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## ***Physical activity and emotional control in the health of the healthcare professional***

*La actividad física y el control emocional en la salud del profesional de enfermería*

*Atividade física e controle emocional na saúde do profissional de enfermagem*

Alicia Morales Iturio<sup>1\*</sup>  , Hilda Narváez Bustos<sup>1</sup> 

<sup>1</sup> Autonomous University of Guerrero, Mexico.

\*Corresponding author: profesmx2023@outlook.es

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### **ABSTRACT**

The activities carried out by the nursing professional produce them health problems, with stress being the first factor that will affect one's own rhythm, causing irritability and anxiety. Physical-sports practice has a positive effect on their physical and mental health because it produces the release of endorphins, which leads to a reduction in anxiety, depression and stress because any type of physical activity, whether low or high impact, releases these substances that act directly on the brain, producing a feeling of well-being and immediate relaxation. A research is presented with a non-experimental design, from the quantitative



approach of a cross-sectional comparative descriptive type. Its objective is to determine the relationships between physical activity and emotional regulation of a group of nurses from the Sur Hospital in Chilpancingo, Guerrero, Mexico. The TMMS-24 Emotional Intelligence Assessment Scale and the International Physical Activity Questionnaire (IPAQ) were applied. To determine the relationship between the variables, Spearman's Rho Correlation was used. The dimensions studied are attention, clarity and emotional repair by the dependent variable (Emotional Control) and the High, Medium and Low dimensions by the independent variable (Physical Activity). In the community where the signs and symptoms of nervousness, agitation or tension associated with situations of anxiety and stress were observed, direct correlations were established between the intensity of physical activity and the emotional control of the subjects studied, that is, at a lower intensity of physical activity, less control and emotional regulation.

**Keywords:** physical activity, emotional control, nursing

## RESUMEN

Las actividades que realiza el profesional de la enfermería les producen quebranto en la salud, siendo el estrés el primer factor que va a afectar el ritmo propio, ocasionando irritabilidad y ansiedad. La práctica físico-deportiva tiene un efecto positivo sobre su salud física y mental debido a que produce liberación de endorfinas, lo que conlleva una reducción de la ansiedad, la depresión y el estrés, ya que cualquier tipo de actividad física, ya sea de bajo o alto impacto, libera estas sustancias que actúan directamente sobre el cerebro, produciendo sensación de bienestar y relajación inmediata. Se presenta una investigación con un diseño no experimental, desde el enfoque cuantitativo de tipo descriptivo comparativo de corte transversal. Tiene como objetivo: determinar las relaciones entre actividad física y regulación emocional de un grupo de enfermeras (o) s del Hospital Sur en Chilpancingo, Guerrero, México. Se aplicó la Escala para Evaluación de la Inteligencia Emocional TMMS-24 y el Cuestionario Internacional de Actividad Física (IPAQ). Para determinar la relación entre las variables se empleó la Correlación del Rho de Spearman. Las dimensiones estudiadas son la atención, claridad y reparación emocional por parte de



la variable dependiente (Control emocional) y las dimensiones Alta, Media y Baja por la variable independiente (Actividad física). En la comunidad donde se observaron los signos y síntomas de nerviosismo, agitación o tensión asociados a situaciones de ansiedad y estrés, se establecen correlaciones directas entre la intensidad de la actividad física y el control emocional de los sujetos investigados, o sea, a menor intensidad de la actividad física menor control y regulación emocional.

**Palabras clave:** actividad física, control emocional, enfermería.

## RESUMO

As atividades realizadas pelo profissional de enfermagem causam-lhe problemas de saúde, sendo o estresse o primeiro fator que afetará seu próprio ritmo, causando irritabilidade e ansiedade. A prática físico-esportiva tem um efeito positivo sobre sua saúde física e mental, pois produz uma liberação de endorfinas, o que leva a uma redução da ansiedade, da depressão e do estresse, pois qualquer tipo de atividade física, seja ela de baixo ou alto impacto, libera essas substâncias que atuam diretamente no cérebro, produzindo uma sensação de bem-estar e relaxamento imediato. A pesquisa é apresentada em um desenho não-experimental, a partir de uma abordagem quantitativa, descritiva, comparativa, transversal e de corte transversal. Seu objetivo é determinar a relação entre a atividade física e a regulação emocional em um grupo de enfermeiras do Hospital Sur em Chilpancingo, Guerrero, México. Foram aplicados o Emotional Intelligence Rating Scale TMMS-24 e o International Physical Activity Questionnaire (IPAQ). A Correlação Rho de Spearman foi usada para determinar a relação entre as variáveis. As dimensões estudadas são Atenção, Clareza e Reparação Emocional para a variável dependente (Controle Emocional) e as dimensões Alta, Média e Baixa para a variável independente (Atividade Física). Na comunidade onde foram observados os sinais e sintomas de nervosismo, agitação ou tensão associados a situações de ansiedade e estresse, foram estabelecidas correlações diretas entre a intensidade da atividade física e o controle emocional dos sujeitos investigados, ou seja, quanto menor a intensidade da atividade física, menor o controle e a regulação emocional.



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**Palabras-chave:** actividad física, controle emocional, enfermagem.

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## INTRODUCTION

According to Orozco-Vásquez *et al.* (2029), currently factors such as globalization, market competitiveness, different forms of labor contracting, increased productivity and insecurity in the workplace have led to the deterioration of working conditions. These aspects have mainly affected health sector workers such as nurses and doctors, who tend to perform higher risk tasks, with longer hours and a high workload, which makes them susceptible to increased levels of stress and of anxiety.

In relation to this, Barbosa Granados and Urrea Cuéllar (2018) assure that there is a variety of therapeutic circumstances that are associated with sports practice, where physical activity is considered an ally in the intervention processes in pathologies as common as stress, anxiety and depression. Also, physical activity and sport can be established as a protective element in the appearance of personality disorders, work or academic stress, social anxiety, lack of social skills, decreased work, social and family impact of post-traumatic stress.

Nursing professionals are subjected to high work stress with a large number of patients in terms of personal care. The set of activities from the nurses is based on a systematic-interactive time, which focuses on the humanistic objective of helping in the patient's optimal recovery process.

In this work context, it is interesting, from the perspective of science, to research how sport and physical exercise produce physical, psychological and social benefits, being important both at a therapeutic and preventive level. From the physical approach, sports exercise improves the functioning of the cardiovascular, respiratory, digestive and endocrine systems, strengthening the musculoskeletal system, increasing flexibility, reducing serum levels of cholesterol and triglycerides, glucose intolerance, obesity and adiposity. On a psychological level, it allows tolerance to stress, adoption of health-protective habits, improvement of self-concept and self-esteem, reduces the perceived risk of getting sick, generating calming and physical and mental effects: in antidepressants, improving reflexes



and coordination, increase in the feeling of well-being, prevention of insomnia, regulation of sleep cycles and improvements in socialization processes.

Hospital work tension levels are derived from uncomfortable situations within the work area, thus producing a health problem called stress. Work stress today is one of the main problems that workers face, since it affects them emotionally and physically, producing a metabolic imbalance that affects the well-being of the individual, a result of a poor distribution of activities and organization within the entity of health.

Physical and mental health in the practice of nursing professionals, whose essence is human care, is of vital importance, since a balanced state of health will allow them to carry out their actions efficiently, effectively and with quality, that is why, it is required that these personnel maintain their physical, mental and emotional stability. It is no less true that maintaining this state requires a series of coping skills that must be used in stressful situations.

Multiple research has developed the topic of physical activity for the health of nursing *staff in recent years*: Guerrero Flores *et al.* (2018), Orozco-Vásquez *et al.* (2019), Bazán *et al.* (2019), Bueno Ferrán and Barrientos-Trigo (2020), Pérez-González *et al.* (2020), Huaman- Carhuas and Bolaños-Sotomayor (2020). Rojas Matsuda *et al.* (2020), Rodríguez-Muñoz *et al.* (2020), Barreto-Osma and Salazar Blanco (2021), Chávez *et al.* (2021), Del Valle Solórzano, (2021), Díaz Muñoz *et al.* (2021), Herrera Molina *et al.* (2022), Montero Vizcaino (2020) among others.

Of them, some worked under the influence of the health crisis caused by the COVID-19 virus pandemic, which caused physical and psychological consequences for the health of nursing staff. Other research argued the emotional impact on health professionals and the coping resources (physical and emotional) to reduce or mitigate this blow. Other studies are dedicated to analyzing the factors that generate work stress and the presence of Burnout Syndrome in Nursing teachers and its influence on their physical deterioration; in another work, the relationship that exists between work overload and the type of care of the nursing professional is described, taking into account the influence on their health.



Many of these authors refer to and describe the benefits of the influence of sport and physical activity with respect to health status, both physically and mentally. Others argue, through experimental studies, how sport and physical activity are factors that positively influence physical health: prevention of cardiovascular risks, chronic diseases, obesity, cancer, osteoporosis and degenerative diseases such as dementia and Alzheimer's disease; and in mental health: anxiety, depression and stress reduction; improvement in cognitive abilities, social skills, self-concept and resilience.

Determining overweight, obesity and its relationship with physical activity in nursing students was another of the topics investigated; the relationship between alcohol consumption, tobacco, eating habits and physical activity among nursing students was also delved into.

Some works developed documentary studies with qualitative and quantitative approaches and bibliographic methods, to examine scientific literature that describes the benefits that characterize the influence of sport and physical activity with respect to the state of health, both physically and mentally, of nursing staff.

From the bibliographic review carried out, it can be stated that find the relationships that exist between the professional performance of nursing, physical-emotional health and the contexts that enable has been a topic addressed by scholars of physical culture and health sciences.

What relationship can be established between physical and emotional health and professional nursing performance?

Angarita-Ortiz *et al.* (2020) affirm that every day there is an increase in research that strengthens the orientation of Emotional Intelligence (EI) [ability to recognize and identify one's own and others' emotions and feelings, differentiate them and use them to guide actions and thinking] in the sports field and how the implementation of physical activity benefits their growth.





Currently, Fitness high intensity (generalized state of well-being and physical health achieved not only from the development of a healthy life, but also and mainly, from continued and sustained exercise over time), is considered a sport that is spreading in the world international in a big way.

For their part, Barbosa Granados and Urrea Cuéllar (2018) assure that humanity faces a great challenge in the coming decades, manifested in a sedentary lifestyle and lack of exercise in a large percentage of citizens, due in part to: the decrease from the use of physical force in work activities, transportation systems, the consumption of high-calorie foods, drug abuse and the use of new technologies; the above demands affect the mental health and psychological quality of life of society.

Recent studies assert that the more physical activity a professional performs, the higher his or her empathy, interpersonal relationships, and social responsibility scores will be. This is why emotional intelligence is considered an important predictor of success in various areas of life, which increases if physical activity is taken into account (Angarita-Ortiz *et al.*, 2020).

According to these authors, emotional intelligence goes beyond traditional intelligence, focusing on an interpersonal and intrapersonal approach that adds an emotional component and significance for personal and professional success; in addition to adding that physical activity attributes positive emotional benefits, improves mood, reduces the effects of anxiety, and produces a better perspective of oneself.

Ros- Morente *et al.* (2018) state that regulating and repairing emotions, and ultimately being emotionally efficient, leads to greater satisfaction, positive affect, and a healthier mindset, which, at the same time, leads individuals to better adjustment psychological. Likewise, EI shows a positive association with a better quality of life, with the practice of healthy lifestyles and finally, with physical and mental well-being, which is why it is necessary to improve EI skills and physical exercise regulate as a way to achieve this.





In fact, it is stated that sport entails a state of relaxation and a confrontation with daily challenges and with oneself. Likewise, due to the demand for competition, the individual must control their emotions, directing them in a way that does not affect the sporting field.

In recent years, interest has grown in the study of stress and psychosocial factors related to the workplace, due to the impact that these can have on the health of workers.

One of the groups most exposed to stress due to the characteristics of their daily work is health professionals, and especially nursing staff.

De Dios Duarte *et al.* (2017) explain that among the risk factors for the triggering of work stress in nursing professionals, the following can be highlighted: the content of the work, the degree of responsibility, role conflict and ambiguity, social contacts and the climate of the organization, contact with patients, workload, the need for maintenance and the development of a professional qualification, irregular hours and shifts, and the physical environment in which the work is performed, among others.

The physical culture that the nursing professional possesses, as a member of the health team, must prepare him/her to face situations that generate stress, through the use of coping mechanisms aimed at maintaining and/or restoring psycho-emotional balance, which could lead to better comprehensive quality care for hospitalized patients.

Due to these characteristics of work performance, bibliographic reviews such as that of Barbosa Granados and Urrea Cuéllar (2018) demonstrate that sport and physical exercise produce physical, psychological and social benefits, being important both at a therapeutic and preventive level for the medical specialties that They face different pathologies every day in their work.

From the physical approach, sports exercise improves the functioning of the cardiovascular, respiratory, digestive and endocrine systems; besides, it strengthens the musculoskeletal system, increases flexibility, reduces serum levels of cholesterol and triglycerides, glucose intolerance, obesity and adiposity.



On a psychological level, it allows tolerance to stress, adoption of health-protective habits, improvement of self-concept and self-esteem, reduces the perceived risk of getting sick, generating calming and calming effects. antidepressants, improving reflexes and coordination, increasing the feeling of well-being, preventing insomnia, regulating sleep cycles and improving socialization processes.

Recently, Herrera Molina *et al.* (2022) carried out a bibliographic study in which they relate several concepts that have to do with the efficient performance of nursing: health promotion, governance and health education, healthy lifestyles, among others.

Closely related to this topic, Pender (as cited in Aristazábal *et al.*, 2011) explains his conceptual model of behavior for preventive health, in which he places the individual as the entity responsible for his decisions about personal health care. The application of this is based on cognitive-perceptual factors that can be modified by the characteristics of the context, personal and interpersonal elements. The underlying principle establishes that human behavior can be motivated by the desire to achieve well-being and human potential.

This nursing model considers the lifestyle multidimensionally and dependent on the actions incident to the health that the person develops. Its structure includes three main categories:

1. Individual characteristics and experiences, including previous related behavior and personal factors.
2. Cognition and specific motivations for behavior, made up of the patient's personal factors, categorizing them as biological, psychological and sociocultural.
3. The behavioral result (Herrera Molina *et al.*, 2022, p. 100).

Consequently, with all of the above, it follows that nursing staff need to develop skills with which they can be aware of their own emotions, as well as the ability to regulate them in favor of more efficient professional performance; they are entities responsible for their decisions about personal health care. In this aspect, physical health plays a decisive role, which is why physical activity has become a pillar for public health strategies and programs in recent years, due to the numerous benefits (physical and emotional) that its benefits



entail. performance, as well as the consequences of physical inactivity, which is considered the fourth risk factor for global mortality.

Currently, signs and symptoms associated with feelings of nervousness, agitation or tension, feelings of imminent danger, increased heart rate, sweating have been observed in a group of nurses at the Sur Hospital of Chilpancingo, Guerrero, Mexico. excessive, feeling of weakness or tiredness, problems stopping your mind or thinking about something else, gastrointestinal problems, need to avoid the situation that generates anxiety. This symptomatology is related to situations of anxiety and stress, as well as depressive symptoms.

General objective: determine the relationships between physical activity and emotional regulation of a group of nurses from the Sur Hospital, Chilpancingo, Guerrero.

As specific objectives:

1. Characterize the physical activity of the group under study.
2. Describe the emotional regulation of the group under study.
3. Compare physical activity and emotional regulation in the group under study.

Independent variable: Intensity of physical activity (high, medium or moderate and low or inactive).

Dependent variable: Emotional control (attention, clarity and repair).

For the study and posterior comparison of these relationships methodological roles described by Hernández, Sampieri and Mendoza (2018) were used. The instruments selected for data collection correspond to two self-completed questionnaires. An instrument used is the Scale for evaluation of emotional intelligence TMMS-24 (Trait Meta Mood Scale-24) (Fernández Berrocal *et al.*, 1998).



The TMMS-24 was validated for application by Angarita *et al.* (2020), where the consistency of the test was found through Cronbach's Alpha formula, resulting in a value of 0.927, indicating a high level of reliability of the instrument. Furthermore, this same test was applied to each component of the test, yielding an internal consistency of 0.90 for emotional attention, 0.90 for emotional clarity and 0.86 for emotional repair.

The other instrument was the International Physical Activity Questionnaire (IPAQ) (1999).

## MATERIALS AND METHODS

This research was carried out with a non-experimental design, from a quantitative approach. cross-sectional comparative descriptive, in order to quantify the results of the investigated variables. For the relationship between the variables, Spearman's Rho Correlation was used.

Of a population of 222 nurses, it was possible to access 100 who voluntarily consented to be part of the study sample. Therefore, a non-probabilistic sampling was carried out, with an intentional selection, guided by inclusion criteria such as:

- Nurses at Hospital Sur, Chilpancingo, Guerrero.
- With more than 5 years of experience.
- Acceptance to participate voluntarily, through informed consent.

### *Instrumentation*

The TMMS-24 used contains three key dimensions of emotional intelligence (EI) with 8 items each, these dimensions are:

1. Emotional attention, when the individual is able to feel and express feelings in an appropriate way.
2. Emotional clarity occurs when the individual knows their own emotional states well.



3. Emotional repair, when a person is able to regulate their emotional states correctly.

The TMMS-24 was used to assess the skills with which one can recognize one's own emotions and the capacity to regulate them. The scale includes 24 5-point Likert-type scale items (1= Not at all agree, 2= Somewhat agree, 3= Quite a bit agree, 4= Strongly agree, and 5= Totally agree).

The authors indicate that the score is obtained by adding the corresponding items in each factor according to the specified dimensions.

The International Physical Activity Questionnaire (IPAQ) used was a short version, which is composed of seven questions about frequency, duration and intensity of physical activity, carried out in the last 7 days, including sitting time on a working day. Participants are assigned into three physical activity categories: Low (sedentary); Moderate and, those defined as individuals with high physical activity.

Cronbach's Alpha reliability calculation resulted in 0.783.

The collected data were processed based on descriptive statistics and Pearson's chi square, with the support of the IBM SPSS Statistics V22 program (Introductory manual to SPSS Statistics Standard Edition 22) and Microsoft Excel, using descriptive statistics, correlation tests (Spearman's Rho Correlation).

## RESULTS

After applying the International Physical Activity Questionnaire (IPAQ), it is significant for the objectives of the research to characterize the physical activity of the group of nurses, which allows us to describe that 66.8 % of those surveyed express a low-level intensity of physical activity and 21 % *medium level*. Only 12 % practice physical activity with a high intensity.



Once the TMMS-24 (Trait Meta Mood Scale-24) has been implemented, it is obtained that 34 % must improve their emotional Attention, 35.6 % have adequate emotional Clarity and 32 % have adequate Repair.

To determine the relationship between the Independent Variable: Intensity of physical activity (high, medium or moderate and low or inactive) and the Dependent Variable: Emotional control (attention, clarity and repair), the Spearman correlation coefficient was used, which allows obtain a coefficient of association between variables.

This coefficient is calculated based on a series of assigned ranges and the values range from -1 to 1, with 0 indicating no correlation, and signs indicating direct and inverse correlation. The results indicate that there is statistically significant evidence between both variables.

The results indicate that there is statistical evidence to establish direct correlation between the variables under study in the research.

*Table 1. - Spearman correlation between the variables under study*

Spearman's Rho	VD Emotional control			
		ATTENTION	CLARITY	REPAIR
VI Intensity of physical activity	HIGH	0.26	0.69	0.77
	HALF	0.23	0.33	0.51
	LOW	0.05	0.21	0.31

When analyzing Table 1, it is determined that there is a statistically significant positive relationship between the Frequency of High Physical Activity and Emotional Attention (Rho 0.26); with Emotional Clarity (Rho 0.69) and with Emotional Repair (Rho 0.77), which shows that the higher the frequency of physical activity, the greater the Attention, Clarity and Emotional Repair.



## DISCUSSION

The relationship of the emotional control variable was analyzed according to the intensity of physical activity of the nurses at Hospital Sur, Chilpancingo, Guerrero, considering that emotions are related to impulse control, motivation, perseverance and adaptability, and that these in turn make up character traits such as self-discipline, this being a necessary characteristic to play the role of nursing.

The sample was characterized from the systematic practice of physical exercises and the conclusion was reached that it is not the majority who exercise adequately physically, only 12 % practice physical activity with a high intensity, considering that sport entails a state of relaxation and a confrontation with daily challenges and with oneself, generating the individual to control their emotions, directing them in a way that does not affect the scope and work performance.

Regarding the meta-knowledge of one's own emotional states and their necessary control, it is obtained that low levels of subjects adequately attend to, clarify and repair their emotions.

According to previous research, it is identified that paying too much attention to emotions can lead to psychological problems, or emotional imbalances, physical symptoms, depression or anxiety, that is, the person who focuses their attention excessively on feelings, but is not able to clarifying what they feel, nor internally regulating their emotions, they may opt for less appropriate ways to deal with their emotional states (Angarita-Ortiz, 2020).

For researchers such as Barbosa Granados and Urrea Cuéllar (2018), sport and physical activity are factors that positively influence physical health: prevention of cardiovascular risks, chronic diseases, obesity, cancer, osteoporosis and degenerative diseases such as dementia and Alzheimer's disease; and in mental health: anxiety, depression and stress reduction; improvement in cognitive abilities, social skills, self-concept and resilience.





The present study coincides with these authors and research results, since it is demonstrated that the practice of physical activity generates well-being in multiple contexts where people develop, as a result of self-knowledge and the internal skills through which the individual regulates his actions. It is concluded that the practice of physical activity as a healthy habit can influence people's emotional stability: the higher the frequency of physical activity, the greater the attention, clarity and emotional repair.

In the community where the signs and symptoms of nervousness, agitation or tension associated with situations of anxiety and stress were observed, the aforementioned characteristics are described and direct correlations are established between the intensity of physical activity and the emotional control of the subjects investigated. , that is, the lower the intensity of physical activity, the less emotional control and regulation.

## REFERENCES

- Angarita-Ortiz, M. F., Calderón-Suescún, D. P., Carrillo-Sierra, S. M., Porras, D. R., Cáceres Delgado, M. y Rodríguez-González, D. (2020). Factores de protección de la salud mental en universitarios: actividad física e inteligencia emocional. *Rev. Archivos Venezolanos de Farmacología y Terapéutica* 39(6), 753-759. <http://dx.doi.org/10.5281/zenodo.4407166>
- Aristizábal, G. P.; Blanco Borjas, D.M.; Sánchez Ramos, A. y Ostiguín Meléndez, R.M. (2011). El modelo de salud de Nola ender. Una reflexión en torno a su comprensión. *Rev. Enfermería universitaria*, 8(4), 16-23. [https://www.scielo.org.mx/scielo.php?script=sci\\_arttext&pid=S1665-70632011000400003](https://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S1665-70632011000400003)
- Barbosa Granados, S. y Urrea, A. M. (2018). Influencia del deporte y la actividad física en el estado de salud físico y mental: una revisión bibliográfica. *Revista Katharsis*, 25, 141-159. <http://revistas.iue.edu.co/index.php/katharsis>



Barreto-Osma, D. A. y Salazar Blanco, H. A. (2021). Agotamiento Emocional en estudiantes universitarios del área de la salud. *Rev. Univ. Salud.* 23(1), 30- 39. <https://doi.org/10.22267/rus.212301.211>

Bazan, N., Laiño, F., Valenti, C., Echandía, N., Rizzo, L. y Fratin, C. (2019). Actividad física y sedentarismo en profesionales de la salud. *Rev. Iberoamericana de Ciencias de la Actividad Física y el Deporte,* 8(2), 1-12. <http://dx.doi.org/10.24310/riccafd.2019.v8i2.6458>

Bueno Ferrán, M. y Barrientos-Trigo, S. (2021). Cuidar al que cuida: el impacto emocional de la epidemia de coronavirus en las enfermeras y otros profesionales de la salud. *Rev. Enfermería Clínica* 31, 35-39. <https://doi.org/10.1016/j.enfcli.2020.05.006>

Chávez, L., Marcet, G., Ramirez, E., Acosta, L. y Samudio, M. (2021). Salud mental del personal médico y enfermería del Instituto Nacional de Enfermedades Respiratorias y del Ambiente durante la cuarentena por la pandemia COVID-19. *Rev. Salud Pública Parag.* 11(1), 74-79. <http://dx.doi.org/10.18004/rspp.2021.junio.74>

De Dios Duarte, M. J., Varela Montero, I., Braschi Diaferia, L. y Sánchez Muñoz, E. (2017). Estrés en estudiantes de enfermería. *Rev. Educación Médica Superior,* 31(3), 110-123. [http://scielo.sld.cu/scielo.php?pid=S0864-21412017000300013&script=sci\\_arttext&tlng=pt](http://scielo.sld.cu/scielo.php?pid=S0864-21412017000300013&script=sci_arttext&tlng=pt)

Del Valle Solórzano, K. S. (2021). La sobrecarga laboral de enfermería que influye en la atención a pacientes. *Revista San Gregorio* (47), 168-183. [http://scielo.senescyt.gob.ec/scielo.php?script=sci\\_arttext&pid=S2528-79072021000400165](http://scielo.senescyt.gob.ec/scielo.php?script=sci_arttext&pid=S2528-79072021000400165)

Díaz Muñoz, G. A., Pérez Hoyos, K., Cala Liberato, D. P., Mosquera Rentería, L. M. y Quiñones Sánchez, M. C. (2021). Diferencia de los niveles de actividad física, sedentarismo y hábitos alimentarios entre universitarios de diferentes programas de la salud de una universidad privada en Bogotá, Colombia. *Rev Esp Nutrición Humana y Dietética,* 25(1), 8 17. [https://scielo.isciii.es/scielo.php?script=sci\\_arttext&pid=S2174-51452021000100008](https://scielo.isciii.es/scielo.php?script=sci_arttext&pid=S2174-51452021000100008)



- Fernández Berrocal, P., Alcaide, R., Domínguez, E., Fernández-McNally, C., Ramos, N. S. y Ravira, M. (1998). Adaptación al castellano de la escala rasgo de metaconocimiento sobre estados emocionales de Salovey et al.: datos preliminares. Libro de Actas del V Congreso de Evaluación Psicológica, 1, 83-84. <http://espectroautista.info/TMMS24-es.html>
- Guerrero, S., Timón Andrada, R. y Conde Caballero, D. (2018). Un estudio sobre la precariedad laboral en enfermería: consecuencias y relaciones en torno al síndrome de agotamiento y el abandono profesional. *Rev Asoc Esp Espec Med Trab*, 27, 204-212. [https://scielo.isciii.es/scielo.php?script=sci\\_arttext&pid=S1132-62552018000400003](https://scielo.isciii.es/scielo.php?script=sci_arttext&pid=S1132-62552018000400003)
- Hernández-Sampieri, R. y Mendoza, C (2018). Metodología de la investigación. Las rutas cuantitativa, cualitativa y mixta, Ciudad de México, México: Mc Graw Hill. <https://virtual.cuautitlan.unam.mx/rudics/?p=2612>
- Herrera Molina, A. S., Machado Herrera, P. M., Tierra Tierra, V. R., Coro Tierra, E. M. y Remache Ati, K. A. (2022). El profesional de enfermería en la promoción de salud en el segundo nivel de atención. *Revista Eugenio Espejo*, 16(1), 98-106. <https://doi.org/10.37135/ee.04.13.11>
- Huaman-Carhuas L y Bolaños-Sotomayor N. (2020). Sobre peso, obesidad y actividad física en estudiantes de enfermería pregrado de una universidad privada. *Rev. Enferm Nefrol*, 23(2), 184-90. [https://scielo.isciii.es/scielo.php?pid=S2254-28842020000200008&script=sci\\_arttext&tlng=pt](https://scielo.isciii.es/scielo.php?pid=S2254-28842020000200008&script=sci_arttext&tlng=pt)
- Montero Vizcaíno, Y. Y., Vizcaíno Alonso, M. C, y Montero Vizcaíno, Y. (2020). Factores involucrados en la calidad de vida laboral para el ejercicio de la enfermería. *Revista Cubana de Medicina Militar*, 49(2), 364-374. [http://scielo.sld.cu/scielo.php?script=sci\\_arttext&pid=S0138-65572020000200014](http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S0138-65572020000200014)
- Orozco-Vásquez, M. M., Zuluaga-Ramírez, Y. C. y Pulido-Bello, G. (2019). Factores de riesgo psicosocial que afectan a los profesionales en enfermería. *Revista Colombiana de Enfermería*, 18(1), 1-16. <https://doi.org/10.18270/rce.v18i1.2308>



Pérez-González, J. C., Yáñez, S., Ortega-Navas, M. C. y Piqueras, J. A. (2020). Educación emocional en la educación para la salud: cuestión de salud pública. *Rev. Clínica y Salud*, 31(3), 127-136. <https://doi.org/10.5093/clysa2020a7>

Rodríguez-Muñoz, P. M., Carmona-Torres, J. M. y Rodríguez-Borrego, M. A. (2020). Influencia del consumo de tabaco y alcohol, hábitos alimenticios y actividad física en estudiantes de enfermería. *Rev. Latino-Am. Enfermagem* 28, 1-9 <http://dx.doi.org/10.1590/1518-8345.3198.3230>

Rojas Matsuda, L. D., Palacio, I. R., Palacio, K. R., Espinoza Requesén, I., Sacerio González, I. y Angulo Álvarez, C. M. (2020). Niveles de actividad física en estudiantes de enfermería. *Revista Finlay*, 10(4), [http://scielo.sld.cu/scielo.php?script=sci\\_arttext&pid=S2221-24342020000400420](http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S2221-24342020000400420)

Ros-Morente, A., Alsinet Mora, C., Torrelles Nadal, C., Blasco-Belled, A. & Jordana Berenguer, N. (2018). An examination of the relationship between Emotional Intelligence, Positive Affect and Character Strengths and Virtues. *Rev. Anales de Psicología*, 34(1), 63-67. <https://dx.doi.org/10.6018/analesps.34.1.262891>.

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The authors declare not to have any interest conflicts.

***Authors' contribution:***

The authors have participated in the writing of the work and analysis of the documents.



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