

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

Juana Rosa Gabriel Tirajaya<sup>1</sup>, Rosalía Zarate-Barrial<sup>2</sup>, Zoila Esther Cherres López<sup>3</sup>, César Stalyn Castañeda Tang<sup>4</sup>, Madeleine Griselda Chunqui Niño de Guzmán<sup>5</sup>, Yenny Primitiva Rojas Pardo<sup>6</sup> and Rafael Romero-Carazas<sup>7</sup>

### 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 Diaz, 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

<sup>1</sup> Enrique Guzmán y Valle National University, Perú. E-mail: [jgabriel@unc.edu.pe](mailto:jgabriel@unc.edu.pe), <https://orcid.org/0000-0003-1965-0970>

<sup>2</sup> César Vallejo University, Perú, Email: [zrateb@ucv.edu.pe](mailto:zrateb@ucv.edu.pe), <https://orcid.org/0000-0002-7899-9964>

<sup>3</sup> Enrique Guzmán y Valle National University, Perú. E-mail: [zcherres@unc.edu.pe](mailto:zcherres@unc.edu.pe), <https://orcid.org/0000-0001-7244-4493>

<sup>4</sup> Fe y Alegría Movement, Perú, E-mail: [ccastaneda@fya45.edu.pe](mailto:ccastaneda@fya45.edu.pe), <https://orcid.org/0009-0006-4686-9651>

<sup>5</sup> César Vallejo University, Perú, E-mail: [mchunquid@ucvvirtual.edu.pe](mailto:mchunquid@ucvvirtual.edu.pe), <https://orcid.org/0000-0002-7696-5154>

<sup>6</sup> Hermilio Valdizan National University, Perú. E-mail: [vrpjasp@unheval.edu.pe](mailto:vrpjasp@unheval.edu.pe), <https://orcid.org/0000-0003-1136-7580>

<sup>7</sup> Technological University of Peru, Perú. E-mail: [C28089@utp.edu.pe](mailto:C28089@utp.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).

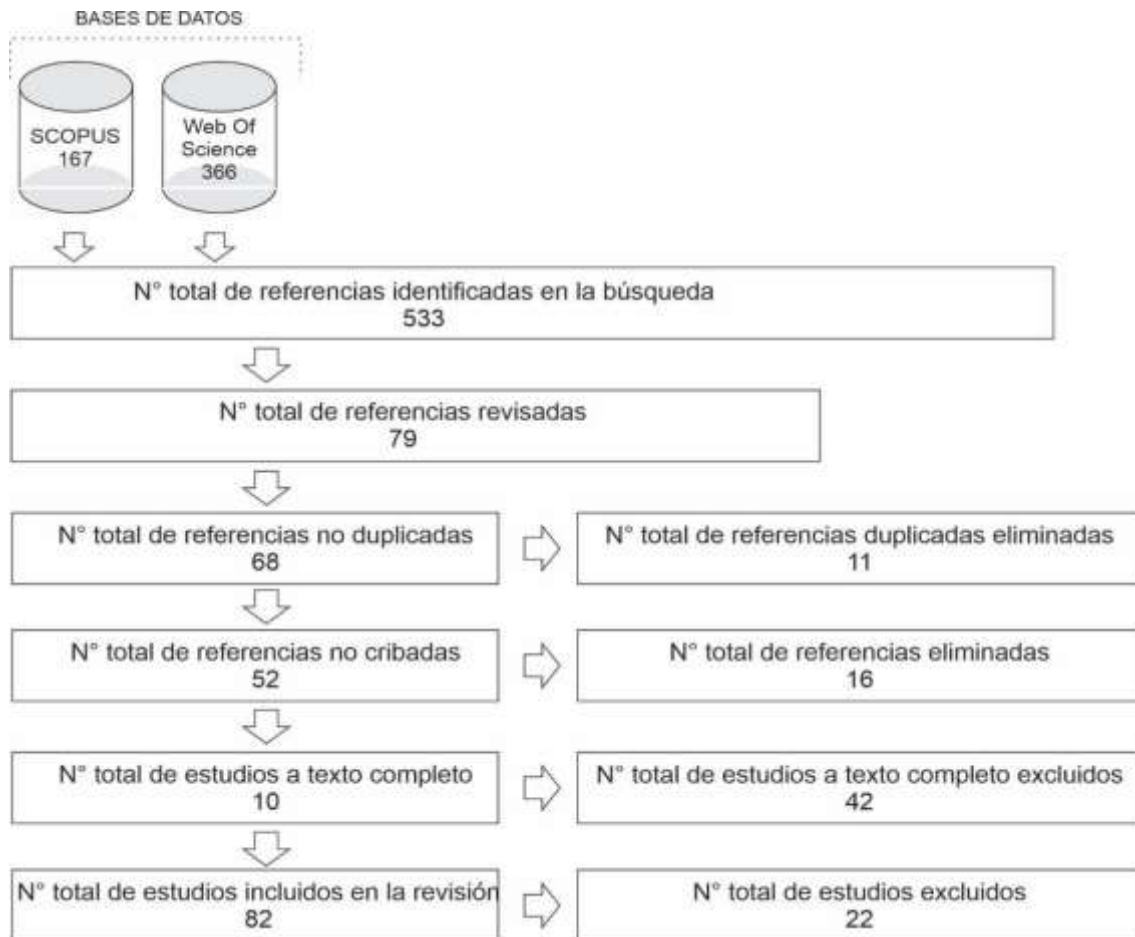
## METHODOLOGY

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).



**Figure 1** Academic article selection flowchart

**Note.** Adapted from Urrutia and Bonfill (2014).

**Table 1 Characteristics of the studies selected for review**

| Cod° | Author(s) - year        | Magazine  | Quartile | Country     | Source | Contribution  |
|------|-------------------------|---|----------|-------------|--------|---|
| 1    | Estrada et al. (2022)   | Journal of Cleaner Production   | Q1       | England     | Scopus | The intrapersonal dimension of I.E. impacts resilience, which in turn impacts engagement, which in turn is closely related to academic performance. |
| 2    | Dong et al. (2022)      | Frontiers in Psychology   | Q1       | Switzerland | Scopus | This study focuses on the relationship between personality traits, emotional intelligence, virtual experience on academic performance.              |
| 5    | Năstasă et al. (2022).  | Forests   | Q1       | Switzerland | Scopus | Investigated emotional variables that are positively linked to academic performance.  |
| 9    | García et al. (2022)    | Frontiers in Psychology   | Q1       | Switzerland | Scopus | Focused on analyzing the influence of emotional intelligence on academic performance.   |
| 34   | Rodríguez et al. (2021) | International Journal of Environmental Research and Public Health     | Q1       | Switzerland | Scopus | Explores the relationship between substance use, emotional intelligence, and academic performance.  |
| 39   | Séllei et al. (2021)    | Applied Sciences  | Q1       | Switzerland | Scopus | One of the I.E. factors is a good predictor of academic performance.  |
| 55   | Ugwuanyi et al. (2020). | Cypriot Journal of Educational Sciences                               | Q3       | Cyprus      | Scopus | Study how emotional intelligence is a predictor of academic performance in mathematics.   |
| 56   | Turi et al. (2020)      | International Journal of Evaluation and Research in Education (IJERE) | Q3       | Indonesia   | Scopus | Verified a statistically significant correlation between emotional intelligence and academic performance.   |
| 71   | Saud (2019)             | International Journal of Higher Education                             | Q1       | England     | Scopus | Describes how emotional intelligence has positive effects on foreign language learning.   |
| 73   | Khan (2019)             | International Journal of Engineering Business Management              | Q2       | Croatia     | Scopus | It reported significant differences that favor students from private universities more than public ones.  |

## 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 of 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 (Sélei et al. (Sélei 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.

## **REFERENCES**

- Abu Alkhayr, L., Alshaikh, R., Alghamdi, L., Alshaikh, A., Soma, F., & Bokhari, F. A. (2022). Is emotional intelligence linked with academic achievement? The first TEIQue-SF study in a sample of Saudi medical rehabilitation students. *Annals of Medicine and Surgery*, 78, 103726. <https://doi.org/10.1016/j.amsu.2022.103726>.

- Alam, F., Yang, Q., Bhutto, M. Y., & Akhtar, N. (2021). The Influence of E-Learning and Emotional Intelligence on Psychological Intentions: Study of Stranded Pakistani Students. *Frontiers in Psychology*, 12. <https://www.frontiersin.org/articles/10.3389/fpsyg.2021.715700>
- Arntz Vera, J., & Trunce Morales, S. (2019). Emotional intelligence and academic performance in undergraduate nutrition students. *Research in Medical Education*, 8(31), 82-91. <https://doi.org/10.22201/facmed.20075057e.2019.31.18130>
- Bonilla-Yucailla, D., Balseca-Acosta, A., Cárdenas-Pérez, M. J., & Moya-Ramírez, D. (2022). Emotional intelligence, engagement and academic self-efficacy. Mediation analysis in Ecuadorian university students. *Interdisciplinaria. Journal of Psychology and Related Sciences*, 39(2). <https://doi.org/10.16888/845>.
- Caballero-García, P. A., & Sánchez Ruiz, S. (2021). Creativity and Life Satisfaction in Spanish University Students. Effects of an Emotionally Positive and Creative Program. *Frontiers in Psychology*, 12. <https://www.frontiersin.org/articles/10.3389/fpsyg.2021.746154>
- Campillo Labrandero, M., Martínez González, A., García Minjares, M., Guerrero Mora, L., & Sánchez Mendiola, M. (2021). Academic performance and graduation in 25 generations of students at the UNAM School of Medicine. *Educación Médica*, 22(2), 67-72. <https://doi.org/10.1016/j.edumed.2019.05.003>
- Cassano, F., Tamburrano, A., Mellucci, C., Galletti, C., Damiani, G., & Laurenti, P. (2020). Evaluation of Emotional Intelligence among Master's Degree Students in Nursing and Midwifery: A Cross-Sectional Survey. *International Journal of Environmental Research and Public Health*, 17(17), Article 17. <https://doi.org/10.3390/ijerph17176347>.
- Celada-Reynoso, E; Romero-Carazas, R; Márquez-Urbina, P; Paul Espíritu-Martínez, A; Zulema Espinoza-Véliz, M; Espinoza-Egoavil, M.J; Gómez-Pérez, K.K; Valero-Ancco, V.N; Gonzales-Figueroa, I.K. (2023). Estrategia B-learning para un desarrollo significativo: una revisión bibliométrica. *Bibliotecas. Anales de Investigación*;19(2), 1-15
- Dong, X., Kalugina, O. A., Vasbieva, D. G., & Rafi, A. (2022). Emotional Intelligence and Personality Traits Based on Academic Performance. *Frontiers in Psychology*, 13. <https://www.frontiersin.org/articles/10.3389/fpsyg.2022.894570>
- Estrada Guillén, M., Monferrer Tirado, D., & Rodríguez Sánchez, A. (2022). The impact of COVID-19 on university students and competences in education for sustainable development: Emotional intelligence, resilience and engagement. *Journal of Cleaner Production*, 380, 135057. <https://doi.org/10.1016/j.jclepro.2022.135057>.
- Fajardo, E., Beleño-Montagut, L., & Romero, H. (2022). Determining factors of academic performance of business administration students in Colombia. *Formación universitaria*, 15(1), 145-152. <https://doi.org/10.4067/S0718-50062022000100145>
- García-Martínez, I., Augusto-Landa, J. M., Quijano-López, R., & León, S. P. (2022). Self-Concept as a Mediator of the Relation Between University Students' Resilience and Academic Achievement. *Frontiers in Psychology*, 12. <https://www.frontiersin.org/articles/10.3389/fpsyg.2021.747168>
- Ghita-Pirnutu, O.-A., & Cismaru, L. (2022). Developing the Emotional Intelligence of Millennial Students: A Teaching Strategy. *Sustainability*, 14(21). <https://doi.org/10.3390/su142113890>
- Guzmán-Mendoza, E., Santos-Díaz, M. de la L., Cabañas-Benítez, G., Pérez-Calderón, D. M., Chávez-Aguilar, C., Morales-Rodríguez, M. C., & Landeros-Olvera, E. A. (2018). Evaluation of Nurse-Developed Randomized Clinical Trials according to the CONSORT Statement criteria. *Global Nursing*, 17(49), 478-499. <https://doi.org/10.6018/eglobal.17.1.276091>.
- Hu, J., & Cheung, C. K. (2021). Gender difference in the effect of cultural distance on academic performance among cross-border students in China. *Psicologia: Reflexão e Crítica*, 34(1), 33. <https://doi.org/10.1186/s41155-021-00199-4>
- Karkada, I. R., D'souza, U. J. A., Mustapha, Z. A. bin, & Mohanraj, J. (2022). Academic Performance Improves with Emotional Intelligence Awareness and Physical Exercise among Medical Students. *Biomedical and Pharmacology Journal*, 15(2), 803-817. <https://biomedpharmajournal.org/vol15no2/academic-performance-improves-with-emotional-intelligence-awareness-and-physical-exercise-among-medical-students/>.
- Khan, S. (2019). A comparative analysis of emotional intelligence and intelligence quotient among Saudi business students' toward academic performance. *International Journal of Engineering Business Management*, 11, 1847979019880665. <https://doi.org/10.1177/1847979019880665>
- Liem, G. A. D. (2019). Academic performance and assessment. *Educational Psychology*, 39(6), 705-708. <https://doi.org/10.1080/01443410.2019.1625522>.
- López Cabañas, J. C., Espinosa Carrasco, M. E., Saucedo Fernández, M., & Romero Durán, H. P. (2022). Socioeconomic and Motivational Factors that Affect the School Performance of the Students of the Faculty of Administrative Economic Sciences of Unacar. *Sotavento M.B.A.*, 34. <https://doi.org/10.18601/01233734.n34.06>
- Mamani-Jilaja, D., Huayanca-Medina, P. C. ., Casa-Coila, M. D. ., Vilca-Apaza, H.-M. ., & Romero-Carazas, R. (2023). Análisis bibliométrico de la producción científica en los deportes colectivos (Bibliometric analysis of scientific production in collective sports). *Retos*, 49, 853–861. <https://doi.org/10.47197/retos.v49.99002>
- MacCann, C., Double, K. S., & Clarke, I. E. (2022). Lower Avoidant Coping Mediates the Relationship of Emotional Intelligence With Well-Being and Ill-Being. *Frontiers in Psychology*, 13. <https://www.frontiersin.org/articles/10.3389/fpsyg.2022.835819>. <https://www.frontiersin.org/articles/10.3389/fpsyg.2022.835819>
- MacCann, C., Jiang, Y., Brown, L. E. R., Double, K. S., Bucich, M., & Minbashian, A. (2020). Emotional intelligence predicts academic performance: A meta-analysis. *Psychological Bulletin*, 146(2), 150-186. <https://doi.org/10.1037/bul0000219>.

- Manjareeka, M., & Yadav, S. (2020). Predictors of high achievers in Indian medical undergraduates: Association with emotional intelligence and perceived stress. *Journal of Education and Health Promotion*, 9(1), 202. [https://doi.org/10.4103/jehp.jehp\\_263\\_20](https://doi.org/10.4103/jehp.jehp_263_20)
- Masud, S., Mufarrah, S. H., Qureshi, N. Q., Khan, F., Khan, S., & Khan, M. N. (2019). Academic Performance in Adolescent Students: The Role of Parenting Styles and Socio-Demographic Factors - A Cross Sectional Study From Peshawar, Pakistan. *Frontiers in Psychology*, 10. <https://www.frontiersin.org/article/10.3389/fpsyg.2019.02497>
- Medina, J., Pinzón, K., & Salazar-Méndez, Y. (2021). Determinants of Academic Achievement of Students in an Ecuadorian Public University. *Revista Politécnica*, 47(2), 53-62. <https://doi.org/10.33333/rp.vol47n2.05>
- Méndez-Giménez, A., Cecchini, J.-A., & García-Romero, C. (2020). Profiles of Emotional Intelligence and Their Relationship with Motivational and Well-being Factors in Physical Education. *Educational Psychology*, 26(1), 27-36. <https://www.redalyc.org/journal/6137/613765724004/html/>
- Năstăsă, L. E., Cocoradă, E., Vorovenciu, I., & Curtu, A. L. (2022). Academic Success, Emotional Intelligence, Well-Being and Resilience of First-Year Forestry Students. *Forests*, 13(5), Article 5. <https://doi.org/10.3390/f13050758>
- Navarro, N., Illesca, M., Rojo, R., González, L., Gittermann, R., Garrido, R., & Rascón, C. (2022). Emotional intelligence and sociodemographic profile in first-year medical school students. *Revista médica de Chile*, 150(1), 54-61. <https://doi.org/10.4067/S0034-98872022000100054>
- Pardal-Refoyo, J. L., & Pardal-Peláez, B. (2020). Annotations for structuring a systematic review. *Revista ORL*, 11(2), 155-160. <https://doi.org/10.14201/orl.22882>
- Patra, I., Alazemi, A., Al-Jamal, D., & Gheisari, A. (2022). The effectiveness of teachers' written and verbal corrective feedback (CF) during formative assessment (FA) on male language learners' academic anxiety (AA), academic performance (AP), and attitude toward learning (ATL). *Language Testing in Asia*, 12(1), 19. <https://doi.org/10.1186/s40468-022-00169-2>
- Pishghadam, R., Faribi, M., Kolahi Ahari, M., Shadloo, F., Gholami, M. J., & Shayesteh, S. (2022). Intelligence, emotional intelligence, and emo-sensory intelligence: Which one is a better predictor of university students' academic success? *Frontiers in Psychology*, 13. <https://www.frontiersin.org/articles/10.3389/fpsyg.2022.995988>
- Polo-Garzón, C., Eriá, A. C., & Tálaga, A. F. (2022). Proposal of categories of analysis of the academic performance of undergraduate architecture students. *Revista Boletín Redipe Magazine*, 11(04), Article 04. <https://doi.org/10.36260/rbr.v11i04.1810>
- Puertas-Molero, P., Zurita-Ortega, F., Chacón-Cuberos, R., Castro-Sánchez, M., Ramírez-Granizo, I., & González-Valero, G. (2020). Emotional intelligence in the educational setting: A meta-analysis. *Annals of Psychology*, 36(1), 84-91. <https://doi.org/10.6018/analesps.36.1.345901>
- Rodríguez-Sáez, J. L., Martín-Antón, L. J., Salgado-Ruiz, A., & Carbonero, M. Á. (2021). Socio-Emotional Variables Linked to the Consumption of Drugs amongst University Students of Social Sciences: A Pilot Study. *International Journal of Environmental Research and Public Health*, 18(9), Article 9. <https://doi.org/10.3390/ijerph18094502>
- Romero-Carazas, R., Dávila-Fernández, S. I., Gutierrez-Chagua, I. A., Tarrillo, F. V., Chávez-Díaz, J. M., Espíritu-Martínez, A. P., Gomez-Perez, K. K., & Huiza, D. A. M. (2023). Reliability in the Creation, Destruction and Mobilization of Debts and Savings. *Journal of Law and Sustainable Development*, 11(2), e635. <https://doi.org/10.55908/sdgs.v11i2.635>
- Romero-Carazas, R., Ochoa-Tataje, F. A., Mori-Rojas, G., Vilca-Cáceres, V. A., Gómez-Cáceres, F. Y., Carpio-Delgado, F. del, Zárate-Suárez, J. S., & Espinoza-Casco, R. J. (2023). Service Quality and Institutional Image as Predictors of Customer Satisfaction in Municipalities of Perú. *Journal of Law and Sustainable Development*, 11(5), e885. <https://doi.org/10.55908/sdgs.v11i5.885>
- Romero Caballero, S., Hernández Sánchez, I., Barrera Villarreal, R., & Mendoza Rojas, A. (2022). Emotional intelligence and academic performance in mathematics during pandemic. *Revista de Ciencias Sociales*. <https://doi.org/10.31876/rcs.v28i2.37929>
- Ruiz-Mori, I; Romero-Carazas, R; Espíritu-Martínez, A.P; Mamani-Jilaja, D; Valero-Ancco, V.N; Flores-Chambilla, S.G. (2023). Análisis bibliométrico de la producción científica sobre competencia y brecha digitales. *Bibliotecas. Anales de Investigacion*;19(2), 1-11
- Saud, W. I. (2019). Emotional Intelligence and its Relationship to Academic Performance Among Saudi EFL Undergraduates. *International Journal of Higher Education*, 8(6), 222. <https://doi.org/10.5430/ijhe.v8n6p222>
- Sélléi, B., Stumphauer, N., & Molontay, R. (2021). Traits versus Grades-The Incremental Predictive Power of Positive Psychological Factors over Pre-Enrollment Achievement Measures on Academic Performance. *Applied Sciences*, 11(4), Article 4. <https://doi.org/10.3390/app11041744>
- Seow, H. Y., Wu, M. H. L., Mohan, M., Mamat, N. H. binti, Kutzsche, H. E., & Pau, A. (2022). The effect of transactional analysis training on emotional intelligence in health professions students. *BMC Medical Education*, 22(1), 1-9. <https://doi.org/10.1186/s12909-022-03455-y>
- Shafait, Z., Khan, M. A., Bilan, Y., & Oláh, J. (2021). Modeling the mediating roles of self-directed learning and knowledge management processes between emotional intelligence and learning outcomes in higher education. *PLOS ONE*, 16(7), e0255177. <https://doi.org/10.1371/journal.pone.0255177>
- Sierra-Tobón, S., & Díaz-Castrillón, C. E. (2020). Emotional intelligence and clinical practice in times of pandemic. *CES Medicine*, 34(SPE), 59-68. <https://doi.org/10.21615/cesmedicina.34.covid-19.9>

- Soza Mora, S. E. (2021). Factors associated with the quality of student academic performance in higher education. *Revista Ciencias de la Salud y Educación Médica*, 3(3). <https://revistacienciasmedicas.unan.edu.ni/index.php/rcsem/article/view/79>
- Suleman, Q., Hussain, I., Syed, M. A., Parveen, R., Lodhi, I. S., & Mahmood, Z. (2019). Association between emotional intelligence and academic success among undergraduates: A cross-sectional study in KUST, Pakistan. *PLOS ONE*, 14(7), e0219468. <https://doi.org/10.1371/journal.pone.0219468>.
- Tacilla Cardenas, I., Vásquez Villanueva, S., Verde Avalos, E. E., & Colque Díaz, E. (2020). Academic achievement: A very complex universe for the pedagogical task. *Revista Muro de la Investigación*, 5(2). <https://doi.org/10.17162/rmi.v5i2.1325>. <https://doi.org/10.17162/rmi.v5i2.1325>.
- Tadese, M., Yeshaneh, A., & Mulu, G. B. (2022). Determinants of good academic performance among university students in Ethiopia: A cross-sectional study. *BMC Medical Education*, 22(1), 395. <https://doi.org/10.1186/s12909-022-03461-0>.
- Torres Estrada, N., & Sosa Rosas, M. del P. (2020). Emotional intelligence of undergraduate nursing degree students. *Cuidarte Magazine*, 11(3). <https://doi.org/10.15649/cuidarte.993>
- Trigueros, R., Aguilar-Parra, J. M., Cangas, A. J., Bermejo, R., Ferrandiz, C., & López-Liria, R. (2019). Influence of Emotional Intelligence, Motivation and Resilience on Academic Performance and the Adoption of Healthy Lifestyle Habits among Adolescents. *International Journal of Environmental Research and Public Health*, 16(16), Article 16. <https://doi.org/10.3390/ijerph16162810>
- Turi, J. A., Rani, A. A., Imaduddin, A., Mahmud, F. B., & Adresi, A. A. (2020). Correlating spiritual and emotional intelligence with academic performance among Pakistani students. *International Journal of Evaluation and Research in Education (IJERE)*, 9(2), Article 2. <https://doi.org/10.11591/ijere.v9i2.20476>.
- Urrutia, G., & Bonfill, X. (2014). Systematic reviews, a key tool for clinical and health decision-making. *Revista Española de Salud Pública*, 88(1), 1-3. <https://www.redalyc.org/articulo.oa?id=17030519008>
- Vargas-Ramos, J. C., Lerma, C., Guzmán-Saldaña, R. M. E., Lerma, A., Bosques-Brugada, L. E., & González-Fragoso, C. M. (2022). Academic Performance during the COVID-19 Pandemic and Its Relationship with Demographic Factors and Alcohol Consumption in College Students. *International Journal of Environmental Research and Public Health*, 19(1), Article 1. <https://doi.org/10.3390/ijerph19010365>
- Villarruel-Meythaler, R. E., Tapia-Morales, K. I., & Cárdenas-García, J. K. (2020). Determinants of academic achievement in middle school education in Ecuador. *Revista Economía y Política*, 173-190. <https://doi.org/10.25097/rep.n32.2020.08>.
- Xie, G., & Zhang, Y. (2020). School of golden touch? A study of school effectiveness in improving student academic performance. *The Journal of Chinese Sociology*, 7(1), 7. <https://doi.org/10.1186/s40711-020-00118-7>
- Yağcı, M. (2022). Educational data mining: Prediction of students' academic performance using machine learning algorithms. *Smart Learning Environments*, 9(1). <https://doi.org/10.1186/s40561-022-00192-z>.