

Soft Skills and Emotional Intelligence in Students of The Education Program

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Abstract

The objective of this research was to determine the relationship between soft skills and emotional intelligence in students of the education program. A quantitative approach and a cross-sectional non-experimental design were used, with a correlational scope. The study sample consisted of 190 students selected through non-probability sampling for convenience. In descriptive terms, it was found that 52.10% of the students had an average level of emotional intelligence, while 45.8% demonstrated a good level of soft skills. In addition, regarding the inferential findings, a significant correlation was found between both variables, with a correlation coefficient $R_{ho} = 0.526$. This leads to the conclusion that there is a direct correlation between emotional intelligence and soft skills in the evaluated students.

Keywords: *Intelligence, Social Skills, Communication, Regulation, Understanding*

INTRODUCTION

One of the problems in the educational context is the deficiency of soft skills in university students. The absence of these skills, as well as the poor development of emotional intelligence, are fundamental for future professionals to be prepared for the challenges and challenges of the workplace. (Juárez, 2022).

In an increasingly interconnected and diverse world, strong soft skills have become essential for personal and professional success. Job demands are increasingly demanding and beyond the knowledge and experience that students or graduates are able to obtain, these special skills are in high demand today. (Albirru and Kartika, 2022).. This trend is supported by the multiple benefits, since the development of soft skills empowers people with communication skills (Sánchez and Hernández, 2022). (Sanchez and Hernandez, 2022).. Yet, curricula at higher education level remain rigid and do not consider skills, abilities and attitudes in a holistic manner. Instead, they focus on assessing mainly technical knowledge through exams that promote a rote assessment (Araya and Garita, 2022). (Araya and Garita, 2020)..

At the national level, a number of studies have verified deficiencies in soft skills. According to the research reported by Rojas (2020) it was found that 50.0% of students at a national university showed a fair level of soft skills. Similarly, in another national university, 48.0% of students showed average levels in soft skills. These results reveal limitations in students in areas such as emotion management, leadership skills, teamwork and project work, among others.

In the local context, it has been shown that students on the education programme at a public university have difficulties with regard to soft skills, which are manifested in their poor interpersonal skills and lack of teamwork; to this is added the lack of emotional control that is evident in their low level of tolerance towards

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others. This problem has been dragging on since the first cycles of their professional training and can be seen now that they are about to graduate.

This research is justified from three perspectives. From the theoretical point of view, the study variables are supported by the main theories. Emotional intelligence is supported by the model of Salovey and Mayer, who stated that emotional skills are fundamental for success in various aspects of life. (Ain et al., 2021).. Likewise, the soft skills variable is based on the model of Goleman, who highlighted the importance of these skills for success in the workplace (Goleman et al., 2021).. From a practical perspective, this research seeks to provide relevant and applicable information to the educational reality; in this way, the results will be useful to propose the most appropriate interventions to strengthen the soft skills of university students. Furthermore, it is important to highlight that this research has been methodologically supported by rigorously following the methodological process based on a quantitative approach at a correlational level. The instruments used in this study have been shown to have validity and reliability, which ensures the quality and accuracy of the results obtained.

Among the main antecedents or previous works, the contribution by Lopez (2022) whose research was able to verify that soft skills are related to collaborative learning in university students. Another study, conducted by Shica (2019) examined the relationship between emotional intelligence and negotiation management skills. Also, in a study conducted in Moquegua, Hualpa (2021) was able to prove that soft skills have an important contribution to organisational behaviour in student practitioners.

Regarding the theoretical construct of soft skills, it should be noted that there are a number of related terms such as social-emotional skills, non-cognitive skills, life skills, and others that are used synonymously (Moreno et al., 2022). In this way, soft skills are defined as those capacities or domains in the management of effective interactions, teamwork skills, leadership, communication, and other skills (Cordero et al., 2020). To assess this variable, Manrique et al. (2018) have proposed five dimensions: adaptive skills, management skills, interpersonal skills, communication skills and work ethics.

For Ortega (2016, as cited in Sánchez and Hernández, 2022) soft skills focus on the social sphere and are valued through the attitudes adopted at work that foster interaction and collaboration, resulting in more efficient performance. On the other hand, according to Ramírez and Manjarrez (2022) these skills are related to emotional aspects, as they facilitate higher, calmer and emotionally controlled behaviour. According to Hernández et al. (2022) these activities are complementary to hard skills.

In addition, soft skills are defined as a set of intra- and interpersonal competences that focus on personal development and contribute to establishing relationships in the workplace in a more appropriate way and even generating greater job permanence. (Loayza, 2021).

Moreover, the theoretical construct of emotional intelligence has been approached from different fields, from the psychological to the educational field. Emotional intelligence refers to a person's ability to recognise, understand and manage their own emotions, as well as the emotions of others. It is a state of alertness and awareness in relation to one's own and others' emotions (Amini et al., 2019). In the educational context, EI refers to the student's ability to recognise and manage emotions, both their own and those of others, and the ability to interact or interrelate with others in an appropriate manner. (Mejía, 2022)..

Emotional intelligence has also been defined as the degree to which emotions are managed or regulated in different social, family or personal situations or circumstances. (Quiliano, 2020). In the same line of concepts, emotional intelligence refers to the ability to understand emotions, both one's own and those expressed by other people, emotions that are expressed in circumstances (Salathiyah, 2022).

In relation to the main theoretical references, the soft skills variable is supported by the theoretical contribution of Mujica (2015) who postulated soft skills as attributes that enable people to interact effectively with others in various areas of life, such as the work environment and everyday life. For its part, the emotional intelligence variable is based on the theoretical contributions of Mayer and Salovey (1997) who stated that emotional intelligence is defined as a set of skills that explain individual differences in the way we perceive and understand our emotions.

Due to the problem posed in the present research, the general question was formulated: What is the relationship between soft skills and emotional intelligence in the students of the education programme?

Similarly, the general objective was set to determine the relationship between soft skills and emotional intelligence in students of the education programme. Consistently, the specific objectives were also formulated: a) to identify the level of emotional intelligence in students of the education programme, b) to identify the level of soft skills in students of the education programme, and, c) to determine the relationship between soft skills and the dimensions of emotional intelligence in students of the education programme.

MATERIALS AND METHODS

The research was carried out following a quantitative approach, which was selected to verify the hypotheses previously stated. In order to achieve this verification, measurements were carried out and the data obtained were statistically analysed, with the aim of obtaining information that would allow the findings to be generalised. (Galeano, 2020).

On the other hand, a non-experimental, cross-sectional design was used. Non-experimental studies are characterised by the absence of direct intervention by the researcher, who acts mainly as an observer. Furthermore, the cross-sectional approach implies that the measurements or the application of the instruments were carried out on a single occasion at a specific moment in time (Román et al., 2021)..

The research population consisted of 3990 students from a national university enrolled in the period 2021-I and the sample consisted of 190 students, with non-probabilistic convenience sampling.

In relation to the techniques and instruments used in this study, two surveys were applied using an ordinal polytomous scale. The first was the emotional intelligence questionnaire, which consisted of 32 questions, and the second was the soft skills questionnaire, composed of 24 items. Both instruments underwent a validation process by consulting a panel of five experts. In addition, a pilot test was carried out to determine the reliability of the instruments. The results obtained from the Cronbach's alpha coefficient were 0.851 and 0.976 for the emotional intelligence questionnaire and the soft skills questionnaire, respectively.

For the analysis of the information collected through the surveys, two tools were used: Excel for database design and SPSS v.26 statistical software. Two types of analysis were carried out. First, a descriptive analysis was carried out using frequency distribution to assess the level of each variable. This analysis provided an overview of the data collected and their distribution in the sample. Secondly, an inferential analysis was carried out. The normality test using Kolmogorov-Smirnov was performed to verify the distribution of the data, especially since there was a sample of more than 50 units. The result of this test allowed the selection of Spearman's Rho test statistic, which was used to test the correlational hypotheses raised in the study. (Mias, 2018).

RESULTS

Descriptive level results.

Table 1 Levels of emotional intelligence

	<i>f</i>	%
Under	26	13,7
Medium	99	52,1
High	65	34,2
Total	190	100,0

Note: f=Absolute frequency.

According to the data presented in table 1, it is observed that 52.10% of the respondents exhibited a medium level of emotional intelligence, while 34.2% showed a high level and 13.7% showed a low level.

Table 2 Levels of soft skills

	<i>f</i>	%
Deficient	40	21,1
Regular	63	33,2
Good	87	45,8
Total	190	100,0

Note: *f*=Absolute frequency.

According to the data presented in table 2, it can be observed that 45.8% of the surveyed students exhibited a good level of soft skills, while 33.2% showed a fair level and 21.1% obtained a poor level.

Inferential Level Results

The hypotheses set out in this research were:

Hg: There is a relationship between soft skills and emotional intelligence.

H1: There is a relationship between soft skills and emotional perception.

H2: There is a relationship between soft skills and emotional facilitation.

H3: There is a relationship between soft skills and emotional understanding.

H4: There is a relationship between soft skills and emotional regulation.

Table 3 Correlation matrix

	Soft skills	Adaptation	Management	Interpersonal	Communication	Ethics
Emotional intelligence	,526**	,489**	,512**	,447**	,498**	,479**
Perception	,400**	,418**	,394**	,354**	,408**	,425**
Facilitation	,469**	,416**	,455**	,415**	,427**	,413**
Understanding	,458**	,458**	,410**	,455**	,363**	,447**
Regulation	,488**	,467**	,470**	,442**	,433**	,417**

Note: ** Significance < 0.05.

Based on the data presented in table 3 and in line with the general hypothesis, a statistical significance of less than 0.05 can be seen, indicating the presence of a relationship between the variables analysed. Furthermore, a Spearman correlation (Rho) equal to 0.526 is observed, which reveals a positive correlation between soft skills and emotional intelligence. This implies that a higher development of soft skills is positively related to a higher level of emotional intelligence.

In relation to the results obtained to test the specific hypotheses, it has been observed that in all cases a significance below the established threshold of 5.0% has been obtained. This confirms the existence of a relationship in each of the cases. Furthermore, it was found that Rho = 0.400 indicates a positive correlation between soft skills and emotional perception, Rho = 0.469 indicates a positive correlation between soft skills and emotional facilitation, Rho = 0.458 shows a positive correlation between soft skills and emotional understanding, and Rho = 0.488 indicates a positive correlation between soft skills and emotional regulation.

DISCUSSION

In this section, the main discussions were held in relation to the research objectives. In accordance with the main objective, it has been verified that emotional intelligence is positively correlated with soft skills in students at a national university. This statement is supported by the findings of verification of the hypothesis, whose correlation Rho = 0.526 was significant, so it has been established that the higher the emotional intelligence, the higher the level of soft skills (see table 3).

This result is consistent with that reported by Shica (2019) whose study verified that emotional intelligence correlates with negotiation management skills. Accordingly, emotional intelligence is an important factor, which facilitates capabilities for managing the tools necessary to understand and regulate their own emotions.

Likewise, in coherence with the first specific objective, the level of emotional intelligence in students of a national university was identified. The findings revealed that 52.1% of the respondents showed an average level of emotional intelligence, while 34.2% showed a high level and 13.7% showed a low level. These findings indicate that the majority of students have an average level of emotional intelligence, which is encouraging. However, despite these favourable results, the importance of implementing educational strategies and programmes that promote the development of emotional intelligence in university students is recognised. Although most students are at an average level, there is room for improvement and strengthening of their emotional skills (see table 1).

Similarly, in relation to the second specific objective, it was possible to identify the level of soft skills in university students. The results obtained revealed that 45.8% of the students surveyed showed a high level of soft skills, while 33.2% showed an intermediate level and 21.1% showed a low level. Although the majority of students showed a good level of soft skills, it is important to highlight that there is still a significant percentage of students who need to strengthen their soft skills (see table 2).

According to the findings obtained in coherence with the verification of the specific hypotheses, a significant relationship has been established between soft skills and each of the dimensions of emotional intelligence. These results indicate that greater development of soft skills is associated with greater emotional perception. Soft skills were also found to have a positive impact on emotional facilitation. Also, adequate soft skills development is related to an increase in emotional understanding skills. Finally, it was found that the strengthening of soft skills contributes to an improvement in emotional regulation.

CONCLUSION

In conclusion, the results obtained in this study support the existence of a significant relationship between soft skills and emotional intelligence. Statistical analyses revealed that significance values (Sig.) lower than 0.05 and a correlation coefficient (Rho) of 0.528 indicate a positive and relevant association between these two variables.

One of the main limitations of the present study is the scarcity of background information directly linking the variables of soft skills and emotional intelligence. This situation has been overcome, with a greater theoretical emphasis that has supported the research. On the other hand, the methodological strength of this research is centred on the rigorousness with which the methodological process has been followed, based on a quantitative approach at a correlational level. The application of statistics has made it possible to establish this relationship, guaranteeing results that show the reality of the relationship between soft skills and emotional intelligence. Furthermore, a solid theoretical approach has been used to support the relevance and importance of investigating this relationship.

REFERENCES

- Ain, N. U., Munir, M., & Suneel, I. (2021). Role of emotional intelligence and grit in life satisfaction. *Heliyon*, 7(4), e06829. <https://doi.org/10.1016/j.heliyon.2021.e06829>
- Albirru Amsal, A., & Kartika, R. (2022). Case Base Method: A Collaborative Learning to Improve Students' Soft Skills in Business Analytics. 19-23. <https://doi.org/10.2991/asschr.k.220303.005>
- Amini, M., Amini, M., Nabiee, P., & Delavari, S. (2019). The Relationship Between Emotional Intelligence and Communication Skills in Healthcare Staff. *Shiraz E-Medical Journal*, 20(4), Article 4. <https://doi.org/10.5812/semj.80275>
- Araya-Fernández, E., & Garita-González, G. (2020). Soft skills: Elements for a holistic vision in the training of computer science professionals. *Trilogía Ciencia Tecnología Sociedad*, 12(23), 11-36. <https://doi.org/10.22430/21457778.1614>
- Cordero Clavijo, A. M., Córdova Tobar, N. J., Moreira Sarmiento, M. C., & Quevedo Jumbo, J. M. (2020). Soft skills, a factor of competitiveness in the profile of the public servant. *Polo del Conocimiento: Revista científico - profesional*, 5(5), 41-63. <https://dialnet.unirioja.es/servlet/articulo?codigo=7506213>
- Galeano, M. E. (2020). Project design in qualitative research. Universidad Eafit.
- Goleman, D., McKee, A., & David, S. (2021). *Inteligencia emocional*. Editorial Reverté. <https://elibro.net/es/lc/ucss/titulos/209690?prev=fs>
- Hernández Silvera, D. I., Ghilardelli, M. A., & Correia, V. E. (2022). Technologies, relationship, information and communication: A resource for the development of soft skills. *Hamut'ay*. 2022, 9 (1). <https://doi.org/10.21503/hamu.v9i1.2375>
- Huallpa Quispe, P. M. (2021). Soft skills of accounting practitioners and organisational behaviour in Moquegua. *REVISTA CIENCIA Y TECNOLOGÍA - Para el Desarrollo - UJCM*, 6(11), Article 11. <https://doi.org/10.37260/rctd.v6i11.167>

- Juárez Gatica, J. (2022). Emotional intelligence and soft skills within the secretarial curriculum. *Revista guatemalteca de educación superior*, 5(1), 35-45. <https://dialnet.unirioja.es/servlet/articulo?codigo=8316441>
- Loayza Borda, J. A. (2021). Critical thinking as a soft skill in education. *Repositorio Institucional - UCV*. <https://repositorio.ucv.edu.pe/handle/20.500.12692/91249>
- Lopez Trujillo, A. G. (2022). Aprendizaje cooperativo y habilidades blandas en estudiantes de una escuela superior pedagógica de Arequipa, 2022 [Master's thesis, Universidad César Vallejo]. <https://repositorio.ucv.edu.pe/handle/20.500.12692/96121>
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? https://scholars.unh.edu/psych_facpub/422
- Mejía Lasso, M. E. (2022). Emotional intelligence and the belief system in the learning of mathematics. *SciELO Preprints*. <https://doi.org/10.1590/SciELOPreprints.4069>
- Mias, C. D. (2018). *Applied statistical research methodology and instruments in neuropsychology: A practical guide for research*. Grupo Encuentro Editor.
- Moreno Murcia, L. M., Silva García, M. B., Hidrobo Baca, C. C., Rincón Tellez, D. C., Yurley Fuentes Rojas, G., & Quintero Pulgar, Y. A. (2022). Appendix: Strategy for the development of soft skills in higher education programmes and their relationship with work immersion processes. *Corporación Universitaria Minuto de Dios - UNIMINUTO*. <https://dialnet.unirioja.es/servlet/articulo?codigo=8680305>
- Mujica, J. (2015). Soft skills: What are soft skills and how are they learned? <https://educra.cl/que-son-las-habilidades-blandas-y-como-se-aprenden/>
- Quiliano Navarro, M. (2020). Emotional intelligence and academic stress in nursing students. *Ciencia y enfermería*, 26. <https://doi.org/10.4067/s0717-95532020000100203>
- Ramírez Chávez, M. A., & Manjarrez Fuentes, N. N. (2022). Soft skills and hard skills, key to comprehensive professional training. *Ciencias Sociales y Económica*, 6(2), 27-37. <https://dialnet.unirioja.es/servlet/articulo?codigo=8792007>
- Rojas Gallo, R. (2020). Habilidades blandas en estudiantes de ingeniería, un estudio comparativo. *revista IECOS*, 21(1), 71-87. <https://doi.org/10.21754/iecos.v21i1.1071>
- Román López, P., Rodríguez Arrastia, M. J., & Roper Padilla, C. (2021). *Research methodology: From reader to disseminator*. University of Almería.
- Salathiyah, M. (2022). Role of emotional intelligence in facilitating interpersonal communication and strengthening relationship. *Journal of Contemporary Issues in Business and Government*, 28(4), 453-462. <https://doi.org/10.47750/cibg.2022.28.04.033>
- Sánchez Aquino, J. G., & Hernández Romero, G. (2022). Soft skills development as a strategy for job placement of university students. *Sinapsis: The scientific journal of ITSUP*, 21(1), 18. <https://dialnet.unirioja.es/servlet/articulo?codigo=8627131>
- Shica Aguilar, N. (2019). *Inteligencia Emocional Y Habilidades Para La Gestión En La Negociación De Conflictos En Alumnos De La Escuela PNP Trujillo, 2018* [Master Thesis, Universidad César Vallejo]. <https://repositorio.ucv.edu.pe/handle/20.500.12692/31148>