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Emotional intelligence, motivation, efficacy and learning performance in a blended learning environment: a case of iraq

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ABSTRACT

Objective: The main objective of this study is to investigate the correlation between emotional intelligence (EI) and learning performance (LRP) among university students in Iraq, specifically in the context of a blended learning environment. In addition, the present study has investigated the mediating influence of motivation (MT) and efficacy (ASE) on the association between emotional intelligence and learning performance among university students in Iraq, specifically in a blended learning setting. **Method:** The study employed a quantitative research technique and data was gathered through the administration of a questionnaire. The Structural Equation Modeling-Partial Least Squares (SEM-PLS) technique is employed for the purpose of data analysis. It is significant that the ultimate response rate achieved in the study amounts to 69.4 percent. The survey results indicate that 61 percent of the participants identified as male, whilst 39 percent identified as female. The research has utilized the method of proportionate random sampling. **Results:** The results suggest that all direct pathways, with the exception of the link from MT to LRP, have positive and statistically significant effects. The analysis employed a two-tailed analysis, examining the relationships between four paths: ASE -> LRP, EI -> ASE, EI -> LRP, and EI -> MT. All of these paths had positive and statistically significant associations, with t-values over 1.96 and p-values below 0.05. The findings suggest that the ASE plays a mediating role in the association between emotional intelligence (EI) and long-term relationship potential (LRP), but the mediating effect of the

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MT on the link between EI and LRP is not supported. **Implications:** This study will provide valuable insights for scholars and policymakers seeking to comprehend the complexities of emotional intelligence, motivation, efficacy, and learning performance within the context of a blended learning environment. **Novelty**: This study examines the little existing research on the mediating influence of motivation and efficacy in the association between emotional intelligence (EI) and learning performance (LRP) among university students in Iraq, specifically in the context of a blended learning environment.

Background

Previous research conducted by Kokkinos and Vlavianou (2021) has demonstrated a correlation between the level of emotional intelligence (EI) exhibited by students and their academic achievement, as well as their mental well-being. Furthermore, it offers a timely psychological augmentation to study routines and concentration in the post-COVID-19 era. This function possesses significant advantages. Despite the formidable obstacles presented by the global pandemic, both students and educators have adeptly navigated the educational landscape by using their emotional intelligence and cognitive involvement within blended learning settings (Iqbal et al., 2022). Blended learning, a form of hybrid education, combines traditional in-person classroom teaching with virtual learning opportunities. In response to the issue of campus closures, higher education institutions have implemented a strategy to convert specific classes into online versions (Turnbull, Chugh, & Luck, 2021). There is a possibility that students may experience a decline in their inherent enthusiasm to participate in educational endeavors. As a result, the researchers were driven to conduct a study examining the relationship between emotional intelligence (EI), cognitive engagement, and academic habits in the specific setting of online and hybrid classrooms.

There is a notable correlation between students' emotional intelligence (EI) and their academic performance (Alam et al., 2021). This phenomenon enables the transformation of emotional energy into productive actions in response to deviant behavior (Celermajer et al., 2019), while also managing emotional and social skills. A multitude of research has been undertaken to examine the association between emotional intelligence (EI) and a range of characteristics, such as stress tolerance, test anxiety, and problem-solving skills, within various contexts. Based on the findings of several academics, it has been posited that individuals with a heightened level of emotional intelligence (EI) may exhibit improved aptitude in efficiently managing the difficulties faced during their educational endeavors (Thomas & Allen, 2021). In their study, Tus (2020) established that emotional intelligence (EI) can be considered a reliable indicator of academic performance, as supported by their research findings.

According to the research conducted by Krou, Fong, and Hoff (2021), the fundamental goals that drive accomplishment motivation involve the acquisition of successful outcomes in tasks and the avoidance of failure. In alternate conceptualizations, individuals demonstrate behavioral tendencies that are motivated either by the desire to achieve success or by the inclination to avoid failure. In the work of Hong, Bernacki, and Perera

(2020), it was suggested that the impact on accomplishment motivation (AM) originated from a combination of performance objectives and mastery goals. The primary objective of the performance goal was to achieve competence, while the mastery goal placed a stronger emphasis on developing and improving competence. Individuals who aimed to improve their performance were more inclined to cease their efforts when faced with an obstacle, whereas those individuals who aimed to enhance their mastery showed a higher probability of persisting in their pursuits (Tang et al., 2019).

In recent years, there has been a noticeable surge in scholarly investigations examining the correlation between emotional intelligence (EI) and academic achievement, as noted by Sánchez-Álvarez, Berrios Martos, and Extremera (2020). According to the study conducted by Lonbani et al. (2023), Emotional Intelligence (EI) can be defined as the ability to effectively regulate one's emotions and employ logical reasoning when confronted with social circumstances. Based on the definition provided by Saeed et al. (2022), emotional intelligence (EI) refers to an individual's ability to identify and regulate their own emotions, as well as the emotions of others, with the purpose of making effective judgments and offering suitable responses. Research has provided evidence to support the notion that Emotional Intelligence (EI) has a positive impact on various aspects of language proficiency. According to Christianson (2020), there is evidence to suggest that emotional qualities and cognitive abilities within emotional intelligence (EI) can have a positive impact on many language skills, such as reading comprehension, introspective speaking, listening, and writing performance. Furthermore, it is important to acknowledge that Emotional Intelligence (EI) plays a substantial role in the process of language acquisition, influencing both the content of what is learnt and the manner in which it is acquired (Habeb Al-Obaydi, Pikhart, & Derakhshan, 2022).

The study conducted by Butakor, Guo, and Adebanji (2021)revealed a significant positive link between students' level of emotional intelligence (EI) and their motivation to actively participate in the learning process. In the study by Derakhshan, Eslami, and Ghandhari (2021), there is a favorable association between emotional intelligence (EI), motivation, and linguistic competency. Based on the research conducted by Habeb Al-Obaydi et al. (2022), motivation may be understood as a complex cognitive process that drives individuals to participate in activities that support the achievement of their objectives. This perspective aligns with the viewpoint expressed by Granero-Gallegos, Phan, and Ngu (2023). Moreover, Hayat et al. (2020) did a study that shown a positive association between student motivation and the effectiveness of the learning process. Another strategy that can be utilized to maintain the continuity of student's learning progress is to offer them incentives for motivation. Pelikan et al. (2021) argue that the lack of motivation among students presents a significant obstacle to achieving desired educational outcomes. Zhang, Dai, and Wang (2020) did a study with the objective of investigating the association between students' motivation levels in the acquisition of a second language and their subsequent language proficiency. The researchers identified a statistically significant positive association between the two factors. Paul and Jefferson (2019) have found a correlation between academic achievement and intrinsic motivation for learning. Therefore, the possession of a strong tendency towards the acquisition of knowledge has been shown to be highly significant. The purpose of this study is to investigate the mediating effects of motivation to learn (MT) and academic self-efficacy

(ASE) on the association between emotional intelligence (EI) and learning and academic performance (LRP).

The following parts of the thesis are organized as follows: The subsequent section elucidates the concepts of literature review and hypothesis creation, while the subsequent section emphasizes the methodology employed. The subsequent section presents the findings, and ultimately, the conclusion and implications are deliberated.

Literature review and hypothesis development

The field of Emotional Intelligence (EI), often denoted as EI, has been a subject of scholarly inquiry since the 1990s, with the seminal scholarly work on this issue being introduced by Zhang and Adegbola (2022). This is in contrast to the assessment of intelligence quotient (IQ) or personality traits. The understanding of Emotional Intelligence (EI) remained relatively unknown until the release of Daniel Goleman's seminal book, EI: Why it Can Matter More than IQ, in the year 1995. In the second half of the 1990s, this literary piece garnered substantial interest from both experts and the general public. As a result of its quick increase in popularity, multiple study groups initiated concurrent investigations, with each group generating their own hypotheses and assessments, rather than building upon pre-existing scholarly contributions. The concept of Emotional Intelligence (EI), sometimes referred to as EI, was the subject of thorough analysis and discussion among scholars for the majority of the 1990s. Matthews, Zeidner, and Roberts (2004) put up a proposal in their study to distinguish between ability measures and rating scales as a means to improve conceptual precision within the research field. To elicit a response on a measure of ability, test takers are required to demonstrate either their cognitive aptitude or their ability to understand and interpret emotional inputs. The participants are provided with instructions to evaluate the accuracy of a collection of self-descriptive claims (e.g., "I possess the capability to effectively manage challenging issues"; (Kjell, Kjell, & Schwartz, 2023). Based on the available empirical research, it may be inferred that rating scales and ability scales of emotional intelligence (EI) are separate phenomena, exhibiting a limited degree of association between them (MacCann et al., 2020). Brackett et al. (year) devised rating scales and ability assessments in order to evaluate Emotional Intelligence (EI). There exist two separate theoretical frameworks that are utilized in the definition of Emotional Intelligence (EI). These frameworks are accompanied by two different approaches that are implemented for the evaluation of EI. At now, there is ongoing consideration of both the mixed model and the ability model. The mixed model offers a comprehensive framework that can be utilized to acquire a thorough comprehension of the idea of emotional intelligence (EI). The current model incorporates a wide array of elements that are linked to behavior associated with emotional intelligence (EI) (Prentice, Dominique Lopes, & Wang, 2020). These components involve emotional competencies, personality traits, and motivational factors. For example, Bar-On's model integrates Petrides's model, which, in turn, incorporates Petrides's model. The overarching group of notions include emotional capacities, personality characteristics, and motivating factors. On the other hand, models of emotional intelligence (EI) based on ability view EI as a cognitive aptitude that can be likened to verbal or quantitative talents. These models give precedence to emotional constructs over language or numerical constructs (Hsu & Lin,

2022). These theories propose that Emotional Intelligence (EI) is of comparable importance in society to verbal or mathematical abilities. Crochet et al. (2021) conducted a study that successfully differentiated between ability theory rating scales and mixed-model rating scales. When discussing Emotional Intelligence (EI), three main forms of EI tests are often mentioned: ability scales, ratings of EI abilities (also known as emotional self-efficacy), and evaluations of mixed model EI (often referred to as trait EI). Extensive investigations on these classifications have been conducted by several researchers, such as Saqib and Benhmad (2021). In this particular analysis, the results obtained from three separate types of analyses have been consolidated into a cohesive framework. The rationale for adopting this approach is substantiated by the existence of both theoretical and empirical support that establishes the differentiation of these three constructs (Bervell & Arkorful, 2020). The concept of mixed emotional intelligence (EI) comprises three distinct components, namely ability-based EI, self-assessed EI, and a combination of both. The following discussion provides an analysis of the dominant ability model of Emotional Intelligence (EI), including evaluations of EI based on self-assessed abilities and self-evaluations of EI. The evaluations mentioned earlier are included in this specific area. Moreover, this discourse will embrace the most prominent mixed emotional intelligence (EI) models and their respective evaluations.

Emotional intelligence and Learning Performance

Jaiswal et al. (2021) suggest that the evaluation of an individual's learning performance may be comprehended via two distinct lenses: the extent of their accomplishments and their aptitude in proficiently applying the gained skills. Kiuru et al. (2020) have identified a relationship between academic performance and a range of demographic variables, as well as contextual factors. This study examines a wide range of characteristics that have been identified as potential indicators of academic achievement. A variety of factors play a role in determining academic achievement, including, but not limited to, the high school grade point average (GPA), scores on standardized tests such as the SAT or ACT, parental educational attainment, gender, socioeconomic status, characteristics of the classroom environment, student commitment and attendance, innate abilities, class size, instructor expectations and attitudes, and institutional investments and resources. Based on the theoretical framework proposed by Quinn et al. (2019), it can be inferred that the combined impact of SAT scores and high school grade point average accounts for approximately 25% of an undergraduate student's grade point average. In their comprehensive literature analysis, Rodríguez-Hernández, Cascallar, and Kyndt (2020) undertook an examination of the correlation between a student's high school grade point average and SAT score, and their subsequent academic achievement in higher education. The results of their study demonstrated a substantial correlation between these two variables and the variances observed in individuals' academic achievements over their college years. However, the findings of their research also indicated that a significant proportion of the variance remained unexplained, suggesting the existence of other factors, outside of GPA and SAT scores, that may have an impact on academic performance in tertiary education. Given the perplexing nature of the variance, researchers have embarked on inquiries into additional non-cognitive characteristics that may serve as possible indicators of academic success in higher education. Prior studies have yielded empirical support for the notion that some

non-cognitive characteristics exert a substantial influence on the academic achievement of athletes, female students, and minority students (Brecht & Burnett, 2019). The academic achievement and psychological growth of a student can be impacted by a range of noncognitive factors. These considerations involve a range of criteria, including a student's positive self-concept, realistic self-evaluation, predisposition towards long-term goals, leadership experience, and other relevant features. Furthermore, many relevant elements are also examined. Moreover, previous scholarly investigations have explored diverse personality traits, as well as aspects associated with social and emotional well-being (Abdelrahman, 2022). The extant literature has found multiple components that exhibit a substantial influence, encompassing social and emotional well-being, with numerous psychological variables. The theoretical framework known as the five-factor model of personality traits comprises the essential dimensions of neuroticism, extraversion, openness, agreeableness, and conscientiousness. These dimensions serve to characterize and describe many aspects of an individual's personality. Multiple studies have repeatedly demonstrated that conscientiousness serves as a reliable and robust predictor of academic accomplishment. This assumption holds true regardless of the academic field. The study undertaken by Austin et al. (2005) revealed that conscientiousness comprises multiple characteristics, including competence, duty, and the pursuit of achievement (Austin et al., 2005). Therefore, the researchers were not surprised by this discovery.

The research conducted by Uzun and Karatas (2020) proved that coping style, academic self-efficacy (ASE), and internal locus of control were identified as significant determinants of academic achievement. When attempting to forecast an individual's level of academic accomplishment, it is imperative to provide priority to personality as the primary predictor. Researchers have undertaken scholarly inquiries to examine the potential association between emotional intelligence (EI) and academic performance. There has been conjecture on a plausible correlation between the two occurrences. The existing body of research exploring the correlation between Emotional Intelligence (EI or EQ) and the aforementioned factors have produced equivocal findings, despite the common practice of utilizing grade point average, academic achievement, or academic intelligence as measures of learning performance (Halimi, AlShammari, & Navarro, 2021). The results can be categorised into numerous overarching domains. In a study undertaken by Tsur and Gafni (2019), an inquiry was carried out to examine the relationship between methodological problems and the inconsistent findings reported in previous studies. The current endeavors to construct precise definitions and quantifiable measures for emotional capacities and academic achievements may possess a possible deficiency, which could potentially contribute to the emergence of these challenges.

The present study employed the Bar-On Emotional Quotient Inventory-Short Form (Bar-On EQ-i:S) to investigate the correlation between learning performance markers and specific outcomes. The study conducted by Sánchez-Álvarez et al. (2020) revealed that there was no statistically significant correlation observed between emotional intelligence (EI) factors and learning ability when evaluating EI using a continuous scale. In their study, Giannakas et al. (2021) categorized the variable of learning performance into discrete categories. Within the surveyed population, a notable proportion of students, specifically those who achieved academic success as indicated by a grade point average (GPA) beyond

3.0, constituted 41.4% of the total sample. The results of the study revealed a notable disparity in scores between academically successful students and academically failing students, who constituted 20.3% of the sample. Specifically, the academically successful students demonstrated considerably higher scores in the domains of Interpersonal skills, Adaptability, and Stress. When employing a continuous variable, it is conceivable to attain results that are more reliable; however, in the study conducted by Giannakas et al. (2021), statistical significance was not observed until the variable was divided into two categories: students who were academically successful and students who were academically unsuccessful. Empirical research has revealed a tentative association between emotional intelligence (EI) and academic achievement. However, it is important to acknowledge that the strength of this correlation is heavily dependent on the particular operationalization used to assess learning outcomes. Hence, it might be argued that the job of definitively establishing a causal relationship between emotional intelligence (EI) and academic performance is challenging. Educators and policymakers face challenges in understanding the optimal timing and approach to addressing students' emotional intelligence (EI) in relation to their academic performance, despite the existence of strong research that supports the integration of EI in education (Schwinger et al., 2022). This phenomenon continues to exist, despite the considerable body of data offered in the academic literature that supports the implementation of such measures. In light of the current understanding that the commonly used measures of academic performance are insufficient in accounting for the disparities in student success rates, it is crucial to conduct additional research in this field. Furthermore, the existing amount of research into emotional intelligence (EI) and other non-cognitive elements is still very lacking in depth and scope. The study has proposed the following hypothesis:

H1: EI has significant positive impact on the LRP.

Mediating of Academic self-efficacy and motivation

According to Kryshko et al. (2022), the ability to successfully encourage oneself and others to embrace a desired behavior or collection of behaviors is a critical determinant of attaining noteworthy achievements. The initialism of the model's designation represents the concepts of "attention," "relevance," "confidence," and "satisfaction." Keller is acknowledged as the individual responsible for the development of the model. The objective of this model is to provide a framework that can be employed to systematically identify and address issues pertaining to the motivation of students and teachers in the context of learning. The four aspects under consideration are commonly denoted by the acronym ARCS, which represents attention, relevance, confidence, and satisfaction. Keller endeavored to acquire a more profound comprehension of the factors that exert a substantial impact on an individual's degree of motivation. The study conducted by Ugwuanyi, Okeke, and Ageda (2020) utilized the social cognitive approach to investigate the relationship between learning motivation, self-efficacy, and academic accomplishment, revealing a significant positive correlation among these variables. The authors argue that the approach being discussed is one of the most reliable techniques for establishing these relationships. This model encompasses a wide array of components and their interrelationships by categorizing them as constituents within the blocks or categories of

the "social world," "cognitive processes," or "motivating beliefs." (Rotolo, 2022). The evaluation of students' motivation, adaptability, and academic achievement can be effectively carried out by employing several sets of factors, either in isolation or in combination with other sets. The theoretical framework put out by the model is predicated on assumptions pertaining to the determinants of human motivation. To begin, the expectations of individuals regarding their success and the subjective value they allocate to different tasks are inherently connected to their achievements, the tasks they choose, and their level of perseverance (Fischhoff, Goitein, & Shapira, 2021). Moreover, the ambitions and self-schemata of an individual exert a substantial influence on their expectancies and task values.

In addition, the assessment of an individual's effectiveness and confidence in their own talents can be seen as essential elements of self-schemata. According to Feraco et al. (2023), the academic performance of students is impacted by the emotional, cognitive, and behavioral pathways they cultivate in their pursuit of competence. The pathways indicated above possess the capacity to exert a substantial influence on a student's probability of attaining proficiency. Previous studies investigating structural models derived from the expectancy-value theory have confirmed that variables related to motivational expectancy value have a significant impact on students' beliefs, including self-efficacy, self-concept, and self-esteem, as well as their academic performance. The claim made by the user is supported by the expectancy-value theory.

In accordance with Priyadarshi and Premchandran (2019), their study examined the fundamental cognitive framework of emotional intelligence (EI), which comprises four major components. the research of Icenogle et al. (2019), there exists a fundamental association between an individual's emotional state and their cognitive talents, namely their capacity for rational thinking. Choudhury (2021) provided additional support for the assertions put forth by Icenogle et al. (2019), who found that an individual's emotional intelligence (EI) has a substantial impact on their ability to recognize and understand emotions. This quotation effectively encapsulates the fundamental nature of emotional intelligence. The recognition and management of both one's own emotions and the emotions of others are considered crucial for the development of emotional intelligence, as indicated by the research conducted by Valente, Monteiro, and Lourenço (2019) and Paoletti and Ben-Soussan (2021). In the research of Valente et al. (2019), self-awareness, social awareness, impulse control, emotional regulation, and constructive expression are identified as crucial constituents of emotional intelligence (EI). In line with Sekreter's (2019) findings, a key attribute of emotional intelligence (EI) is the ability to effectively regulate one's emotions, even when confronted with challenging circumstances, feelings of sorrow, or a letdown. Failure, disappointment, and sadness exemplify the negative emotional states under consideration.

The researchers also presented a definition of emotional intelligence (EI), which incorporates the ability to effectively manage one's own emotions in social situations, as well as the skill to inspire and motivate others to display similar emotional regulation. This tendency is frequently denoted as emotional regulation within interpersonal contexts. Chiu, Lin, and Lonka (2021) assert the establishment of ideal learning settings requires the concurrent enhancement of students' academic, social, and emotional proficiencies.

Focusing on the findings of multiple studies (Costa & Faria, 2020; Shafait et al., 2021), one can posit that emotional intelligence (EI) exerts a notable impact on students' ability to acquire knowledge and achieve academic success. Empirical studies have shown evidence supporting a favorable association between emotional intelligence (EI), academic performance, and various other attributes that contribute to emotional and cognitive well-being, hence enhancing the learning process. According to the research conducted by Pérez-González et al. (2022), it can be deduced that emotional intelligence (EI) demonstrates a greater ability to predict academic accomplishment when compared to intelligence quotient (IQ), exhibiting a twofold disparity. The significance of providing assistance to students in developing their emotional intelligence (EI) is clearly demonstrated by the favorable effects it has on their academic performance. Therefore, the correlation between emotional intelligence (EI) and motivation for learning, self-efficacy, and academic performance may be comprehensively examined by employing the social cognitive theory and the social cognitive perspective. In their study, Arias-Pastor et al. (2023) observed notable discrepancies in emotional intelligence (EI) among students who were classified into distinct levels of drive to gain knowledge. These disparities were shown to be statistically significant.

The empirical investigations undertaken by Kostić-Bobanović (2020) have consistently demonstrated a favorable association between emotional intelligence (EI) and self-efficacy. Moreover, Henter's research findings demonstrated that the integration of Emotional Intelligence (EI) has a beneficial effect on individuals' levels of motivation as well as their linguistic proficiencies. Based on research conducted by Nayeem (2022) and published in the scholarly journal EI Quotient (EIQ), it has been observed that individuals with a higher emotional intelligence quotient (EQ) tend to possess enhanced self-confidence, display adaptability in unfamiliar situations, and exhibit the capacity to make constructive adjustments when confronted with difficulties. The study conducted by Ren et al. (2021) thoroughly reviewed the available literature and discovered substantial evidence that establishes a strong correlation between students' self-efficacy beliefs and their academic accomplishments within the educational context. The ability of students to proficiently regulate and govern their emotions exerts a substantial influence on their overall academic performance, as well as their inclination to engage in learning, self-efficacy beliefs, and eventual scholastic achievements.

H2: EI has significant positive impact on the MT.
H3: EI has significant positive impact on the ASE.
H4: ASE has significant positive impact on the LRP.
H5: MT has significant positive impact on the LRP.
H6: ASE mediate the relationship between the EI and LRP
H7: MT mediate the relationship between the EI and LRP

Methodology

The main objective of the present study is to investigate the intermediary function of self-efficacy and motivation in the association between emotional intelligence (EI) and learning performance. In order to accomplish the research aims of the present study, the authors have utilized quantitative research methodology and data has been gathered

through the use of a questionnaire. The scale utilized in the questionnaire has been modified from prior research endeavors. The study used the Structural Equation Modeling-Partial Least Squares (SEM-PLS) technique for data analysis. SEM-PLS is considered a robust method that is particularly suitable for complicated frameworks and various theoretical frameworks. Furthermore, the use of Structural Equation Modeling-Partial Least Squares (SEM-PLS) can be advantageous in addressing concerns related to data normality. In addition to utilizing Structural Equation Modeling-Partial Least Squares (SEM-PLS), the authors have applied the Statistical Package for the Social Sciences (SPSS) to analyze the demographic characteristics of the present study. The researchers circulated approximately 500 questionnaires and got a total of 370 completed questionnaires. Out of these, 347 questionnaires were deemed suitable for inclusion in the final analysis. The ultimate response rate is 69.4 percent. Of the total respondents, 61 percent identified as male, while 39 percent identified as female. The research has utilized the method of proportionate random sampling.

Results

The research has utilized the Structural Equation Modeling-Partial Least Squares (SEM-PLS) approach, which consists of two distinct stages: the measurement model and the structural model. The purpose of the measurement model is to evaluate the reliability and validity of a research framework. The measuring model utilized in the present study is depicted in Figure 2 below.

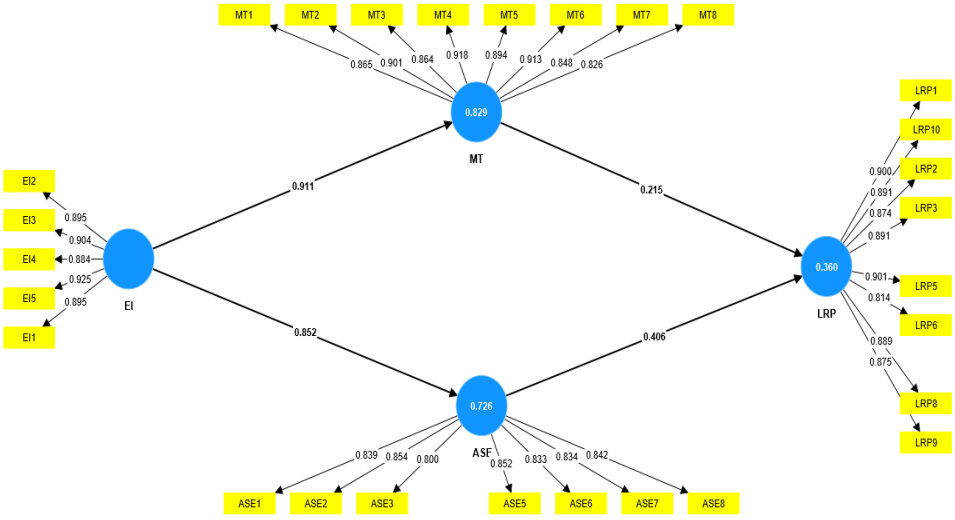

Figure 1. *Measurement Model*

Note: *EI= emotional intelligence; MT= motivation; ASE= academic self-efficacy; LRP= learning performance*

The depicted figures in Figure 1 and Table 2 present the external loading values of our study. The study excludes the items ASE4, LRP4, and LRP7, as they have loading values below 0.70.

Table 1

Outer Loadings

	ASE	EI	LRP	MT
ASE1	0.839			
ASE2	0.854			
ASE3	0.800			
ASE5	0.852			
ASE6	0.833			
ASE7	0.834			
ASE8	0.842			
EI1		0.895		
EI2		0.895		
EI3		0.904		
EI4		0.884		
EI5		0.925		
LRP1			0.900	
LRP10			0.891	
LRP2			0.874	
LRP3			0.891	
LRP5			0.901	
LRP6			0.814	
LRP8			0.889	
LRP9			0.875	
MT1				0.865
MT2				0.901
MT3				0.864
MT4				0.918
MT5				0.894
MT6				0.913
MT7				0.848
MT8				0.826

Note: *EI= emotional intelligence; MT= motivation; ASE= academic self-efficacy; LRP= learning performance*

The values related to reliability analysis are presented in Table 2. Table 2 displays the findings pertaining to Cronbach's alpha, composite reliability, and average variance extracted (AVE). The findings suggest that all the observed values fall inside the predetermined range of threshold values, indicating the reliability of our model.

Table 2

Reliability

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
ASE	0.929	0.932	0.942	0.700
EI	0.942	0.942	0.955	0.811
LRP	0.958	0.961	0.965	0.774
MT	0.958	0.958	0.964	0.772

Note: *EI= emotional intelligence; MT= motivation; ASE=academic self-efficacy; LRP= learning performance*

The evaluation of discriminant validity is achieved by the utilization of the Fornell-Larcker criterion, as proposed by Fornell and Larcker (1981). The findings demonstrate that the diagonal values consistently exceed the lower values, hence substantiating the soundness of the framework.

Table 3

Discriminant Validity

	ASE	EI	LRP	MT
ASE	0.887			
EI	0.852	0.887		
LRP	0.790	0.813	0.880	
MT	0.756	0.811	0.862	0.879

Note: *EI= emotional intelligence; MT= motivation; ASE= academic self-efficacy; LRP= learning performance*

The subsequent stage in the structural equation modeling-partial least squares (SEM-PLS) study involves executing the structural model. The utilization of the bootstrapping process in combination with a structural model facilitates the establishment of a coherent connection between the independent, mediator, and dependent variables. The image below displays the structural model utilized in the present study.

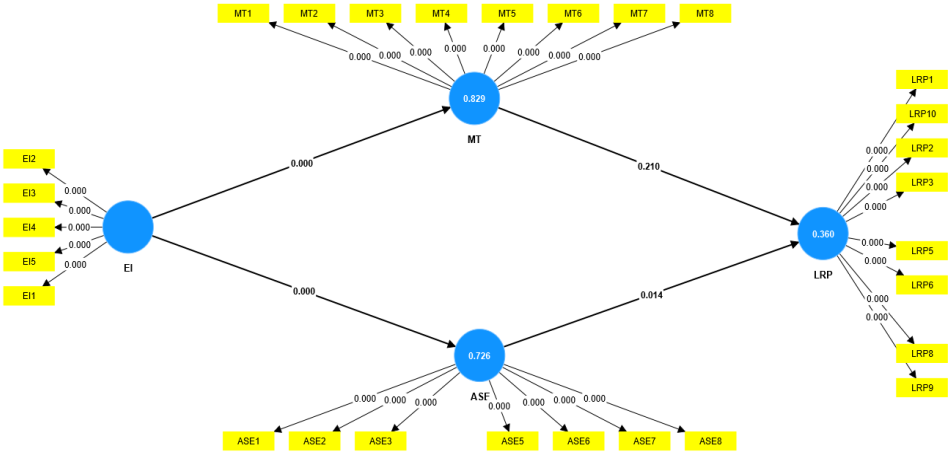

Figure 2: *Structural Model*

Note: *EI= emotional intelligence; MT= motivation; ASE= academic self-efficacy; LRP= learning performance*

The results of the direct pathways are presented in Table 4. The findings suggest that all direct pathways, with the exception of the link from MT to LRP, exhibit positive and statistically significant relationships. The study is conducted using a two-tailed analysis. All routes, namely ASE -> LRP, EI -> ASE, EI -> LRP, and EI -> MT, exhibit positive and statistically significant relationships, with t-values over 1.96 and p-values below 0.05. The findings indicate that Emotional Intelligence (EI) is a statistically significant predictor of both Academic Self-Efficacy (ASE) and Learning Performance (LRP). Emotional

intelligence (EI) refers to an individual's ability to identify, comprehend, and manage both their own and others' emotions. Increased emotional intelligence (EI) has been found to be linked with enhanced abilities in attentional focus, cognitive flexibility, and information processing. This correlation may provide an explanation for the observation that individuals with high EI tend to possess a wider attentional set. The ability to absorb multiple pieces of information concurrently has the potential to boost learning and performance. Therefore, individuals possessing a greater level of emotional intelligence (EI) may exhibit superior abilities in the retention and utilization of information. Emotional intelligence (EI) has the potential to influence learning outcomes and professional or learning performance through various mechanisms, including memory consolidation, motivation, self-regulation, and stress management. The impact of the Active Self-Explanation (ASE) technique on the Late Positive Component (LRP) underscores the importance of effectiveness in facilitating effective learning and the preservation of information in long-term memory. Enhanced learning outcomes and performance have been found to be correlated with the ability to effectively engage in multitasking and efficiently handle attention-demanding information.

Table 4

Direct Paths

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
ASE -> LRP	0.406	0.405	0.166	2.450	0.014
EI -> ASE	0.852	0.853	0.025	4.281	0.000
EI -> LRP	0.541	0.544	0.061	8.847	0.000
EI -> MT	0.911	0.911	0.016	5.235	0.000
MT -> LRP	0.215	0.219	0.171	1.253	0.210

Note: *EI= emotional intelligence; MT= motivation; ASE= academic self-efficacy; LRP= learning performance*

Table 5 presents the outcomes of the mediation analysis. The findings suggest that the ASE plays a mediating role in the association between emotional intelligence (EI) and learning readiness potential (LRP), but the mediating effect of the MT on the link between EI and LRP is not supported.

Table 5

Indirect Paths

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
EI -> MT -> LRP	0.196	0.200	0.156	1.251	0.211
EI -> ASE -> LRP	0.346	0.345	0.140	2.477	0.013

Note: *EI=emotional intelligence; MT= motivation; ASE= academic self-efficacy; LRP= learning performance*

The influence of Emotional Intelligence (EI) on Learning Performance can be partially understood by considering people's level of self-assurance in their academic talents, as indicated by the significant mediation effect of Academic Self-Efficacy (ASE) (Wang, 2022).

The idea of emotional intelligence (EI), which involves the ability to recognize, understand, and manage one's emotions, has been linked to improved academic performance in several contexts. A favorable relationship has been seen between higher levels of emotional intelligence (EI) and improved self-efficacy beliefs in educational environments. The correlation between this linkage can be ascribed to the stronger ability to regulate emotions, more self-assurance, and superior interpersonal abilities that are linked to higher levels of emotional intelligence. Self-efficacy refers to the cognitive appraisal a student makes regarding their capability to successfully attain scholastic objectives. There is a positive correlation between higher levels of emotional intelligence (EI) and academic success among students. Consequently, heightened emotional intelligence (EI) has the potential to enhance motivation, foster greater involvement in learning activities, and ultimately improve overall learning outcomes.

The absence of mediation by Motivation (MT) in this study implies that variations in motivation cannot account for the relationship between Emotional Intelligence (EI) and learning performance. Although emotional intelligence (EI) encompasses motivational aspects including self-regulation and goal-directed behaviors, the results indicate that motivation alone is inadequate in elucidating the impact of EI on LRP.

Conclusion

The findings of this study offer significant insights into the diverse elements that impact the academic performance of students at Iraqi universities. Emotional intelligence (EI) was observed to exert a notable and favorable influence on both academic self-efficacy (ASE) and learning-related performance (LRP). This finding suggests that students who possess higher levels of emotional intelligence tend to exhibit superior academic performance and efficacy. This association serves to establish a connection and further supports the notion that individuals with high emotional intelligence (EI) exhibit enhanced learning abilities as a result of their heightened levels of focus, cognitive agility, and rapid information-processing capabilities. The findings of the research suggest a correlation between emotional intelligence (EI) and enhanced cognitive abilities, including improved learning, memory retention, and overall learning ability. The explanation for this phenomenon might be attributed, in part, to the concept of ASE, which functions as an intermediary connecting EI and LRP. According to a study conducted by Im Kan and Chew (2022), there exists a favorable correlation between ASE and EI. Consequently, students demonstrate heightened levels of passion, active engagement, and academic productivity.

The aforementioned studies underscore the significance of cultivating emotional intelligence (EI) and competence among students. Educators have the capacity to foster the growth of emotional intelligence (EI) in their pupils by establishing a secure and supportive setting that encourages students to engage in risk-taking behaviors while also acknowledging and validating their endeavors. There is potential for improvement in both education and student achievement. The hypothesis positing that Motivation (MT) serves as a mediator in the association between Emotional Intelligence (EI) and Long-term association Performance (LRP) did not obtain any empirical evidence. The data suggest that EI has the potential to enhance both critical thinking abilities and learning performance. However, the research findings revealed that motivation alone proved

inadequate in providing a comprehensive explanation for these associations. This underscores the need of examining the moderators and contributors to the association between emotional intelligence (EI) and job performance within the framework of the Leader-Member Exchange (LMX) Relationship Paradigm (LRP).

Implications

The outcomes of this study provide potential benefits for educators, politicians, and academics alike. The efficacy of educational interventions can be enhanced by a comprehensive comprehension of the impact that students' emotional intelligence (EI) exerts on their academic performance and educational results. Enhancing students' academic achievement can be facilitated by implementing educational modules focused on emotional intelligence (EI) and fostering self-confidence.

Limitations

It is imperative to acknowledge the inherent limitations and deficiencies of the study. The applicability of the results will be influenced by the study's design and the criteria used for participant selection. Future studies should aim to investigate further mediators and moderators that exist between emotional intelligence (EI), learning processes, and academic achievements in order to enhance our comprehension of this intricate association.

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