Chapter 06 / Capítulo 06

Health 4.0: management, technology, and transformation of the healthcare sector in Latin America (English version)
ISBN: 978-9915-704-35-7
DOI: 10.62486/978-9915-704-35-7.ch06
Pages: 94-107

©2025 The authors. This is an open access article distributed under the terms of the Creative Commons Attribution (CC BY) 4.0 License.

The emotional competitions in the personnel of the health, underestimated but necessary

Las competencias emocionales en el personal de la salud, subestimadas pero necesarias

Nolivio López Díaz[1], Idesnel Banguela Pérez[2]

[1]Universidad Marta Abreu De Las Villas, Santa Clara, Cuba.
[2]ESBU Javier Calvo, Esperanza, Cuba.

Corresponding author: Nolivio López Díaz

ABSTRACT

The present chapter explores the emotional competitions and its importance for the personnel that works in the sector of the health. In an environment characterized by the high stress, the human suffering and the complexity relational, the mere technical competition is insufficient to guarantee an attention of quality and sustainable. It is analyzed the concept of emotional intelligence and their components - it makes aware emotional, self-regulation, motivation, empathy and social abilities - in the sanitary context. Through a revision of the literature, it is demonstrated how the development of these competitions impacts positively in the results of the patients, in the reduction of the professional waste (burnout syndrome), in the improvement of the work in team and in the own professional's labor satisfaction. A case of the practice is presented where lacks of emotional competitions are demonstrated in the personnel of an area of health and they intend the bases for a formation program in emotional competitions for those subject of the study, arguing that this investment is not a luxury, but a strategic necessity to make sustainable the systems of health.

Keywords: Emotional Competitions; Emotional Intelligence; Personal of Health; Empathy; Sanitary Attention.

RESUMEN

El presente capítulo explora las competencias emocionales y su importancia para el personal que labora en el sector de la salud. En un entorno caracterizado por el alto estrés, el sufrimiento humano y la complejidad relacional, la mera competencia técnica resulta insuficiente para garantizar una atención de calidad y sostenible. Se analiza el concepto de inteligencia emocional y sus componentes —conciencia emocional, autorregulación, motivación, empatía y habilidades sociales— en el contexto sanitario. A través de una revisión de la literatura, se demuestra cómo el desarrollo de estas competencias impacta positivamente en los resultados de los pacientes, en la reducción del desgaste profesional (síndrome de burnout), en la mejora del trabajo en equipo y en la satisfacción laboral del propio profesional. Se presenta un caso de la práctica donde se demuestran carencias de competencias emocionales en el personal de un área de salud y se proponen las bases para un programa de formación en competencias emocionales para los sujetos del estudio, argumentando que esta inversión no es un lujo, sino una necesidad estratégica para la sostenibilidad de los sistemas de salud.

Palabras clave: Competencias Emocionales; Inteligencia Emocional; Personal de Salud; Empatía;

Atención Sanitaria.

INTRODUCTION

The environment in which healthcare personnel work is inherently emotionally demanding. Constant exposure to pain, illness, uncertainty, and, on occasions, death, generates a significant psychological burden which, if not appropriately managed, can lead to professional burnout, clinical errors, and a dehumanization of care.[1] The training of healthcare professionals has traditionally focused on the development of technical skills and scientific knowledge, leaving preparation for dealing with the emotional dimension of their work in the background.

However, in recent decades, there has been strong evidence that excellence in clinical practice depends as much on technical expertise as on the ability to relate effectively to patients, family members, and other team members. In his work, Goleman popularized the concept of emotional intelligence, defining it as "the ability to recognize our own feelings and those of others, to motivate ourselves and to manage emotions well, both in ourselves and in our relationships".[2] This ability takes the form of a set of emotional skills that healthcare personnel can learn and refine through practice.

Patiño Domínguez[3] states that competence "is more complex than skill, as it incorporates cognitive and attitudinal elements, although in everyday language both terms are often used as synonyms".

Rojas Cadena et al.[4] argue that "The term 'competencies' encompasses a set of characteristics through which people develop the skills necessary to function assertively in various contexts, whether family, interpersonal, or work-related".

Being competent implies having undergone a learning process in which human capacities are developed in a favorable environment that allows for the integration of knowledge, skills, and specific attitudes and values, enabling a person to perform optimally.[3]

Emotional competence should not be confused with sensitivity or condescension, since although it seeks to improve interpersonal relationships, it also involves taking action to identify when mistakes are being made or when people are acting incorrectly due to emotional impulses.[5]

Suriel et al.[6] state that "emotional skills in all areas are of significant value because they promote better decision-making".

There is a wealth of research and scientific data that highlights the importance of emotions in people's lives. Therefore, having a greater understanding of the emotional realm of human beings, as well as the proper management of emotions through the development of emotional intelligence (EI), leads people toward more respectful, empathetic, pleasant, positive, and ethical behaviors.[7]

For this reason, the authors of this chapter set themselves the following objective: to highlight the importance of emotional skills for healthcare workers, demonstrating through a case study the existence of deficiencies in these skills among professionals who interact in the emergency room of the polyclinic in the town of San Juan de los Yeras, located in the

municipality of Ranchuelo, Villa Clara province, Cuba.

The research for the case study was conducted using a non-experimental cross-sectional design, since, according to Barrero Ticona[8], it seeks to "establish cause and effect between its variables", without manipulating the study variables, and cross-sectional since «it collects data at a single point in time and only once».[8]

The freely available Trait Meta-Mood Scale (TMMS) 24 questionnaire by Fernández Berrocal et al. was used, a reduced version of the TMMS-48 with eight items per dimension (perception, understanding, and emotional regulation), which showed adequate psychometric characteristics. The three dimensions were represented in 1) emotional attention with a Cronbach's alpha = 0,80; 2) emotional clarity with a Cronbach's alpha = 0,87; and 3) emotional repair with a Cronbach's alpha = 0,85 for the population.[9] These results demonstrate the instrument›s internal consistency, as evidenced by the high item-to-item correlation, confirming its reliability.

A Likert scale is used for the response, with five options: 1) strongly disagree; 2) disagree; 3) neither agree nor disagree; 4) agree; 5) strongly agree. Healthcare professionals completed the self-report scale according to the instructions.

In the evaluation, the instrument has a correction and scoring system based on the items assigned to the components of EI (perception, understanding, and regulation), with three possible scores.[10]

DEVELOPMENT

Emotional intelligence and competencies

In the 1960s, the term emotional intelligence (EI) was used incidentally in literary criticism[11,12] and psychiatry.[13] Contributions from various authors have enriched it and progressively raised awareness in the business world of its benefits on a personal and professional level.

There are various definitions of EI, almost as many as there are authors who have written on the subject. Darwin was the first to use the concept of EI, pointing out in his works the importance of emotional expression for survival and adaptation. In 1983, in his book Theory of Multiple Intelligences, Gardner introduced the concept of interpersonal intelligence, emphasizing the ability to understand other people's motivations and desires. He also introduced the term intrapersonal intelligence, contributing to the importance of one's own motivations and appreciation of one's own feelings. He defines EI as "the biopsychological potential to process information that can be generated in the cultural context to solve problems".[14]

There is skepticism regarding "the relationship between developed emotional intelligence and success at work or, specifically, success in leading and managing work teams".[15] EI is abstract and intangible, and therefore difficult to measure, which does not help society to understand and internalize this term.

In integrating all EI approaches, this skill is considered an individual process that becomes social, originating in individual emotional knowledge and culminating in collective emotional transcendence. Consequently, a senior manager, middle manager, or employee must be measured at the performance level, both for their operational skills and their emotional aptitudes and degree of EI, under which they are employed, with the ability to perform a specific job effectively.[16]

Figure 6.1 provides a schematic summary of the main features and aspects that must be developed and refined to improve an individual's EI according to Goleman's model.

Figure 6.1. Goleman's principles for developing emotional intelligence[18]

Emotional competencies are practical skills grounded in emotional intelligence that lead to superior job performance.[17]

For Saarni, "emotional competencies are an articulated set of abilities and skills that a person needs to function in a changing environment with greater adaptability and self-confidence".[18]

The fundamental principles or competencies for achieving proper EI are:

- Empathy: the ability to understand others and try to understand their feelings and opinions. By developing this ability, diversity, guidance services, political awareness, and the ability to help others grow can be enhanced.
- Self-regulation: the ability to control impulses, be aware of one's actions, adapt to the environment, and be innovative in the face of events and situations.
- Motivation: the characteristic of doing something for oneself without the encouragement of others and having a drive to achieve and a commitment to one's actions. This skill helps you to take initiative and be optimistic about your daily actions.
- Self-awareness: the ability to know oneself physically and emotionally. It promotes accurate self-assessment and fosters growth in self-confidence as you identify your strengths and weaknesses.
- Assertiveness: knowing how to defend your own opinions and ideas in front of others with the utmost respect, as well as accepting criticism that can help you continuously

improve and grow personally.

- Creativity: the ability to enhance your imagination and observe the world from different points of view, which enhances empathy and self-management.
- Social skills: the ability to relate to other people. With this skill, you can achieve many characteristics that improve and enrich an individual's EI, such as: influencing and communicating with people and the world around them, the ability to manage conflicts, as well as building emotional bonds, the ability to improve collaboration and cooperation, helping to enhance teamwork qualities, personal growth and leadership skills, and finally, the ability to catalyze continuous change in the individual's environment.

Emotional competencies in the healthcare sector

In the healthcare sector, emotional competencies manifest as observable, measurable behaviors that facilitate effective therapeutic interaction. Goleman's model, adapted to the healthcare context, organizes these competencies into two main groups: personal competencies and social competencies.[19]

Personal competencies establish how professionals relate to themselves and manage their inner universe. They consist of:

1. Emotional awareness: This is the basis of competencies and involves the subject recognizing their emotions and their effects. A doctor who makes a complex and unfavorable diagnosis for a patient's life avoids conveying their mood to the patient or their team. As Extremera Pacheco points out,[11] "the ability to perceive and assess one's own moods is a prerequisite for intelligent emotional management". In practice, this means a healthcare professional must be able to distinguish whether their anxiety stems from their workload or from concern for a patient, to act accordingly.
2. Self-regulation: the ability to manage disruptive emotions and impulses. Emotions are not suppressed; instead, they are modulated by context. A healthcare professional with adequate self-regulation can remain calm and clear-headed during an emergency, despite feeling fear or pressure for the patient's life. One study found that physicians with stronger self-regulation skills reported lower stress and greater satisfaction in communicating with patients.[21]
3. Motivation: In the healthcare sector, motivation is intrinsically linked to a vocation for service and a desire to alleviate suffering. A motivated professional is more resilient in the face of adversity, showing a firm ethical commitment and promoting positive change within the institution.

Social skills, on the other hand, reflect how professionals relate to those around them. These include:

1. Empathy: Perhaps the most representative competency in the healthcare field. It consists of the ability to understand patients' and their families' feelings, needs, and points of view, and to act accordingly. Empathy goes beyond "putting oneself in another's shoes"; it involves cognitive understanding and an appropriate emotional response. An empathetic surgeon not only explains the risks of an operation but also perceives the patient's fear and takes the time to dispel their doubts. Hojat et al.[20] proved in their studies that "greater empathy on the part of medical staff is significantly correlated with better clinical outcomes in diabetic patients".[22]
2. Social skills: The ability to promote desirable responses in others. This includes assertive communication, conflict management, teamwork, and leadership. In a multidisciplinary environment such as a hospital, effective collaboration among

professionals from different specialties is vital to patient health. A communication error or omission of information during shift handover or diagnosis can have serious consequences, which is why "social skills are a clinical safety tool".

Study of emotional competencies through a case study

The San Juan de los Yeras polyclinic has various areas of work, provides primary health services, and has a consultation area where multiple specialists from the municipality assess patients from the town. It also has an emergency room for treating health emergencies.

A total of 6 doctors and 12 nurses work in this area, with shifts staggered. A total of six professionals (33,3 %) were randomly selected to ensure a balanced distribution by gender and to allow comparison.

RESULTS AND DISCUSSION

The final results were obtained by averaging responses to the items in each dimension; it should be noted that the instrument differentiates between men and women in terms of scores.

Six professionals (50 % women and 50 % men) aged between 26 and 42 participated in the study.

The analyses were performed using the TMMS-24 to assess metaknowledge of emotional states based on three dimensions: perception, understanding, and regulation.

These results are presented below for each dimension, broken down by gender.

Perception

Defined as:

The ability to feel and express emotions appropriately. Scores < 21 in men and < 24 in women are interpreted as a low perception of emotions. Scores between 22 and 32 for men and 25 and 35 for women indicate adequate perception of emotions. Finally, scores > 33 for men and > 36 for women are associated with excessive attention to their feelings.[24]

For both groups, the average indicates adequate perception of emotions without attention reaching optimal levels: 24,33 for men and 20,00 for women.

In the analysis of each item, it is possible to distinguish the questions with the more negative scores reported by men. In contrast, women showed more homogeneous scores regarding adequate emotional perception. In this regard, table 6.1 shows a negative trend in men's scores for item 5.

Table 6.1. Frequency of responses for item 5 for men I let my feelings affect my thoughts

Value	Absolute frequency	Relative frequency	Cumulative relative frequency	Percentage frequency	Cumulative percentage frequency
1	2	0,67	0,67	66,67	66,67
2	1	0,33	1,00	33,33	100,00
Total	3	1,00		100,00 %	

These results show that 100,00 % of men have difficulty letting their feelings affect their

thoughts, according to the scale measuring self-perception, as reported in questions related to emotional perception or attention, and this is the item with the most negative score in the sample of men.

For women, item 6, "I often think about my feelings," stands out due to its low score.

These results show that 100,00 % of women spend little time thinking about their feelings, devoting their time to those around them (family, co-workers, etc.). This aspect scores most negatively for women.

Understanding

This dimension is the ability to perceive people's different emotional states clearly.

Scores < 25 indicate a low understanding of emotions; for women, these scores should be < 23. Scores of 26 to 35 for men and 24 to 34 for women indicate an adequate understanding of emotional states. Finally, scores > 36 for men and > 35 for women reflect a high level of emotional understanding.

For men, the average was 25,33, which falls on the borderline between low and adequate understanding of their emotions; for women, the average was 38,67, indicating an optimal level of emotional experience.

In the question-by-question analysis, for men, the lowest value was in item 10, "I can often define my feelings," as shown in table 6.2.

Table 6.2. Frequency of responses for item 10 for men I can often define my feelings

Value	Absolute frequency	Relative frequency	Cumulative relative frequency	Percentage frequency	Cumulative percentage frequency
1	1	0,33	0,33	33,33	33,33
2	1	0,33	0,67	33,33	66,67
3		0,00	0,67	0,00	66,67
4	1	0,33	1,00	33,33	100,00
Total	3	1,00		100,00 %	

Item 11, "I almost always know how I feel," also received a low rating among men.

These results show that 100,00 % of men have difficulty defining their feelings, according to the self-perception scale, as reported in questions related to emotional perception or awareness, which is the item with the most negative score for men.

In addition, 66,66 % of men have difficulty knowing how they feel about their emotions, which is the other aspect that scores most negatively in their case.

Regulation

This dimension refers to the ability to manage emotional states appropriately.

About elements related to low emotional regulation, for both men and women, scores < 23

should be found; adequate levels of emotional regulation should have scores of 24 to 35 for men and 24 to 34 for women; finally, excellent emotional regulation should have scores > 36 for men and > 35 for women.

For men, the average was 27,33, indicating an adequate level of emotional regulation, though not optimal; for women, emotional regulation was excellent.

Among men, the items with the lowest scores (they agreed) were 20 "If I overthink things, complicating them, I try to calm down" and 24 "When I am angry, I try to change my mood." Therefore, they need to work on their emotional regulation, as they still do not handle adverse situations appropriately; their responses to specific conditions (e.g., trying to calm down and change their mood) are poor.

PROPOSAL FOR SOCIO-PSYCHOLOGICAL TRAINING IN EMOTIONAL INTELLIGENCE

There are two ways to increase EI in an organization:

1. Hire emotionally intelligent staff, or
2. Fostering EI in the organization's employees.

It should be noted that the first option quickly raises EI in the organization, but it is not always feasible due to labor-market characteristics.

A proposal for socio-psychological training in emotional intelligence was designed for professionals working in the security guard corps. The program will meet weekly and is intended for a total of fifteen to twenty participants. The sessions will be held at the workplace of those involved.

The training consists of four modules:

1. emotional perception,
2. emotional autonomy,
3. social skills, and
4. Emotional regulation.

An introductory session was designed, and then each session corresponds to a module and will be developed as follows:

Each session will consist of several activities, arranged in a logical order of content development and complexity, totaling 25. Below is a summary of the program.

SESSION I: Introduction

Activity 1: My name is.

Objective: To get to know the members of the group, their expectations, and their motivations regarding the program.

Activity 2: Do you know about emotional intelligence?

Objective: For each participant to make a brief assessment of what they know about emotions.

Activity 3: Emotion diary

Objective: To be able to identify the emotions experienced each day.

Activity 4: Summary of what has been learned
Objective: To become aware of what was learned in the introductory session.

SESSION II: Emotional perception
Activity 1: In my free time, I...
Objective: To create connections between group members.

Activity 2: Identifying emotions
Objective: Identify which emotions certain situations produce.

Activity 3: Your body says
Objective: Work on body language.

Activity 4: I feel, and I say
Objective: To be able to identify the feelings and needs that a person assumes when faced with a conflict.

Activity 5: I take your place
Objective: To foster empathy towards the people around you.

Activity 6: With just one word
Objective: To become aware of what has been learned in the session.

SESSION III: Developing social skills
Activity 1: Bring on the hope
Objective: To increase group cohesion.

Activity 2: Come on, say it now
Objective: To explore different communication styles.

Activity 3: Conflict versus communication
Objective: Identify the type of communication used.

Activity 4: Say it without offending
Objective: To learn how to resolve conflicts assertively.

Activity 5: Closing cycles
Objective: Internalize the techniques learned

SESSION IV: Social skills and emotional regulation
Activity 1: Colors of the soul
Objective: To become aware of one's emotional state.

Activity 2: Are you listening to me?
Objective: To practice active listening.

Activity 3: How do I do it?
Objective: To learn how to manage feelings.

Activity 4: Breathe out and let it go
Objective: Master breathing as a means of relaxation.

SESSION V: Emotional autonomy
Activity 1: Let it go
Objective: Practice relaxation in stressful situations.

Activity 2: Adding up
Objective: Identify the positive aspects of each person

Activity 3: I see in you
Objective: Identify the positive qualities that a person has to empower them.

Activity 4: Why did I choose this profession?
Objective: To measure each participant's satisfaction with their work.

Activity 5: The goal
Objective: To determine participants' satisfaction with the course.

Advantages of developing emotional skills in healthcare workers

Developing emotional skills in healthcare workers is not a superfluous investment; it is backed by its impact on key indicators of service quality, resulting in benefits for patients and workers in the sector.

The primary beneficiary will be the patient, since the relationship between the healthcare professional and the patient is, in essence, a therapeutic relationship. Emotional competencies facilitate the development of this relationship in the best possible way for both parties.

Patients who feel listened to, understood, and respected by their doctors are more likely to follow therapeutic recommendations, promoting effective communication as part of social skills and greater treatment effectiveness.

The patient's experience is deeply influenced by the treatment they receive. Empathy, kindness, and respect often weigh as much, or more, than the intervention's technical outcome in the overall assessment of the care received. In practice, negative patient comments focus more on communication and treatment failures than on clinical errors.

Last but not least, a positive emotional state in the patient can influence their neuroendocrine and immune systems, creating conditions more conducive to healing.

In the health sector, human capital is the most valuable asset of any health system, with its well-being an end in itself and a necessary condition for the provision of quality care. Developing the emotional skills of these workers achieves several objectives, such as:

Burnout syndrome, characterized by emotional exhaustion, depersonalization, and low personal fulfillment, can be prevented and reduced. In this case, emotional competencies act as a protective factor. Self-regulation allows stress to be managed adaptively, emotional awareness helps detect the first signs of burnout, and intrinsic motivation helps overcome the negative influence of this syndrome.

Professionals who successfully manage the emotional demands of their work and establish meaningful connections with patients and coworkers feel more effective and purposeful, identifying more closely with their work and, as a result, experiencing lower job turnover.

More effective decision-making is also achieved, as a high level of emotional self-regulation allows for an "open mind" and optimal analytical skills, facilitating more rational clinical decision-making that is less biased by the pressure of medical urgency.

In addition, developing emotional competencies among members of an organization improves the work environment and teamwork, fostering a healthier, more productive environment. The occurrence of errors and adverse events is reduced, as barriers to effective communication are lowered. As a result, efficiency increases, and costs decrease due to lower staff turnover, reduced stress-related absenteeism, and fewer malpractice complaints.

CONCLUSIONS

Emotional intelligence is a tool at the service of organizations, which use it to increase their added value and the skills of their members, enabling them to successfully meet the demands imposed by the environment in which they operate. It is expressed in a set of emotional competencies that can be learned and perfected in practice.

A case study and the application of the Trait Meta-Mood Scale 24 showed that, in general, men scored adequately but not optimally across the different dimensions. In contrast, women scored more consistently, indicating that they have greater emotional intelligence than their male counterparts.

A draft program was designed to enhance emotional intelligence among professionals working in the emergency room of the San Juan de los Yeras polyclinic, to offer resources and tools to develop and/or improve emotional skills, based on the personal and professional benefits of effective emotional management.

The development of emotional skills offers several advantages from the perspectives of patients, health professionals, and organizations themselves, which is why this process is highly recommended.

BIBLIOGRAPHICAL REFERENCES

1. Mérida López S, Extremera Pacheco N, Rey L. Emotional intelligence and teacher burnout: a systematic review. Int J Educ Res. 2017;85:121–30. https://doi.org/10.1016/j.ijer.2017.07.006

2. Goleman D. Inteligencia emocional. Barcelona: Editorial Kairós; 1995.

3. Patiño Domínguez HAM. Competencias emocionales. Rev Int Educ Emoc Bienest. 2024;4(2):IX–XIII. https://doi.org/10.48102/rieeb.2024.4.2.105

4. Rojas Cadena CM, Ruiz Silva AM, Díaz Mosquera EN. Propuesta psicoeducativa sobre competencias emocionales en jóvenes universitarios. Sophia (Colecc Filos Educ). 2024;(36):169–97. https://doi.org/10.17163/soph.n36.2024.05

5. Mórtigo Rubio AM, Rincón Caballero DA. Competencias emocionales como estrategia para la resolución de conflictos en la educación superior: el caso de la Universidad Militar

Nueva Granada, Bogotá-Colombia. 2018. Disponible en: https://repositorio.uptc.edu.co/bitstream/001/6063/1/competencias_emocionales_estrategia.pdf

6. Suriel AJ, Escalante JL. Competencias emocionales y su relación con el liderazgo efectivo: un acercamiento desde las directoras educativas de la República Dominicana. Cuad Pedag Univ. 2023;21(41):52–63. http://cuaderno.pucmm.edu.do

7. Lotito F. Liderazgo e inteligencia emocional: las emociones como parte relevante del negocio. Rev Acad Negoc. 2022;8(1):71–86. https://doi.org/10.29393/RAN8-2LIFL10002

8. Barrero Ticona JE. Metodologías de la investigación científica: un enfoque práctico. Perú: Colecciones Culturales; 2023.

9. Fernández-Berrocal P, Extremera N, Ramos N. Validity and reliability of the Spanish modified version of the trait meta-mood scale. Psychol Rep. 2004;94:751–5. https://doi.org/10.2466/pr0.94.3.751-755

10. González R, Custodio JB, Abal FJP. Propiedades psicométricas del Trait Meta-Mood Scale-24 en estudiantes universitarios argentinos. Psicogente. 2020;23(44):1–26. https://doi.org/10.17081/psico.23.44.3469

11. Extremera Pacheco N. Inteligencia emocional en educación. Madrid: Editorial Síntesis; 2014.

12. Gardner H. Estructuras de la mente: la teoría de las inteligencias múltiples. México: Fondo de Cultura Económica; 1994.

13. Zapatero Cardenal AJ. Inteligencia emocional y coaching en la empresa [tesis de pregrado]. Madrid: Universidad Pontificia Comillas; 2018. Disponible en: https://repositorio.comillas.edu/jspui/bitstream/1151/1870/1/TGF-%2520Zapatero%2520Cardenal

14. Van Ghent D. The English novel: form and function. New York: Harper & Row; 1961.

15. Leuner B. Emotional intelligence and emancipation. Prax Kinderpsychol Kinderpsychiatr. 1966;15:193–203.

16. Boyatzis RE, Goleman D, Rhee KS. Clustering competence in emotional intelligence: insights from the Emotional Competence Inventory (ECI). En: Bar-On R, Parker JDA, eds. The handbook of emotional intelligence. San Francisco: Jossey-Bass; 2000. p. 343–62.

17. Lagos N, Anabalón Y, Concha M, López López C. Competencias emocionales en educación superior: una revisión sistemática. Rev Digit Investig Doc Univ. 2025;19(1):e1828. https://doi.org/10.19083/ridu.2025.1828

18. Goleman D. Inteligencia emocional. Barcelona: Editorial Kairós; 2020.

19. Weng HC, Steed JF, Yu SW, Liu YT, Hsu CC, Yu TJ, et al. The effect of surgeon empathy and emotional intelligence on patient satisfaction. Adv Health Sci Educ. 2011;16(5):141–54. https://doi.org/10.1007/s10459-010-9251-6

20. Hojat M, Louis DZ, Markham FW, Wender R, Rabinowitz C, Gonnella JS. Physicians' empathy and clinical outcomes for diabetic patients. Acad Med. 2011;86(3):359–64. https://doi.org/10.1097/ACM.0b013e3182086f1d

21. Leonard M, Graham S, Bonacum D. The human factor: the critical importance of effective teamwork and communication in providing safe care. Qual Saf Health Care. 2004;13(Suppl 1):i85–90. https://doi.org/10.1136/qshc.2004.010033

22. Castro Castiblanco YM, Guayacundo Ramos MJ, Giraldo León CI, Caro Delgado AG. Caracterización de la inteligencia emocional mediante el TMMS-24 en estudiantes de secundaria de Bogotá. Psicoespacios. 2022;16(29):1–18. https://doi.org/10.25057/21452776.1451

ACKNOWLEDGMENTS

To the workers at the San Juan de Los Yeras polyclinic.

FUNDING

This work has not received specific funding from public, commercial, or non-profit funding agencies.

CONFLICT OF INTEREST

There are no conflicts of interest of any kind with commercial institutions or associations.

AUTHOR CONTRIBUTIONS

Conceptualization: Nolivio López Díaz.
Data curation: Idesnel Banguela Pérez.
Formal analysis: Nolivio López Díaz.
Investigation: Nolivio López Díaz.
Writing—original draft: Nolivio López Díaz.
Writing—review and editing: Nolivio López Díaz.