Emotional intelligence characterization in university students at a nutrition bachelor's degree

Caracterización de la inteligencia emocional en estudiantes universitarios del área de nutrición

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Abstract

Objective: Identify the levels of emotional intelligence possessed by students of a Bachelor of Nutrition degree at a university in southeastern Mexico.

Materials and methods: According to reviewed documental sources this is a quantitative study, with a descriptive non-experimental approach. In this research, a validated Salovery and Meyer TMMS-24, adapted to Spanish, was applied; this instrument consists of 24 items, subdivided into three subscales or dimensions of the Likert type made up of five items. The sampling was non-probabilistic, including 172 university students, who accepted the terms of the informed consent. For data analysis, the SPSS v.25 program was executed to assembly the information obtained through descriptive statistics (frequency, mean, median and percentage) and variability measures (range, standard deviation and variance). A t-Student test was performed for the analysis of means according to the levels, with a p value <0.005 to determine statistically significant differences.

Results: 52.91% of the students are located at a level of "adequate attention", but 47.1% must improve. In relation to the level of understanding, 43.60% have adequate clarity in this sphere of emotional intelligence, while 56.60% must improve this component and 52.33% have adequate regulation, while 47.67% must improve. No statistically significant differences were found; as well as there were no differences in the means between both genders (p = ≥0.05).

Conclusions: The study population showed an adequate management level of their emotional intelligence, being emotional perception the one that is presented more frequently as adequate, however, the clarity of feelings presents the lowest levels, so It is evident the need to carry out intervention programs in university students to promote further development of the dimensions that make up emotional intelligence.

Keywords: Emotional intelligence; Students; Nutrition; University.

Resumen

Objetivo: Identificar los niveles de inteligencia emocional en estudiantes de la Licenciatura en Nutrición de una universidad en el sureste de México.

Materiales y método: Es un estudio cuantitativo, no experimental descriptivo. En la investigación se aplicó el TMMS-24 de Salovery y Mayer, adaptada al español; dicho instrumento consta de 24 ítems, subdividida en tres subescalas o dimensiones, de tipo Likert conformado por cinco ítems. El muestreo fue no probabilístico, incluyendo a 172 estudiantes universitarios, quienes aceptaron los términos del consentimiento informado. Para el análisis de los resultados se ejecuta el programa SPSS v.25 para agrupar la información obtenida mediante la estadística descriptiva (frecuencia, media, mediana y porcentaje) y medidas de variabilidad (rango, desviación estándar y varianza). Se realizó una prueba de t-Student para el análisis de medias según los niveles, con valor p < 0.005 para determinar diferencias estadísticamente significativas.

Resultados: El 52.91 % de los estudiantes se ubican en un nivel de "adecuada atención", pero el 47.1 % debe mejorar. En relación con el nivel de comprensión el 43.60 % tiene una adecuada claridad en esta esfera de la inteligencia emocional, mientras el 56.60 % debe mejorar este componente y el 52.33 % tiene una adecuada regulación, mientras 47.67 % debe mejorar. No se encontraron diferencias estadísticamente significativas; así como tampoco hubo diferencias de las medias entre ambos géneros (p=≥0.05).

Conclusiones: La población de estudio se ubica en un adecuado manejo de su inteligencia emocional, siendo la percepción emocional la que se presenta con mayor frecuencia como adecuada, sin embargo, la claridad de sentimientos es la que presenta los niveles más bajos, por lo que es evidente la necesidad de llevar a cabo programas de intervención en universitarios que fomenten el desarrollo de las dimensiones que conforman la inteligencia emocional.

Palabras Clave: Inteligencia emocional; Estudiantes; Nutrición; Universitarios.

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Introduction

The approach to human health can be understood from the conceptualization of the integrated construct of a complex network that integrates biological, psychological, social, cultural, economic and spiritual aspects, beyond just a biological reductionism oriented to health, allowing through emphasis the conjugation of these, for the achievement of a complete state of well-being[1].

Through the constant search for the state of well-being in the field of exercise of health professionals, the psychological aspect offers the opportunity to understand "emotions", as a substantial element for the establishment of interpersonal relationships through direct contact with sick people during the care they provide in their professional practice[2].

The emotions that health professionals develop in this process show that the understanding of emotions plays a fundamental role in the dynamics of social interaction and in its influence on the state of well-being and therefore in the preservation of mental health. It is important to consider that this understanding of emotions is carried out from the teaching-learning process that undergraduate students in the area of nutrition put into practice in the classroom and in clinical fields, thus acquiring skills and abilities for the care of the human being and of themselves, contemplating and adhering in the psychological, under the gaze of the understanding of the emotional aspect[1,2].

In their daily actions, health professionals are constantly interacting with human beings from their individuality to a collective sense, these individuals are considered vulnerable by having different types of diseases[1]. The undergraduate student establishes contact with them from the development of practical learning units as well as in the execution of their social service, in which at all times it is encouraged to carry out a sustained practice, in the case of professionals in nutrition, in evidence-based nutrition, with an empathetic, flexible, critical and supportive attitude in order to provide comprehensive care to the person[2], in this interaction process the establishment of an empathic process with the individuals under their care, opening up to the experimentation of a conglomerate of emotions from the interaction with them, even on some occasions to live, feel and share together with the human being who cares for a series of emotions that are gestate during their stay in a hospital institution[3], hence it is important to talk about the emotional intelligence (EI) of undergraduate students in nutrition, in order to enable them in reference to emotional awareness and regulation based on the recognition of their own emotions and of those who are in their care during their professional practice.

The term Emotional Intelligence (EI) was developed in the 90s by Salovey and Mayer and, later, by Goleman due to the need to expand the concept of intelligence beyond the IQ[4]. EI is a concept that is related to the development of important capacities to achieve personal balance and integration in the environment, as well as the socio-emotional development of students[5]. EI is important to predict behavior and has a decisive influence on the different areas related to Healthcare. Therefore, it has great relevance in the educational and social fields[6] and of course in the establishment and improvement of labor relationships within hospitals[7,8]. Emotions directly influence our emotional state and our physical and mental health, due to their impact on health, they can be considered as positive emotions and negative emotions. Those that have a considerable influence on our quality of life directing the subjects towards the improvement of health and personal and social well-being are the positive ones, however, in the opposite direction when these emotions suppose a risk factor for health, they are considered as negative[8].

The relationship between emotional states and the well-being of individuals is evident, as well as the influence exerted by the level of EI that regulate their behaviors, studies show that low levels of EI directly affect the levels of well-being and psychological adjustment, they also affect school performance, level of relationship with others, disruptive behaviors and consumption of toxic substances. On the contrary, high levels of EI are related to high levels of mental health and general well-being[4]. Young university students show that students with a high EI level report having lower levels of anxiety, depression and hopelessness, and a higher level of self-esteem and interpersonal satisfaction[4,5]. Therefore, it is considered essential to promote the development of EI in students for the increase of well-being at a personal and social level, since it is determined as a predictive value of academic performance and psychological balance in university students[3,4,7].

EI is a key concept to organize the skills and / or abilities and interpersonal communication capacities of the student or health professionals with the human beings they care for, it is very important to identify the EI of university students during their academic training to promote ability to know how to act emotionally starting from the construction of their own understanding in relation to their own emotions, thus generating an emotional awareness and establishing effective and healthy interpersonal relationships[1].

The requirements for the undergraduate student are mainly aimed at obtaining good grades, as well as the accreditation of academic courses that make them worthy of a university degree which enables them to enter the workplace. It is at this level of academic training at a higher level that it is evidenced that only on some occasions there are instruments

where the feelings of the student have been taken into consideration regardless of their cognitive or intellectual development, various authors mention that EI accounts for 80% of academic and / or work success, and only 20% involve the IQ, highlighting the relevance of the ability to conceptualize personal emotions, develop understanding to understand the feelings of others and the development of social abilities that allow interaction with third parties, as fundamental aspects of the person, especially in those that are being formed to provide a health care service[1,3,8].

In the documentary review, information on EI in university students was sought, with emphasis on students in the health area (nutrition, nursing, physiotherapy, psychology, and medicine), in this review, not many related data were found, within the geographic location of Mexico, there is an evident scarcity of EI studies carried out with undergraduate students in the health area during their academic training, however, a similar study was found within the Mexican Republic and related studies in other countries that refer to alterations in the emotional states of undergraduate students in the health area. These investigations indicated that the lack of EI is a problem that occurs in the context in which the student learns, that it is necessary to pay attention to EI because the development of it positively favors the personal progress of health related career students, through the internalization, empowerment and appropriation of a sense of caring for their person in the first instance so that later they become trained to take good care of others[1,3,6,8,9].

A worldwide public health event has already impacted the educational system in Mexico in January 2020, the Emergency Committee of the World Health Organization (WHO) declared a global health emergency due to the outbreak of the coronavirus SARS CoV2 (disease of the coronavirus 2019; formerly CoV19), in the Hubei province of the People's Republic of China, which has spread to many other countries with a high burden of morbidity and mortality, meanwhile the incidence in other Asian countries, in Europe and Latin America North remains low to date. With the consequence that the entire population worldwide had the need to establish a period of social confinement to prevent the spread of this virus, and Mexico was no exception, in the case of the Mexican educational system, the suspension of activities was established for schoolchildren and / or vocational training and at this point, managers and teachers sought to translocate their classes from classrooms to the virtual mode through the use of various existing information and communication technologies platforms and tools; where, different limitations were manifested by university students in relation to the existence of a lack of knowledge of the use of digital tools and media, as well as an emotional distress caused by the idea of not being in contact with their classmates and even with the teacher through the execution

of their activities in the classroom, thereby fostering an emotional demand for adaptation to a new study modality[10].

Therefore, it is considered transcendent to study the levels of EI that undergraduate students of the Bachelor of Nutrition show during their academic training, based on the premise that at the time of their graduation they will be the health professionals who will provide care to the general population, thus becoming those in charge of promoting a state of integral health in people.

Materials and Methods

The present investigation had a quantitative, descriptive, cross-sectional, non-experimental approach. An instrument with 3 validated scales was applied, which was digitized and programmed using the Google Drive Form tool and applied from May 3 to June 3, 2021, to students at a nutrition degree program from a university in southeastern Mexico, under the General Health Law[11], with prior informed consent, an informative meeting was also held with school managers, teachers and students with the purpose of explaining the objectives of the research, informing them about the benefits they would obtain from participation in filling out the questionnaire and its importance, the sample was selected following the criteria of convenience, accessibility and availability of the participants, the information obtained was handled anonymously and confidentially, in order to avoid exhibiting to students under the law of confidentiality of use of personal data. The results obtained were handled with professionalism and care and submitted to the ethics committee for approval which was granted.

Convenience sampling is used, consisting of 172 students, with inclusion criteria of being enrolled in the educational institution, attendance to the information meeting, and accepting to participate voluntarily, the exclusion criteria are not being enrolled in the educational institution, not wanting to participate and the elimination criteria applies to those who did not fill out the instrument correctly.

The Salovery and Mayer Trait Meta-Mood Scale (TMMS-24) adapted to Spanish was applied, which measures Emotional Intelligence; This instrument consists of 24 items, subdivided into three subscales or dimensions. The Likert-type scale of five items, the score is displayed through a coding of items with scores 1-2-3-4-5, being: 1 = Does not agree, 2 = Somewhat agree, 3 = Agree enough, 4 = Strongly agree and 5 = Totally agree. Each component provides information on emotional perception or attention, emotional clarity, and emotional repair or regulation (Table 1).

Table 1. Emotional Intelligence components inTMMS-24

Variable	Components	Definition	Items	Internal Consistency
Emotional Intelligence	Perception or emotional attention	It refers to our own awareness of our emotions, the ability to recognize our feelings and know what they mean.	1, 2, 3, 4, 5, 6, 7, 8.	0,90
	Emotional Clarity	It refers to the ability to identify and understand emotions, knowing how to distinguish between them, understanding how they evolve and integrating them into thought.	(9, 10, 11, 12, 13, 14, 15, 16	0,90
	Repair or emotional regulation	It refers to the ability to regulate and control positive and negative emotions.	17, 18, 19, 20, 21, 22, 23, 24	0,85

Source: Adapted from Espinoza-Venegas *et. al.* (2015)[12]; Taramuel Villacreces y Zapata Achi (2017)[13] y Andrade Saco (2018)[14].

The TMMS-24 has cut-off points for men and women, since there are differences in the scores for each of them (Table 2).

Table 2. Cut-off points by gender

Components	Level	Male	Female
Perception or emotional attention	Must improve attention: pays little attention.	< 21	< 24
	Adequate level of attention.	22 a 32	25 a 35
	Must improve attention: pays too much attention.	>33	>36
Emotional Clarity	Must Improve Clarity	< 25	< 23
	Adequate level of clarity	26 a 35	24 a 34
	Excellent clarity	>36	>35
Repair or emotional regulation	Must Improve regulation	< 23	< 23
	Adequate level of regulation	24 a 35	24 a 34
	Excellent regulation	>36	>35

Source: Adapted from Espinoza-Venegas *et. al.* (2015)[12]; Taramuel Villacreces y Zapata Achi (2017)[13] y Andrade Saco (2018)[14].

To prepare the results of the study, Microsoft Excel software was used, this allowed the construction of a database of the applied instruments, which provided the opportunity to identify the way in which the information could be grouped, then the SPSS v.25 program was executed. to group the information obtained through the descriptive statistics through the questionnaires, executing the frequency distribution, measures of central tendency (mean, median and mode), measures of variability (range, standard deviation and variance). A t-Student test was carried out for the analysis of means according to the levels, a p value <0.005 was taken as a cut-off point to determine statistically significant differences.

Results

172 surveys were analyzed, of these 78% (134) correspond to female students and 22% (38) to male students, with an average age in women of 20.92 ± 3.31 years and 21 ± 2.21 years in males distributed in different academic cycles and five generational cuts for the 2016 to 2020 academic cycles.

Table 3 shows the average of the scores obtained by women and men in the TMMS-24 considering the values established by the authors of the scale, which show the cut-off points for men and women, since there are differences in the scores for each of them (Table 4.

Table 3. Emotional Intelligence average scores

Components	Females		Males	
	Mean	Level	Mean	Level
Attention	26.57 ±6.50	Adequate	26.87 ±7.47	Adequate
Comprehension	24.90 ±7.23	Adequate	26.71 ±6.62	Adequate
Regulation	26.47 ±7.09	Adequate	26.07 ±8.61	Adequate

Source: Prepared by the Authors.

Table 4. shows the comparison of gender with the different subscales of emotional intelligence.

Components	Total			Female			Male		
	f	%		f	%	x̄		f	%	x̄
Attention Level										
Must improve attention: pays little attention.	62	36.05		54	40.30	19.87 ±2.5		8	21.05	15.88 ±3.3
Adequate level of attention.	91	52.91		68	50.75	30.10 ±3.2		23	60.53	27.57 ±3.5
Must improve attention: pays too much attention.	19	11.05		12	8.96	36.75 ±0.7		7	18.42	37.06 ±2.5
Comprehension Level										
Must Improve Clarity	77	44.77		60	44.78	18.40 ±9.7		17	44.74	20.53 ±2.8
Adequate level of clarity	75	43.60		59	44.03	28.08 ±3.1		16	42.11	29.75 ±2.4
Excellent clarity	20	11.63		15	11.19	38.33 ±1.8		5	13.16	38.00 ±1.4
Regulation Level										
Must Improve regulation	58	33.72		45	33.58	18.49 ±3.2		13	34.21	16.85 ±4.4
Adequate level of regulation	90	52.33		72	53.73	28.72±3.17		18	47.37	29.56 ±3.5
Excellent regulation	24	13.95		17	12.69	38.05 ±1.55		7	18.42	38.14 ±1.4

Source: Prepared by the Authors.

Discussion

Currently, a series of changes of a social, economic, political and cultural nature are being experienced, thereby fostering a complex and dynamic environment, in which both individuals and organizations are socially affected in relation to the establishment of relationships between people, as well as labor interactions between workers and institutions[6].

Starting from the paradigm shift on the conceptualization of EI, the new approach to its importance lies precisely in the rupture produced with the theory of the intellectual coefficient (IQ), which is based on the mathematical and linguistic skills predicted by the academic performance and professional success, but it does not contemplate its subsequent evolution, that is, it does not study the relationship between EI and the success of individuals based on the set of social and emotional competencies that it encompasses. So much so that the transition of this new construct, shows that for some decades, a change has been taking place in the labor market where a series of competencies is demanded in individuals that encompasses something more than training or demonstrable experience, In other words, health professionals currently have the hard skills, being those learned from knowledge, and that can be useful for any type of institution starting from the IC, as well as the soft skills that refer to the added value that is contributed through the attitude in their professional practice through the use of EI[1,6,7].

A characteristic of EI applicable to health professionals is the fact that they include in their daily actions a set of capacities that explain individual differences in the way of perceiving and understanding emotions. These capacities are to monitor one's own feelings and emotions, as well as those of others,

to discriminate between them, and to use the information to guide thought and actions[7]. The acquisition of competences, abilities, capacities and values on the part of the student favor the development of EI, allowing them to recognize, understand and regulate their own emotions and those of others. This involves three processes: 1) perceiving what we feel and being able to give it a verbal label; 2) understand, integrate what we feel into our thinking and know how to consider the complexity of emotional changes; 3) regulate, direct and manage both positive and negative emotions effectively[10].

The university student faces a period of adaptation to the new challenges posed by higher education during the first semesters, progressively in the coming educational cycles the demands are increasing, as well as the academic responsibilities according to the level of complexity of the formative contents, generating scenarios that affect the dynamics of learning and academic performance based on the emotions that the student experiences, that is why within the development of academic life the applicability of EI is necessary to establish a directed personal study plan significantly for the achievement of academic, work and daily success. However, it is important to consider that the deficit in EI skills affects the academic performance, well-being and emotional balance of undergraduate students[15,16].

The main objective of this research is to analyze and expose the data referring to EI in university students, where it is seen that the average scores obtained by the students place both men and women in a range that is considered adequate management of EI in the three spheres that the TMMS-24 evaluates, results similar to those reported by Pérez, Estrada and Estrada[10] and Rodríguez, Rodríguez and Rodríguez[4].

In the present study it is observed that 52.91% of the students are located at a level of "adequate attention", but 36.05% of the population must improve, since it was determined that they pay little attention and 11.05% pay too much attention, being women where these situations are accentuated in comparison with men. Emotional perception or attention implies the ability to analyze how emotional states influence cognitive processes. Managing this skill is a great tool, since experiencing the right emotions at the right time helps to improve attention processes in the classroom[1,4,17].

In relation to the level of understanding, it is determined that 43.60% have adequate clarity in this sphere of EI, but 44.77% of the population must improve this component, being a problem for both genders (44.78% female and 44.74% male). Skill refers to the knowledge one has of one's own emotional system and that of other people, that is, knowing how emotions are processed at a cognitive level. An individual who has mastered the skill has a rich emotional vocabulary; possesses a sophisticated understanding of emotions; accepts that both himself and others who experience complex sensations and feelings every day[5,7,8].

Reflective regulation is the most complex of all the skills that make up EI and consists of managing emotions intra- and interpersonally, reducing their negative effects and maximizing positive ones without repressing or exaggerating them[3,7,9]. The results of this research on this component of EI indicate that 52.33% of the population has adequate regulation, however, 33.72% should improve this sphere, being a problem for both genders (33.58% female and 34.21% male).

When analyzing the results of a T-Student test for the analysis of means according to the levels, no statistically significant differences were found; as well as there were no differences in the means between both genders (p = ≥0.05). Regarding the limitations of the present study, the imbalance between the sample size by groups with respect to gender stands out.

Understanding EI is the first step towards understanding the development of human beings, since it is a complex aspect that must be considered from different points of view, taking into account individual, social, and cultural aspects[16], what is evident is the need for intervention in university students with programs that promote the development of the dimensions that make up EI.

Conclusions

The understanding of EI is a complex aspect that involves individual, social, and cultural aspects that give the guideline for the individual's involvement with their own emotions and the social relationships that they establish from them, as well as their personal and professional development starting from of the acquisition of socio-emotional competences from his academic career in the health area. Based on the results obtained, it was possible to determine the following traits in relation to the EI of undergraduate students of the degree in nutrition.

It should be noted that the study population in a general way is located in an adequate management of its EI, being the emotional perception the one that is presented more frequently as adequate, however, the clarity of feelings is the one that presents the lowest levels, Therefore, it is evident the need to carry out intervention programs in university students that promote the development of the dimensions that make up EI. This with the intention of empowering students with the necessary skills to be emotionally intelligent health professionals. No statistically significant associations were found between the EI subscales.

Nutrition students obtain a theoretical-practical preparation in terms of skills and abilities for professional development. However, they are not prepared to face daily situations that involve the emotional, it is observed that their participation in the teaching-learning process is by obligation.

It is recognized in a broad sense that EI is fundamental for the academic training of undergraduate students in nutrition to strengthen the competencies related to its humanistic role in interaction with individuals, whose components involve empathy, responsibility, conscience, self-knowledge, ability to cope with stressful situations and social skills that allow interaction among others.

It is necessary that the authorities of the institution give importance to the EI of the students, thereby providing the facilities that allow the implementation and execution of courses or workshops where students in the area of nutrition are trained and trained with the emotional tools and components of EI, applicable to the nutritional care of the population for optimal professional practice.

Conflicts of Interest

The authors declare no conflicts of interest

Authors contribution

Conceptualization and design, A.E.T.Z., C.C.L.G., and K.A.P.J.; Methodology, A.E.T.Z., C.U.E.R., and T.J.B.C.; Data acquisition and software, A.E.T.Z., C.C.L.G., and K.A.P.J.; Data curation, analysis and interpretation, C.U.E.R and T.J.B.C.; Principal investigator, A.E.T.Z.; Investigation, C.U.E.R., T.J.B.C., and K.A.P.J.; Manuscript writing- Preparation of original draft, A.E.T.Z.; Writing, review and

References

1. Torres Estrada N, Sosa Rosas MP. Inteligencia emocional de los estudiantes de pregrado de licenciaturas de enfermería. Rev. Cuid. [Internet]. 2020 [Citado 08 julio 2021]; 11(3): e993. https://doi.org/10.15649/cuidarte.993

2. Universidad Autónoma del Carmen. Plan de estudios de la licenciatura en Nutrición [Internet]. México: Facultad Ciencias de la Salud; 2017 [Citado 08 julio 2021]. Available from: http://www.unacar.mx/f_salud2017/datos/MapaNutricion2011.pdf

3. Sosa Hernández AK, Barragán Ledesma LE, Estrada Martínez S, Quintanar Escobar MA. Análisis de niveles de inteligencia emocional en estudiantes universitarios del área de la salud. Altern. Cub. en Psi. [Internet]. 2017 [Citado 08 julio 2021]; 5(13):1-9. Available from: http://www.alfepsi.org/revista-alternativas-cubanas-en-psicologia-vol5-n13/

4. Rodríguez Góngora J, Rodríguez Rodríguez JC, Rodríguez Rodríguez JA. Inteligencia emocional en universitarios: análisis descriptivo en alumnos de 1º y 2º curso de Grado. Know Share Psychol. [Internet]. 2020 [Citado 09 julio 2021]; 1(1):23-37. https://doi.org/10.25115/kasp.v1i1.3081

5. Extremera Pacheco N, Fernández-Berrocal P. El papel de la inteligencia emocional en el alumnado: evidencias empíricas. Rev. Electrón. Investig. Educ. [Internet]. 2004 [Citado 10 julio 2021]; 6(2):1-17. Available from: http://www.scielo.org.mx/pdf/redie/v6n2/v6n2a5.pdf

6. Cazallo AM, Bascón M, Mudarra AB, Salazar EJ. La inteligencia emocional en los estudiantes universitarios. Espacios [Internet]. 2020 [Citado 13 julio 2021]; 41(23):333-345. Available from: https://www.revistaespacios.com/a20v41n23/a20v41n23p28.pdf

7. Fragoso Luzuriaga R. Retos y herramientas generales para el desarrollo de la inteligencia emocional en las aulas universitarias. Praxis Educativa (Arg) [Internet]. 2018 [Citado 13 julio 2021]; 22(3):47-55. DOI: 10.19137/praxiseducativa-2018-220305

8. Vasefi A, Dehghani M, Mirzaaghapoor M. Emotional intelligence of medical students of Shiraz University of Medical Sciences cross sectional study. Ann Med Surg (Lond). [Internet]. 2018 [Citado 14 julio 2021]; 32:26-31. DOI: 10.1016/j.amsu.2018.07.005

9. Alves Apóstolo JL, Alves Rodrigues M, Pineda Olvera J. Evaluación de los estados emocionales de estudiantes de enfermería. Index Enferm [Internet]. 2007 [Citado 14 julio 2021]; 16(56):26-29. Available from: http://scielo.isciii.es/scielo.php?script=sci_arttext&pid=S1132-12962007000100006&lng=es

10. Pérez Jaimes AK, Estrada Reyes CU, Estrada Gutiérrez CE. Estado emocional en alumnos de Nivel Superior de universidades Públicas/Privadas tras la contingencia del SARS COV2. Rev. RedCA [Internet]. 2020 [Citado 13 julio 2021];3(8):182-192. https://doi.org/10.36677/redca.v3i8.15483

11. Reglamento de la Ley General de Salud en Materia de Investigación para la Salud [Internet]. Diario Oficial de la Federación. 02-04-2014 [Consultado 2019 Oct 15]. Available from: http://www.diputados.gob.mx/LeyesBiblio/regley/Reg_LGS_MIS.pdf

12. Espinoza-Venegas M, Sanhueza-Alvarado O, Ramírez-Elizondo N, Sáez-Carillo K. A validation of the construct and reliability of an emotional intelligence scale applied to nursing students. Rev. Latino-Am. Enfermagem [Internet]. 2015 [Citado 15 julio 2021]; 23(1):139-147. https://doi.org/10.1590/0104-1169.3498.2535

13. Taramuel Villacreces JA, Zapata Achi VH. Aplicación del test TMMS-24 para el análisis y descripción de la Inteligencia Emocional considerando la influencia del sexo. Revista Publicando. [Internet]. 2017 [Citado 15 julio 2021]; 11(1):162-181. Available from: https://revistapublicando.org/revista/index.php/crv/article/view/518/pdf_345

14. Andrade Saco LM. La inteligencia emocional y su relación con el rendimiento académico en asignatura de estadística en educación superior [Tesis Maestría]. Perú: Universidad Nacional Mayor de San Marcos; 2018. Available from: https://hdl.handle.net/20.500.12672/7715

15. Orejarena Silva HA. Relación entre inteligencia emocional, estilos de aprendizaje y rendimiento académico en un grupo de estudiantes de psicología. Inclusión y Desarrollo [Internet]. 2020 [Citado 15 julio 2021]; 7(2):22-36. https://doi.org/10.26620/uniminuto.inclusion.7.2.2020.22-36

16. Jarrin W. Inteligencia emocional y rendimiento académico en estudiantes universitarios: Una revisión crítica de evidencias empíricas. Impacto Científico. Impacto Científico [Internet]. 2020 [Citado 15 julio 2021];15(2):416-429. Available from: https://produccioncientificaluz.org/index.php/impacto/article/view/34513

17. Silva Idrovo MRR, Pino Morán MFN, Guzmán Barquet MEA. Implicaciones de la inteligencia emocional en los estilos de liderazgo. Universidad y Sociedad [Internet]. 6abr.2018 [citado 19ago.2021];10(3):247-54. Available from: https://rus.ucf.edu.cu/index.php/rus/article/view/945