *Personality and Individual Differences*, 123. <https://doi.org/10.1016/j.paid.2017.11.012>

Droppert, K., Downey, L., Lomas, J., Bunnett, E. R., Simmons, N., Wheaton, A., Nield, C., & Stough, C. (2019). Differentiating the contributions of emotional intelligence and resilience on adolescent male scholastic performance. *Personality and Individual Differences*, 145. <https://doi.org/10.1016/j.paid.2019.03.023>

El-Adl, A., & Alkharusi, H. (2020). Relationships between self-regulated learning strategies, learning motivation and mathematics achievement. *Cypriot Journal of Educational Sciences*, 15(1). <https://doi.org/10.18844/cjes.v15i1.4461>

Extremera, N., Sánchez-Álvarez, N., & Rey, L. (2020). Pathways between ability emotional intelligence and subjective well-being: Bridging links through cognitive emotion regulation strategies. *Sustainability (Switzerland)*, 12(5). <https://doi.org/10.3390/su12052111>

Festus, A. B. (2012). The Relationship between Emotional Intelligence and Academic Achievement of Senior Secondary School Students in the Federal Capital Territory, Abuja. *2Journal of Education & Practice*, 3(10).

Fredrickson, B. L. (2006). Unpacking positive emotions: Investigating the seeds of human flourishing. *Journal of Positive Psychology*, 1(2). <https://doi.org/10.1080/17439760500510981>

Gajbhiye, S., Tripathi, R., Parmar, U., Khatri, N., & Potey, A. (2021). Critical appraisal of published research papers - A reinforcing tool for research methodology: Questionnaire-based study. *Perspectives in Clinical Research*, 12(2). [https://doi.org/10.4103/picr.PICR\\_107\\_18](https://doi.org/10.4103/picr.PICR_107_18)

Gardner, H. (1993). Multiple Intelligences Theory to practice. In *Intelligence*.

Goleman, D. (1998). Executive Book Summaries Working with Emotional Intelligence. In *Executive Book Summaries* (Issue May).

Goleman, D., Boyatzis, R. E., & Rhee, K. S. (2000). Clustering Competence in Emotional Intelligence: Insights from Emotional Competence Inventory (ECI). In *Handbook of emotional intelligence*.

Goleman, D., Boyatzis, R., & McKee, A. (2002). Primal Leadership: Realizing the Power of Emotional Intelligence - Tapping into Your Team's Emotional Intelligence. *Harvard Business School Press*.

Goleman, Danel. (1995). Emotional intelligence: Why it can matter more than IQ. *Learnning*, 24.

Görgens-Ekermans, G., & Roux, C. (2021). Revisiting the emotional intelligence and transformational leadership debate: (how) does emotional intelligence matter to effective leadership? *SA Journal of Human Resource Management*, 19. <https://doi.org/10.4102/sajhrm.v19i0.1279>

Gupta, K., Parimal, B. S., & Narang, N. (2023). Academic stress among first-year undergraduate college students: Role of emotional intelligence in coping with academic stress. In *Handbook of Research on Coping Mechanisms for First-Year Students Transitioning to Higher Education*. <https://doi.org/10.4018/978-1-6684-6961-3.ch004>

Halimi, F., AlShammari, I., & Navarro, C. (2020). Emotional intelligence and academic achievement in higher education. *Journal of Applied Research in Higher Education*, 13(2). <https://doi.org/10.1108/JARHE-11-2019-0286>

Hansenne, M., & Legrand, J. (2012). Creativity, emotional intelligence, and school performance in children. *International Journal of Educational Research*, 53. <https://doi.org/10.1016/j.ijer.2012.03.015>

Henderson, A., & Mapp, K. (2002). A New Wave of Evidence: The Impact of School, Family, and Community Connections on Student Achievement. Annual Synthesis 2002. *National Center for Family and Community with Schools*.

Jaeger, A. J., & Eagan, M. K. (2007). Exploring the Value of Emotional Intelligence: A Means to Improve Academic Performance. *NASPA Journal*, 44(3). <https://doi.org/10.2202/1949-6605.1834>

Joyner, F. F., & Mann, D. T. Y. (2011). Developing Emotional Intelligence In MBA Students: A Case Study Of One Program's Success. In *American Journal of Business Education-October* (Vol. 4, Issue 10).

Kaliská, L. (2015). Three types of intelligences and their relationship to students' school performance. *New Educational Review*, 41(3). <https://doi.org/10.15804/tner.2015.41.3.22>

Kashani, F. L., Azimi, A. L., & Vaziri, Sh. (2012). Relationship between Emotional Intelligence and Educational Achievement. *Procedia - Social and Behavioral Sciences*, 69, 1270–1275. <https://doi.org/10.1016/j.sbspro.2012.12.061>

Keefer, K. V., Parker, J. D. A., & Saklofske, D. H. (2018). *Three Decades of Emotional Intelligence Research: Perennial Issues, Emerging Trends, and Lessons Learned in Education: Introduction to Emotional Intelligence in Education*. [https://doi.org/10.1007/978-3-319-90633-1\\_1](https://doi.org/10.1007/978-3-319-90633-1_1)

Clitgaard, R., & Gardner, H. (1984). Frames of Mind: The Theory of Multiple Intelligences. *Journal of Policy Analysis and Management*, 3(4). <https://doi.org/10.2307/3324560>

Kuh, G. D., & Umbach, P. D. (2005). Experiencing diversity. *Liberal Education, Winter*.

MacCann, C., Jiang, Y., Brown, L. E. R., Double, K. S., Bucich, M., & Minbashian, A. (2019). Emotional Intelligence Predicts Academic Performance: A Meta-Analysis. *Psychological Bulletin*. <https://doi.org/10.1037/bul0000219>

Mayer, J., & Salovey, P. (1997). What is emotional intelligence? In: Salovey, P., Sluyter, D. (Eds.), Emotional Development and Emotional Intelligence. In *Implications for Educators. Basic Books, New York* (Vol. 0, Issue 0).

Mayer, J. D., & Salovey, P. (1995). Emotional intelligence and the construction and regulation of feelings. *Applied and Preventive Psychology*, 4(3). [https://doi.org/10.1016/S0962-1849\(05\)80058-7](https://doi.org/10.1016/S0962-1849(05)80058-7)

Mayer, J. D., & Salovey, P. (1997a). What is emotional intelligence. Emotional development and emotional intelligenc. In *Educational implications* (Vol. 3).

Mayer, J. D., & Salovey, R. (1997b). «What is Emotional Intelligence?», en P. Salovey y D. J. Sluyter: Emotional Development and Emotional Intelligence. *BasicBooks.*, 0(0).

Mohzan, M. A. M., Hassan, N., & Halil, N. A. (2013). The Influence of Emotional Intelligence on Academic Achievement. *Procedia - Social and Behavioral Sciences*, 90, 303–312. <https://doi.org/10.1016/j.sbspro.2013.07.095>

Mudiono, A. (2019). Teaching politeness for primary school students in indonesia: Mediating role of self efficacy and self esteem of learners. *Journal of Social Studies Education Research*, 10(4).

Mustafa Ali Khalaf Ali. (2016). The Relationship between Emotional Intelligence and Academic Achievements in Males and Females in Egyptian Context. *Journal of Psychology Research*, 6(10). <https://doi.org/10.17265/2159-5542/2016.10.002>

Naseer, S., Mussarat, R., Malik, F., & Malik, F. (2022). Personality Traits and Academic Achievements of Undergraduate Students: The Mediating Role of Emotional Intelligence. *Pakistan Journal of Psychological Research*, 37(1). <https://doi.org/10.33824/PJPR.2022.37.1.09>

Newsome, S., Day, A. L., & Catano, V. M. (2000). Assessing the predictive validity of emotional intelligence. *Personality and Individual Differences*, 29(6), 1005–1016. [https://doi.org/10.1016/S0191-8869\(99\)00250-0](https://doi.org/10.1016/S0191-8869(99)00250-0)

Njega, S. W., Njoka, J. N., & Ndung'u, C. W. (2019). Assessment of self-efficacy on students' academic performance in secondary schools: A comparative study of male and female

students in Murang'a and Kirinyaga counties, Kenya. *Journal of Arts and Humanities*, 8(10).

Oduwaiye, R. O., Yahaya, L. A., Amadi, E. C., & Tiamiyu, K. A. (2017). Stress level and academic performance of university students in Kwara State, Nigeria. *Makerere Journal of Higher Education*, 9(1). <https://doi.org/10.4314/majohe.v9i1.9>

Parker, J. D. A. (2005). The Relevance of Emotional Intelligence for Clinical Psychology. In *Emotional intelligence: An international handbook*.

Parker, J. D. A., Summerfeldt, L. J., Hogan, M. J., & Majeski, S. A. (2004). Emotional intelligence and academic success: Examining the transition from high school to university. *Personality and Individual Differences*, 36(1). [https://doi.org/10.1016/S0191-8869\(03\)00076-X](https://doi.org/10.1016/S0191-8869(03)00076-X)

Perera, H. N., & DiGiacomo, M. (2015). The role of trait emotional intelligence in academic performance during the university transition: An integrative model of mediation via social support, coping, and adjustment. *Personality and Individual Differences*, 83. <https://doi.org/10.1016/j.paid.2015.04.001>

Petrides, K. V., Frederickson, N., & Furnham, A. (2004). The role of trait emotional intelligence in academic performance and deviant behavior at school. *Personality and Individual Differences*, 36(2). [https://doi.org/10.1016/S0191-8869\(03\)00084-9](https://doi.org/10.1016/S0191-8869(03)00084-9)

Petrides, K. V., & Furnham, A. (2000). On the dimensional structure of emotional intelligence. *Personality and Individual Differences*, 29(2). [https://doi.org/10.1016/S0191-8869\(99\)00195-6](https://doi.org/10.1016/S0191-8869(99)00195-6)

Pope, D., Roper, C., & Qualter, P. (2013). The influence of emotional intelligence on academic progress and achievement in UK university students. *Assessment & Evaluation in Higher Education*, 38(1). <https://doi.org/10.1080/02602938.2012.750438>

Preeti, B. (2013). Role of Emotional Intelligence for Academic Achievement for Students. *Research Journal of Educational Sciences*, 1(2).

Qualter, P., Whiteley, H., Morley, A., & Dudiak, H. (2009). The role of emotional intelligence in the decision to persist with academic studies in HE. *Research in Post-Compulsory Education*, 14(3). <https://doi.org/10.1080/13596740903139255>

Quílez-Robres, A., Usán, P., Lozano-Blasco, R., & Salavera, C. (2023). Emotional intelligence and academic performance: A systematic review and meta-analysis. *Thinking Skills and Creativity*, 49. <https://doi.org/10.1016/j.tsc.2023.101355>

Richardson, J. T. E. (1995). Mature Students in Higher Education: II. An investigation of approaches to studying and academic performance. *Studies in Higher Education*, 20(1). <https://doi.org/10.1080/03075079512331381760>

Rode, J. C., Mooney, C. H., Arthaud-Day, M. L., Near, J. P., Baldwin, T. T., Rubin, R. S., & Bommer, W. H. (2007). Emotional intelligence and individual performance: Evidence of direct and moderated effects. *Journal of Organizational Behavior*, 28(4). <https://doi.org/10.1002/job.429>

Romanelli, F., Cain, J., & Smith, K. M. (2006). Emotional intelligence as a predictor of academic and/or professional success. *American Journal of Pharmaceutical Education*, 70(3). <https://doi.org/10.5688/aj700369>

Rozell, E. J., Pettijohn, C. E., & Stephen Parker, R. (2002). An empirical evaluation of emotional intelligence. *Journal of Management Development*, 21(4). <https://doi.org/10.1108/02621710210430272>

Salovey, P., & Mayer, J. (1997). Emotional intelligence", en imagination, cognition, and personality,. *Imagination, Cognition and Personality*, 9núm. 3.,

Sharma, U., & Jain, A. C. (2020). *LINKAGES BETWEEN EMOTIONAL INTELLIGENCE AND ACADEMIC PERFORMANCE*. [http://www.internationalconference.in/XXI\\_AIC/INDEX.HTM](http://www.internationalconference.in/XXI_AIC/INDEX.HTM)

Singh, P., Chan, Y. F., & Sidhu, G. K. (2006). A Comprehensive Guide To Writing A Research Proposal. In *Venton Publishing*.

Slaski, M., & Cartwright, S. (2003). Emotional intelligence training and its implications for stress, health and performance. *Stress and Health*, 19(4). <https://doi.org/10.1002/smj.979>

Sy, T., Côté, S., & Saavedra, R. (2005). The contagious leader: Impact of the leader's mood on the mood of group members, group affective tone, and group processes. *Journal of Applied Psychology*, 90(2). <https://doi.org/10.1037/0021-9010.90.2.295>

Tamannaifar, M. R., Sedighi Arfai, F., & Salami Mohammadabadi, F. (2010). Correlation between emotional intelligence, self-concept and self-esteem with academic achievement. In *Education Strategies in Medical Sciences* (Vol. 3, Issue 3).

Thorndike, E. L. (1920). A constant error in psychological ratings. *Journal of Applied Psychology*, 4(1). <https://doi.org/10.1037/h0071663>

Torres Zapata, Á. E., Estrada Reyes, C. U., Pérez Jaimes, A. K., & Brito Cruz, T. D. J. (2023). Emotional Intelligence and Academic Performance in Students of the Bachelor of Nutrition. *Journal of Higher Education Theory and Practice*, 23(18). <https://doi.org/10.33423/jhetp.v23i18.6632>

Van Rooy, D. L., & Viswesvaran, C. (2004). Emotional intelligence: A meta-analytic investigation of predictive validity and nomological net. *Journal of Vocational Behavior*, 65(1). [https://doi.org/10.1016/S0001-8791\(03\)00076-9](https://doi.org/10.1016/S0001-8791(03)00076-9)

Venkteshwar, A., & Warrier, U. (2022). Exploring the Influence of Emotional Intelligence on the Academic Performance of MBA Students. *IIMS Journal of Management Science*, 13(1), 112–128. <https://doi.org/10.1177/0976030x211052193>

Weisinger, H., & Cali, R. L. L. (1999). Emotional intelligence at work: The untapped edge for success. *Performance Improvement*, 38(6). <https://doi.org/10.1002/pfi.4140380611>

Wentzel, K. R. (2022). Peer Relationships, Academic Motivation, and Academic Performance. In *Peer Relationships, Academic Motivation, and Academic Performance*. <https://doi.org/10.4324/9781138609877-ree49-1>

Zhou, J., & George, J. M. (2003). Awakening employee creativity: The role of leader emotional intelligence. *Leadership Quarterly*, 14(4–5). [https://doi.org/10.1016/S1048-9843\(03\)00051-1](https://doi.org/10.1016/S1048-9843(03)00051-1)