

Emotional intelligence and academic performance, variable or category in scientific research?

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Abstract

The research aims to analyze the categorical relationship between emotional intelligence and academic performance among university students, due to these are categories whose similarity provides important data to discriminate conceptually and operational use within university education. The study is based on the Prisma method whose database originates from Scopus, PubMed and Web of Science. The review of specialized literature corresponds to a data of 1011 articles, of which, as well using analysis criteria, 78 articles and other documents have been selected. The finding is focused on the importance of emotional intelligence as a category/variable that should be independent from the conceptual and within the spectrum of epistemology to academic performance, considering that its demonstration is a human faculty, useful for human development and that transcends in that it has other categories in common such as self-realization, self-concept, adaptability, self-management, motivation, self-esteem, emotion management, resilience, anxiety and depression.

Keywords: emotional intelligence, academic performance, categorical analysis

1 Introduction

The bibliometric study with an equivalent predominance of deductive reasoning focuses ideas centered on quantitative and qualitative studies of emotional intelligence and academic performance. The categorical relationship highlights the hegemony of the quantitative approach, although the qualitative approach using the same categories is not ruled out. The categorical equivalence confirms the existence of elements around the academic performance of the university student, the quantitative and qualitative research of both categories/variables is valued using the prism method. The approximation of academic performance towards emotional intelligence is manifested as a category that concomitantly underlie. The emphasis on the analysis of emotional intelligence transcends insofar as its functionality is reaffirmed when individual behavior is observed against the type of academic performance.

2 Theoretical framework

The concept of emotional intelligence derives from the compound construct that in turn comes from two terms (from Latin, *intellegentia*) related to the individual's ability to think, understand, reason, assimilate, elaborate and use logic and emotions, from Latin *emotio*., which means 'movement or impulse', 'that which moves you towards'. Apparently, there would be a kind of contradiction in the nature of both concepts, one from rationality and the other from viscosity, but the fusion promotes a force that influences, positively unbalancing relationships, a personal and interpersonal state; however, the dichotomy favors the relative meaning of the concepts when judging them separately.

Around 1990, Peter Salovey and John Mayer coined the term "emotional intelligence", specifying its use as interpersonal and intrapersonal intelligence (Mera, 2017, p. 9). At that time, it was revolutionary to understand some other form of intelligence that is associated with human development. "Hume advocated an experimental investigation of human thoughts, feelings, and behavior rather than a couch theory" (Packer, 2013, p. 202). It should be remembered that Hume was influenced by Descartes, with the recognition of reason from the "I think, therefore I am". Human existence is not necessarily the manifestation of academic performance as the characterization of cognitive behavior, it is about existing with everything that Hume raises, however, "there is a relationship between the epistemological issue of how knowledge is possible and the ethical question of how we should act and try to live" (Packer, 2013, p. 202) from the assessment of the emotional, because it is imperative to recognize that being emotionally intelligent is complex, as long as the concepts do not have biases and their operational sense contributed to human understanding.

The relationship between emotional intelligence and academic performance has elements that allow judging the role of epistemology to consider that quantitative studies are absolute when the conceptual problem is not resolved, that is, that the relationship between both categories/ variables deserve further studies; However, Descartes' "thinking and then existing" is compelling, because thought is a dissimilar category to emotional intelligence.

In reality, it is a strong natural dichotomy, where a category of apparent supremacy is prevalent in the formative process of the individual, although it may be the supra-structural category; that is to say, the academic performance (favorable or unfavorable) can generate certain intelligently emotional manifestations.

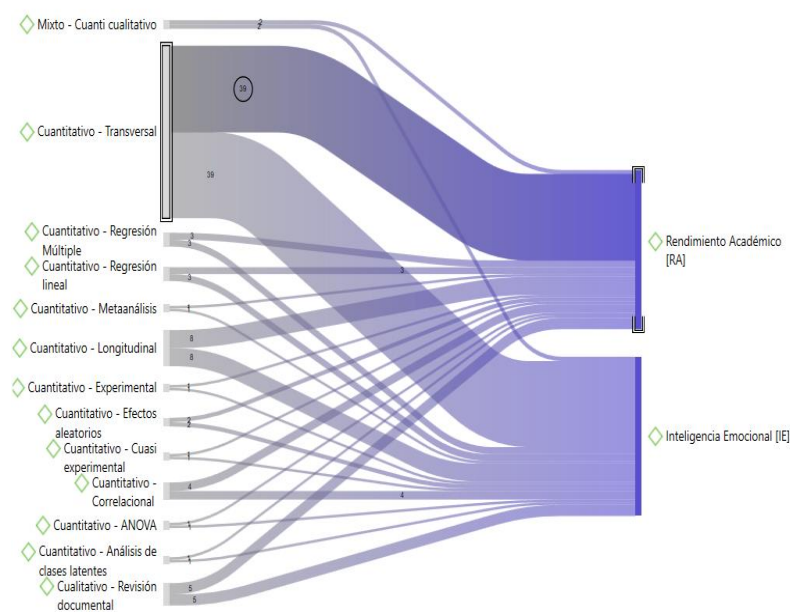
In the relationship of the categories/variables, the researchers specifically incorporate various dimensions of emotional intelligence in the search for more precise explanations, which is why the study observes a variety of categories that underlie intelligence. emotional. The spectrum of both categories/variables offers the same conditions for research approaches.

3 Method

The literature review followed the PRISMA reporting guidelines and rules (Preferred Reporting Items for Systematic reviews and Meta-Analyses). The data of scientific documents was prepared based on data collected from Scopus, PubMed and Web of Science and has considered original articles. For the Scopus database, protocols were used, in order to guarantee current and relevant data for the analytical reading of the full text of the results.

4 Results

The analysis of the variables/categories correspond directly to the predominant research approaches, although the hegemony of the quantitative approach do not obviating the importance of the qualitative approach. See figure #1.



Source: Own elaboration using ATLAS.ti.

5 Discussion

This type of research requires the identification of analysis units accessible to the application of instruments such as surveys or perception scales that are then categorized

as ordinal or nominal data for statistical treatment. The contribution of Al-Shahomee et al., 2017; Antonio-Aguirre et al., 2019; Bakouei et al., 2019; Estrada et al. (2021), Goh & Kim (2021), Heidari et al. (2017), Jan & Anwar (2019), Khan (2019), Llega (2021), Maguire et al. (2017), Martínez-Martínez et al. (2020), Noor & Hanafi (2017), Pulido Acosta & Herrera Clavero (2017), Ranasinghe et al. (2017), Ranjbar et al. (2017), Rodríguez-Rodríguez (2020), Tariq et al. (2020), Toscano-Hermoso et al. (2020), Trigueros et al. (2019), Costa & Faria (2015), Ditton et al. (2019), Lessard & Juvonen (2019), MacCann et al. (2011), Sainio et al. (2019), Tam et al. (2021) and Ursache et al. (2020) is significant because it seeks the relevance of both categories/variables, in order to clarify the role of concepts in the training process. The predominant approaches have scientific rigor; however, quantifying emotions can be an important attempt to describe humanity and this will necessarily depend on each individual.

6 Conclusions

The systematic review of the literature reveals that the researchers approach the relationship between the categories/variables from the positivist paradigm with methodologies focused on the framework of the cross-sectional quantitative approach, since there are few studies with qualitative approaches and fundamentally with documentary analysis.

7 Limitations and future research

There is a diversity of information that does not necessarily guarantee quality; For this reason, it is necessary to deepen the research on emotional intelligence from the purity of the concept for which it has been created, to avoid the power of speculations about beliefs about emotional intelligence and academic performance.

References

- Costa, A., & Faria, L. (2015). The impact of emotional intelligence on academic achievement: A longitudinal study in Portuguese secondary school. *Learning and Individual Differences*, 37, 38-47. <https://doi.org/10.1016/j.lindif.2014.11.011>
- Del Rosal, I., Moreno-Manso, J. M., & Bermejo, M. L. (2018). Inteligencia emocional y rendimiento académico en futuros maestros de la Universidad de Extremadura. *Profesorado, Revista de Currículum y Formación Del Profesorado*, 22(1), 257–275. <https://doi.org/10.30827/profesorado.v22i1.9928>
- Descartes, R. (2004). *Discurso del método*. (E. C. SRL (ed.)).
- Ditton, H., Bayer, M., & Wohlking, F. (2019). Structural and motivational mechanisms of academic achievement: a mediation model of social-background effects on academic achievement. *British Journal of Sociology*, 70(4), 1276–1296. <https://doi.org/10.1111/1468-4446.12506>

- Duckworth, A. L., Taxer, J. L., Eskreis-Winkler, L., Galla, B. M., & Gross, J. J. (2019). Self-Control and Academic Achievement. *Annual Review of Psychology*, 70, 373–399.
- Ferrando, M., Prieto, M. D., Almeida, L. S., Ferrándiz, C., Bermejo, R., López-Pina, J. A., Hernández, D., Sáinz, M., & Fernández, M. C. (2011). Trait Emotional Intelligence and Academic Performance: Controlling for the Effects of IQ, Personality, and Self-Concept. *Journal of Psychoeducational Assessment*, 29(2), 150–159. <https://doi.org/10.1177/0734282910374707>
- Hjertø, K. B., & Paulsen, J. M. (2016). Beyond Collective Beliefs: Predicting Team Academic Performance From Collective Emotional Intelligence. *Small Group Research*, 47(5), 510–541. <https://doi.org/10.1177/1046496416661236>
- Lanciano, T., & Curci, A. (2014). Incremental validity of emotional intelligence ability in predicting academic achievement. *American Journal of Psychology*, 127(4), 447–461. <https://doi.org/10.5406/amerjpsyc.127.4.0447>
- Lessard, L. M., & Juvonen, J. (2019). Cross-class friendship and academic achievement in middle school. *Developmental Psychology*, 55(8), 1666–1679. <https://doi.org/10.1037/dev0000755>
- Locke, J. (2020). *Ensayo sobre el entendimiento humano*. Editorial Verbum.
- Maccann, C., Jiang, Y., Brown, L. E. R., Double, K. S., & Bucich, M. (2020). Supplemental Material for Emotional Intelligence Predicts Academic Performance: A Meta-Analysis. *Psychological Bulletin*, 146(2), 150–186. <https://doi.org/10.1037/bul0000219.supp>
- Mera, A. (2017). *Revisión teórica del concepto de incidencia en el desempeño laboral* [Artículo para obtener el grado de magíster, Universidad de Especialidades Espíritu Santo]. Repositorio UEES. <http://201.159.223.2/handle/123456789/1616>
- Moghadari-Koosha, M., Moghadasi-Amiri, M., Cheraghi, F., Mozafari, H., Imani, B., & Zandieh, M. (2020). Self-efficacy, self-regulated learning, and motivation as factors influencing academic achievement among paramedical students a correlation study. *Journal of Allied Health*, 49(3), 145E-152E.
- Mukhametzyanova, L. Y., Bezborodova, M. A., Korzhanova, A. A., Akhmetov, L. G., Sotnikov, M. V., & Khairullina, E. R. (2017). Formation of students emotional intelligence as a factor of their academic development. *Man in India*, 97(3), 543–552.
- Omidi, A., Mohammadi, A., Zargar, F., Akkashe, G., & Akbari, H. (2012). Personality Types and Emotional Intelligence as Predictors of Academic Achievement in Students at Kashan University of Medical Sciences. *Nursing and Midwifery Studies*, 1(2), 72–76. <https://doi.org/10.5812/nms.8304>
- Packer, M. (2013). *La ciencia de la investigación cualitativa*. Ediciones Uniandes.
- Singh, N., Kulkarni, S., & Gupta, R. (2020). Is emotional intelligence related to objective parameters of academic performance in medical, dental, and nursing students: A systematic review. *Education for Health: Change in Learning and Practice*, 33(1), 8–12. https://doi.org/10.4103/efh.EfH_208_17
- Tam, H. lin, Kwok, S. Y. C. L., Hui, A. N. N., Chan, D. K. yin, Leung, C., Leung, J., Lo, H., & Lai, S. (2021). The significance of emotional intelligence to students' learning motivation and academic achievement: A study in Hong Kong with a

Confucian heritage. *Children and Youth Services Review*, 121, 105847.
<https://doi.org/10.1016/j.chidyouth.2020.105847>

Thomas, C. L., Cassady, J. C., & Heller, M. L. (2017). The influence of emotional intelligence, cognitive test anxiety, and coping strategies on undergraduate academic performance. *Learning and Individual Differences*, 55, 40-48.
<https://doi.org/10.1016/j.lindif.2017.03.001>

Ursache, A., Kiely Gouley, K., Dawson-McClure, S., Barajas-Gonzalez, R. G., Calzada, E. J., Goldfeld, K. S., & Brotman, L. M. (2020). Early Emotion Knowledge and Later Academic Achievement Among Children of Color in Historically Disinvested Neighborhoods. *Child Development*, 91(6), e1249–e1266.
<https://doi.org/10.1111/cdev.13432>