Emotional Intelligence in Improving Academic Performance in College Students: A Systematic Review

Juana Rosa Gabriel Tirajaya¹, Rosalía Zarate-Barrial², Zoila Esther Cherres López³, César Stalyn Castañeda Tang⁴, Madeleine Griselda Chunqui Niño de Guzmán⁵, Yenny Primitiva Rojas Pardo⁶ and Rafael Romero-Carazas⁷

Abstract

The present investigation was carried out with the purpose of publicizing how emotional intelligence contributes to academic performance; posing as a research question: What is the impact of emotional intelligence in improving academic performance in university students in the last five years? Due to this, the methodology used for this purpose was qualitative, basic and a review of articles published in the SCOPUS and Web of Science databases; following a search protocol, collection, extraction, analysis and selection of articles under the eligibility criteria: academic publications with SJR (Scimago Journal Rank) impact indicators and publications in Spanish and English. For the analysis of the review, 79 articles were selected and after filtering, only 10 articles met the inclusion and exclusion criteria as part of the review. The results show that there is a limited number of publications that have specified emotional intelligence as a predictor of academic performance in university students.

Keywords: Emotional Intelligence, Academic Performance, Academic Performance

INTRODUCTION

Although emotional intelligence is one of the most well-studied constructs, there are still gaps in the scientific literature on the effect of emotional intelligence on academic performance (Abu et al., 2022; Estrada et al., 2022; Karkada et al., 2022; Shafait et al., 2021). In the same line of ideas, (Cassano et al., 2020; Romero et al., 2022; Seow et al., 2022) stated that there are many studies which have stated that there are many studies that have been able to prove the relationship between emotional intelligence and academic performance, but there is a need to extend the studies to strengthen the knowledge of the benefits of emotional intelligence in education.

In the educational scenario, the role of emotions in learning has also not been given the importance it deserves, since memory-reasoning abilities, cognitive skills, and not the affective factors that are potential predictors of learning have been privileged more (Saud, 2019). Due to this need, the present research investigates the scientific literature on the relationship or impact of emotional intelligence on academic performance.

Among the most important contributions to the knowledge of emotional intelligence are the contributions of Binet, who in 1905 argued that emotional intelligence was a representation of cognitive abilities. (Pishghadam et al., 2022). Later Thorndike understood that intelligence is a way of self-regulating and acting with prudence (Torres and Sosa, 2020). Salovey, Mayer and Goleman highlight the role of emotions in interpersonal relationships (Arntz and Trunce, 2019). (Arntz and Trunce, 2019) and, Reuven Bar-On and Goleman agree that emotional intelligence is a learning ability (Sierra and Díaz, 2020) that is to say, it can be developed by learning or by experience (Navarro et al., 2022). Goleman also points out that emotional intelligence contributes up to

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¹ Enrique Guzmán y Valle National University, Perú. E-mail: igdaniel@une.edu.pe, https://orcid.org/0000-0003-1965-0970
² César Vallejo University, Perú, Email: tzarate@ucv.edu.pe, https://orcid.org/0000-0002-7899-9964
³ Enrique Guzmán y Valle National University, Perú. E-mail: echerres@une.edu.pe, https://orcid.org/0000-0001-7244-4493
⁴ Fe y Alegría Movement, Perú, E-mail: ec castaneda@fya45.edu.pe, https://orcid.org/0009-0006-4686-9651
⁵ César Vallejo University, Perú, E-mail: mchunquid@ucvirtual.edu.pe, https://orcid.org/0000-0002-7696-5154
⁶ Hermilio Valdizan National University, Perú. E-mail: vjiap@unbeval.edu.pe, https://orcid.org/0000-0003-1136-7580
⁷ Technological University of Peru, Perú. E-mail: cs2898@uantp.edu.pe, https://orcid.org/0000-0001-8909-7782
80.0% in learning, the rest being a contribution of cognitive aspects; accordingly, Goleman considers that emotional intelligence provides skills that potentially favor learning (Suleman et al., 2022). (Suleman et al., 2019).

According to Ghita and Cismaru (2022) in the multiplicity of theories that exist, there is a clear consensus that emotional intelligence distinguishes an internal dimension from an external one; the former is oriented towards self-awareness, control of one's own emotions, and the latter, on the contrary, is an externally oriented dimension, i.e., towards empathy, tolerance, teamwork and other skills.

According to the model of Mayer, Salovey, Salovey and Sluyte, emotional intelligence has four components: a) the ability of a person to perceive one's own emotional states as others; b) the understanding that emotional intelligence is important; c) the ability to regulate emotions depending on the circumstances; and d) the ability of emotional intelligence to perceive, understand and regulate emotions according to the context or situation that warrants it. (Trigueros et al., 2019).

In the opinion of MacCann et al. (2022) the above models can be classified from two perspectives: a) emotional intelligence as the ability to process emotions and information and be evaluated by means of objective tasks through performance and b) emotional intelligence as a trait that is perceived as personal characteristics that support the social and emotional foundation that emphasizes the importance of self-evaluation.

Currently, the study of emotional intelligence is oriented to the field of educational psychology (Méndez et al., 2020). (Méndez et al., 2020) and especially with a tendency towards academic aspects (Puertas et al., 2020). (Puertas et al., 2020). The few documented studies highlight the importance of emotional intelligence in the mastery and regulation of emotions, emphasizing its contribution to commitment, achievement, self-efficacy and academic performance (Bonilla-Yucailla et al., 2020). (Bonilla-Yucailla et al., 2022; Navarro et al., 2022). On the other hand, the ability to develop and improve emotional intelligence is remarked, i.e., it is considered a practical skill (MacCann et al., 2020).

Emotional intelligence can be very useful for academic success for several reasons among them, because students who manage to have adequate levels of emotional intelligence will have the ability to manage academic stress, thus, they can stay better focused on academic pursuits (Manjareeka and Yadav, 2020). Emotional intelligence can contribute to the reduction of psychological pressures and physical demands that lead to the decline of intellectual abilities (Alam et al., 2020). (Alam et al., 2021). On the other hand, due to social demands, university students are required to have the necessary skills and competencies to be more successful in the labor field upon graduation (Caballero and Sanchez, 2021).

On the other hand, academic performance is a multidimensional theoretical construct that has been widely studied, and is characterized by its complexity due to the diversity of interpretations, depending on the context in which it is evaluated, and relative in allusion to the fact that its measurement is a comparison with other standards (Soza, 2021). (Soza, 2021). This term appears with the industrial economic model (López et al., 2022). Currently, it is common to use academic performance interchangeably with academic achievement. Academic performance has been conceived as a measure of how academic activities are carried out to achieve the desired expectations and achievements; that is, it measures the student's ability to achieve the desired objectives (Hu and Cheung, 2021; Tacilla et al. (Hu and Cheung, 2021; Tacilla et al., 2020; Tadese et al., 2022; Vargas et al., 2022); and academic performance is seen as a measure or the level achieved, i.e., it is based on the results achieved by the student (Liem, 2019; Soza, 2021; Xie and Zhang, 2020).

Regarding the factors that influence academic performance, Elger, 2007 (cited by Patra et al., 2022) pointed out six components: context, level of knowledge, personal skills, degree of involvement with studies, personal variables and fixed elements. In relation to the factors associated with academic performance, there is extensive literature on these, some authors have classified them into: personal, family or social and institutional factors (Campillo et al., 2021; Medina et al., 2021). In other studies it has been reported that there is an association between the level of academic performance and sociodemographic factors (Fajardo et al., 2022; Villarruel et al., 2020; Yağcı, 2022); other factors are: parents' educational level (Masud et al., 2019); the student environment, the teacher-student relationship, the conditions of the institution, among others (Polo et al., 2022).
METHODOLOGY

The present research was developed in the systematic review modality, whose purpose was to gather information through a process of reviewing articles on a specific topic based on a research question, and following a review protocol, the level of evidence and quality of each publication were evaluated, complying with eligibility criteria. (Pardal and Pardal, 2020).

The information search was carried out using SCOPUS and Web Of Science, considering the following keywords and search equations: "emotional intelligence" and "academic performance"; and, "inteligencia emocional" and "desempeño académico". The searches were performed taking into account the inclusion criteria: publications in English and Spanish from the last five years, as unit of study university students; excluding review articles and articles with restricted access.

The analysis of the publications was performed by examining that the articles meet the eligibility criteria and contemplate the research question through an article selection process (Guzman et al., 2018).

At the beginning of the initial search for publications, 533 articles were pre-selected from a total of 4049 publications reported in the Scopus (167) and Web Of Science (366) search engines; from which 79 articles were extracted, excluding duplicate articles, publications in other study units, articles that do not answer the research question; and after the review, only 10 articles were selected and included in the review, as shown in the following diagram: (see Figure 1).

![Academic article selection flowchart](image)

**Figure 1** Academic article selection flowchart

**Note.** Adapted from Urrutia and Bonfill (2014).
Table 1 Characteristics of the studies selected for review

<table>
<thead>
<tr>
<th>Cod°</th>
<th>Author(s) - year</th>
<th>Magazine</th>
<th>Quartile</th>
<th>Country</th>
<th>Source</th>
<th>Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Estrada et al. (2022)</td>
<td>Journal of Cleaner Production</td>
<td>Q1</td>
<td>England</td>
<td>Scopus</td>
<td>The intrapersonal dimension of I.E. impacts resilience, which in turn impacts engagement, which in turn is closely related to academic performance.</td>
</tr>
<tr>
<td>2</td>
<td>Dong et al. (2022)</td>
<td>Frontiers in Psychology</td>
<td>Q1</td>
<td>Switzerland</td>
<td>Scopus</td>
<td>This study focuses on the relationship between personality traits, emotional intelligence, virtual experience on academic performance.</td>
</tr>
<tr>
<td>5</td>
<td>Năstasă et al. (2022)</td>
<td>Forests</td>
<td>Q1</td>
<td>Switzerland</td>
<td>Scopus</td>
<td>Investigated emotional variables that are positively linked to academic performance.</td>
</tr>
<tr>
<td>9</td>
<td>Garcia et al. (2022)</td>
<td>Frontiers in Psychology</td>
<td>Q1</td>
<td>Switzerland</td>
<td>Scopus</td>
<td>Focused on analyzing the influence of emotional intelligence on academic performance.</td>
</tr>
<tr>
<td>34</td>
<td>Rodríguez et al. (2021)</td>
<td>International Journal of Environmental Research and Public Health</td>
<td>Q1</td>
<td>Switzerland</td>
<td>Scopus</td>
<td>Explores the relationship between substance use, emotional intelligence, and academic performance.</td>
</tr>
<tr>
<td>39</td>
<td>Sellet et al. (2021)</td>
<td>Applied Sciences</td>
<td>Q1</td>
<td>Switzerland</td>
<td>Scopus</td>
<td>One of the I.E. factors is a good predictor of academic performance.</td>
</tr>
<tr>
<td>55</td>
<td>Ugwuanyi et al. (2020)</td>
<td>Cypriot Journal of Educational Sciences</td>
<td>Q3</td>
<td>Cyprus</td>
<td>Scopus</td>
<td>Study how emotional intelligence is a predictor of academic performance in mathematics.</td>
</tr>
<tr>
<td>56</td>
<td>Turi et al. (2020)</td>
<td>International Journal of Evaluation and Research in Education (IJERE)</td>
<td>Q3</td>
<td>Indonesia</td>
<td>Scopus</td>
<td>Verified a statistically significant correlation between emotional intelligence and academic performance.</td>
</tr>
<tr>
<td>73</td>
<td>Khan (2019)</td>
<td>International Journal of Engineering Business Management</td>
<td>Q2</td>
<td>Croatia</td>
<td>Scopus</td>
<td>It reported significant differences that favor students from private universities more than public ones.</td>
</tr>
</tbody>
</table>

RESULTS

In the present investigation, 79 articles were reviewed from a total of 533 publications that were found under the search criteria of both Scopus (167) and Web Of Science (366). In reviewing these articles, only a total of 10 publications were selected for the review.

As one of the conditions for the review, we considered the publications whose journals have SJR impact, finding that 70% (7) of articles have quartile 1 (Q1), one publication belongs to quartile 2 (Q2) and two articles are reported from quartile 3 (Q3). This classification corresponds to a Scimago Journal Rank that is used to catalog publications in journals by the quality of citations received. On the other hand, 50.0% of the publications were from the Q1 quartile of Swiss journals, with publications in England also standing out.

DISCUSSION

According to the review of scientific articles, there is relative evidence on the contribution of emotional intelligence in the academic performance of university students. According to Estrada et al. (2022) emotional intelligence should be considered as a useful competence in the academic context, since there is evidence that highlights the importance of mastering emotions on the positive impact on resilience, commitment and academic performance.
In the study conducted by Saud (2019) it was reported that emotional intelligence is positively linked to academic performance, that is, students who showed a better level or emotional mastery, were those who knew how to understand and control emotional situations in their favor, making better decisions, which contributed in a better scenario to have better academic results in relation to students with low level of emotional intelligence. In a similar result developed by Turi et al. (2020) the positive relationship of both variables was proven, highlighting the role of intelligence as a strong predictor of academic performance.

In other research, Khan (2019) verified that there are significant differences in emotional intelligence that favor students from private universities more than public ones; that is, the relationship between emotional intelligence and academic performance is higher or of greater degree in university students from private universities. This finding would be congruent to the extent that it is demonstrated that the degree of impact or influence of emotional intelligence depends on the culture or the field of study (Séllei et al., 2021). Năstasă et al. (2022) concluded that emotional intelligence favors learning; making the precision that the Grade Point Average (GPA) grades of students before reaching college are the predictors of academic performance; further reporting, that in a group of study skills with a medium effect size of positive emotions favoring better academic performance, compared to another group of emotional skills with a medium to small effect.

In the same line of argument, Dong et al. (2022) highlighted the role of emotional intelligence, noting that students with greater emotional skills are those who have better resources to perform in the academic environment; additionally, they have also come to prove in a population of university students that personality traits also count, noting that the extroverted person is more likely to succeed academically.

A result to be taken into account is provided by the research carried out by García et al. (2022) who has pointed out that there is no relationship between emotional intelligence and academic performance. This result could contradict the previous ones, however, it is worth mentioning that academic performance is not the same as academic achievement, although they are quite similar terms and have similar meanings; while the former focuses on the final result, the latter specifies the student's ability during a teaching and learning process.

On the other hand, Rodríguez et al. (2021) questioned whether emotional intelligence has a direct relationship with academic performance. Nevertheless, making the precision that the case deserves, the Spanish university students who were part of the sample presented high levels of substance use, which probably does not highlight the potential of emotional intelligence.

CONCLUSION

In accordance with the general objective, evidence has been found on the relevance of emotional intelligence in the academic environment, especially because it is a skill that can be developed and its application brings benefits for students as they have better strategies for emotional management, which favors appropriate, sensible or well-thought behaviors.

Studies have been found that have proven the benefits of emotional intelligence on academic performance; however, it is important to consider additional factors such as whether academic performance is higher in science or humanities courses, which demonstrates the need for further research to understand the true impact of emotional intelligence in the academic field, specifically in the performance of university students.

The present study revealed that several investigations have been able to prove that emotional intelligence has a positive or favorable influence on the academic performance of university students. Future research should focus on evaluating other characteristics or from other criteria the influence of emotional intelligence and academic performance. On the other hand, studies should also be increased to finally evaluate the impact of emotional intelligence on academic performance.

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