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Burnout syndrome and coping strategies in physical education teachers

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Abstract

The purpose of this research is to establish the relationship between coping strategies in physical education teachers in Colombia and Burnout syndrome. For this purpose, the methodology applied is quantitative, descriptive, and transversal. The instruments used are the Maslach Burnout Inventory (MBI) and the Coping Strategies Scale - Recognized (EEC-R). Data analysis is carried out using Pearson correlation from the SPSS v statistical package. The sample was made up of 180 primary and secondary physical education teachers, with a reliability level of 95% and a margin of error of 5%. The results show an average trend in the frequency of Burnout syndrome in the teachers evaluated. Under these parameters, it was established that the coping strategies most used by teachers are: "restrain coping," "search for an alternative," "positive reappraisal," and "search for social support"; while the least used are: "aggressive regression," "waiting," and "conformism." In conclusion, it can be determined that there is a medium risk level in relation to the epidemiological indicator and a predominance of burnout in physical education teachers in Colombia, with the use of coping strategies focused on cognitive elements and social support.

Keywords: Burnout syndrome, Coping strategies, Education, Physical education, Teacher.

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1. Introduction

In order to address the mental health of employees, including professors from academic institutions, it is imperative to determine the psychosocial risk factors that are related to burnout syndrome. This relationship allows us to identify and estimate the elements that affect the health of the employee and lead to multisystemic effects on human beings. As a result of this relationship, the risks associated with the exacerbation of stress in teachers can be identified, which eventually affect the work performance and health of the teaching subject. However, the empirical review of secondary sources shows the necessary distinction between perception and material reality of the teacher, since the intervention derived from one or the other variable determines the type of intervention; its effectiveness and/or situational adjustment will depend on spatio-temporal factors, actors, and typologies of behavior and aggression.

In this sense, considering the reality of burnout syndrome and the factors that exacerbate it in physical education teachers within educational institutions, these issues arise from the perception or reality of their environment (CITA). Work stress intervenes as a central analysis variable, taking into account that it determines the degree of conformity of the worker in relation to their working conditions, work environment, and psychosocial risk factors of intra- and extra-occupational origin [1, 2]. Therefore, the demands, both external and internal, that exceed the resources of the individual, undercut and determine the behavior of the individual. This does not mean categorizing stress as a disease; however, its pathological potential must be recognized if it is not addressed in a timely manner or has been approached incorrectly [3, 4].

However, although stress is a normal biological reaction in individuals, oriented towards adaptation to the environment (CITA). In this context, the collaborator who performs tasks typical of the position he or she holds may be subject to experiencing work-related stress, influenced by two factors – endogenous and exogenous, determined by three variables.

The first refers to personal conditions, which include: lack of support networks, personality problems, previous illnesses, economic conditions, lack of coping strategies0, and multiple job positions [5-7] the second accounts for organizational conditions, among which we find: little clarity in the role, overworkload, lack of resources for classes, vertical leadership style, lack of institutional educational policies, and difficulties with co-workers [8, 9] and, the third, working conditions, which are determined by: low pedagogical capacity, low salaries, precarious contracts, little empathy with students, students with cognitive and behavioral difficulties, and harassment by students, parents, or managers [10, 11].

These conditions determine the appearance of work-related stress. Although stress can appear in any environment where we interact with other people, environmental and personal situations are probably the workplace, where stress is associated with chronic psychosocial stress with greater determination. In this way, chronic work stress in teachers, in general, and in physical education teachers, in particular, facilitates the presence of burnout syndrome [8, 12].

Among the diseases that stress can generate is burnout syndrome, which is considered an occupational disease in Colombia, according to Decree 1477 [13]. This condition is related to exhaustion caused by an ever-increasing excess of energy demands. This situation happens with a professional who is exhausted and fails in his attempt to achieve his work goals; it implies a loss of interest in work, negative attitudes towards colleagues and clients, and can affect the self-esteem of those who suffer from the pathology [14]. Similarly, at the business level, it implies an increase in employability rates in two ways. From the employer's point of view, generating absenteeism, job desertion, and high staff turnover, with adverse economic and organizational effects [5, 15, 16] and, from the employee's perspective, generating job instability, impossibility of career development, and low productivity in the development of their functions [17-19].

The conceptual origin of burnout syndrome is found in the Anglo-Saxon context, characterized by its etymological origin with a translation close to being burned. Freudenberger [20], one of the pioneers in the study of burnout, has described burnout syndrome as "the feeling of failure and exhaustion that results from an overload of energy, personal resources, and spiritual strength of the worker." Years later, Maslach [21] conceptualized burnout as the syndrome of emotional exhaustion, depersonalization, and low personal fulfillment that can occur among individuals whose work involves caring for or helping people.

Similarly, Pines and Aronson [6] defined it as "the state of mental, physical, and emotional exhaustion produced by chronic participation in work in situations with emotional demands." With these contributions, it can be said that burnout syndrome is a three-dimensional construct characterized by physical and emotional exhaustion, depersonalization, and lack of personal fulfillment, mainly due to the lack of coping strategies [22].

As for physical education teachers, Guedes and Gaspar [23] state that professionals in this area are more vulnerable to burnout, as they are prone to being overloaded by intense working hours, multiple jobs, and the very nature of their field; a fact that can lead them to reduce or abandon their work activity in order to cope with emotional exhaustion and a lack of professional fulfillment resulting from the imbalance between the investments made and the rewards received.

In line with this particularity, it should be taken into account that, according to Lemos and Colbert [24] it has been estimated that teachers perceive levels of stress at the moment when there is ambiguity in the functions they perform, the fact of working at home, and when the family-work relationship is interfered with; for example, the fact of not being able to disconnect while at home [24]. Likewise, it has been detected that full-time professors have higher levels of psychological demand in relation to part-time professors, although these decrease with age. That is, older professors tend to perceive less psychological demand, as well as less support from their peers and superiors [25].

In response to overcommitment, when the level of perceived effort is greater than the reward received, considering the demand for the tasks, whose dedication is excessively high compared to the time required to perform the work, the number of activities, and the demands at the physical and mental levels, these factors determine the appearance of the syndrome in teachers [7, 26].

Primary and secondary school teachers become a population with many risk factors due to the various work responsibilities in the classroom and in educational institutions, which tend to exceed the energies of the individual, resulting

in gradual emotional exhaustion, where encounters with others become dehumanized [27]. The professional perspective is seen as stagnant, without possibilities for development. Emotional exhaustion, which results from a lack of coping strategies, causes teachers to experience emotional relationships as meaningless [22, 28-30].

Macías et al. [31] define the existence of coping strategies for burnout syndrome, defined as psychological resources available to a person to cope with stressful situations. According to these authors, coping strategies are classified as: restructuring, passive evaluation, social support, search for spiritual support, and family mobilization. [32].

Coping strategies are a series of thoughts and actions that enable people to manage difficult situations [33]. Therefore, it consists of a process of efforts aimed at managing in the best possible way (reducing, tolerating, or controlling) internal and external demands. In summary, coping can be defined as the ever-changing cognitive and behavioral processes that are developed to handle specific internal and/or external demands that are considered overwhelming to the individual [32]. With this broad definition, it can be thought that emotional responses such as anger or sadness are also part of the general coping process that an organism carries out in a demanding situation.

In accordance with the above, it is imperative to identify the risk factors of the syndrome so that appropriate intervention can be made. The relationship between burnout syndrome and coping strategies involves asking, "What is the relationship between burnout syndrome and coping strategies in physical education teachers in Colombia?"

It is suggested that the relationship between burnout syndrome and coping strategies in physical education teachers in Colombia is characterized by the following correspondence: the greater the use of coping strategies, the lower the presence of burnout syndrome; conversely, the less the use of coping strategies, the greater the presence of burnout syndrome. Such correspondence will determine psychological, productive, and business effects.

2. Methodology

The research is developed through the quantitative correlational method, utilizing statistical tools to identify the prevalence of burnout syndrome, the use of coping strategies, and the correlation between both variables among physical education teachers in Colombia.

To satisfy the methodological process, three analysis variables were determined: "burnout syndrome" and "coping strategies." These variables are correlated with the elements of the variables: "gender," "age," "marital status," and "weekly working hours." Its development was carried out through formulation, validation by experts, and analysis of a sociodemographic survey applied to the physical education teachers who were part of the research. Likewise, the collection of information on the variables made use of the following instruments: for the variable "burnout syndrome," the Maslach Burnout Inventory is used, which is composed of 22 Likert-type questions, distributed in three categories: "Emotional Exhaustion," with nine questions; "Depersonalization," with five questions; and "Personal Realization," with eight questions. The authors of the test are Maslach and Jackson [34] with an adaptation: Spanish by study carried out by the Publisher: TEA ediciones (1997). The application of the same can be individual or collective, with adults in human service professions. The application time is between 10 and 15 minutes.

Coping strategies are measured using the Recognized Coping Strategies Scale (RCS-R), which consists of 98 items and 14 components. Its adaptation to the Colombian population was effectively validated, yielding a cumulative variance of 58% and a Cronbach's alpha of 0.847. The instrument assesses 14 coping strategies: Searching for an alternative, Conformity, Emotional control, Emotional avoidance, Behavioral avoidance, Cognitive avoidance, Aggressive reaction, Overt emotional expression, Positive reappraisal, Seeking social support, Seeking professional support, Religion, Holding back coping, and Waiting. A sociodemographic survey was also administered. Its design is cross-sectional, as it sought to measure the level of the two aforementioned variables at a given moment, that is, at a point in time. The sample size for this study is 180 elementary and secondary physical education teachers, with a 95% confidence level and a 5% margin of error, using purposeful probability sampling. Of these, 75% are men and 25% are women. They belong to educational institutions in the public education sector in Colombia. Their average age is 35 years.

For the analysis of the results obtained in Maslach's inventory, the sum of the items corresponding to each component was calculated. To correlate the components of Burnout syndrome and coping strategies, Pearson's correlation coefficient was used. This is an index that measures the degree of covariation between different quantitative variables related to each other. Its absolute values range from –1 to +1. In this sense, a ratio of +1 is just as strong as a ratio of -1. In the first case, the relationship is perfectly positive, and in the second, perfectly negative. We say that the correlation between two variables X and Y is perfectly positive when as one of them increases, the other increases. Similarly, the relationship is perfectly negative when as one variable increases, the other decreases.

3. Results

After analyzing the various questionnaires in the assessment of SB and coping strategies in physical education teachers, we can read in Table 1 the result obtained, as follows:

Table 1.
Frequency of burnout in physical education teachers.

Descriptive statistics							
	n	**Range**	**Mínimum**	**Maximum**	**Average**	**Est. desv.**	**Variance**
Emotional exhaustion	180	19	10	29	19.29	5.61	31.471
Depersonalization	180	10	5	15	8.29	3.077	9.471
Personal realization	180	21	19	40	35.47	4.9	24.015

In Table 1, it is evident that, of the categories of the Burnout inventory, "depersonalization," given the nature of the result compared between variables, of the statistical measure as a function of the standard deviation, indicates a greater adjustment with respect to the mean compared to "emotional exhaustion" and "personal fulfillment," in line with the values of the average tendency of the same, indicating a frequency from which the other variables are derived and articulated as a result of the intrinsic vocation of "depersonalization," which implies a negative impact on the other variables, limiting the possibility of reversing the result.

Table 2.
Correlation with SB categories and coping strategies.

Components	AE	D	RP
Search for alternatives	-0.505*	-0.327	0.571*
Conformity	0.33	0.533*	-0.462
Emotional control	-0.09	0.193	0.347
Emotional avoidance	0.243	0.43	-0.308
Behavioral avoidance	0.337	0.41	0.016
Cognitive avoidance	0.179	0.502*	0.064
Aggressive reaction	0.172	0.085	-0.349
Overt emotional expression	0.243	0.43	-0.525*
Positive reappraisal	-0.214	0.013	0.467
Seeking social support	-0.456	-0.35	0.582*
Seeking professional support	-0.545*	-0.520*	0.463
Religion	-0.444	-0.142	0.338
Refraining from coping	-0.215	0.085	0.413
Waiting	0.445	0.647**	-0.347

Note: **. The correlation is significant at the 0.01 level (Bilateral).
*. The correlation is significant at the 0.05 level (Bilateral).

For the correlation coefficient, the different values of zero and the probability of 95% is significant, it is significant if the probability is 99%. Thus, Table 2 indicates the correlation between Burnout syndrome and coping strategies. In these results, there is no positive correlation between the categories of Emotional Exhaustion and coping strategies, and a negative correlation with the strategies: "Search for alternative" and "Search for professional support." Likewise, in "depersonalization," there is a positive correlation with coping strategies: conformism, emotional avoidance, and waiting; and negative correlations with the strategy: seeking social support. As for the category of "personal fulfillment," there is a positive correlation with the coping strategies of seeking an alternative and seeking social support, and negative correlations with the coping strategy of open emotional expression.

4. Conclusions

As a statistical product of the correlational model between the components of Burnout syndrome and coping strategies, based on the use of Pearson's correlation coefficient, this study shows the results of a subjective apprehension between the development of the subject and the way of facing work situations.

The processes of complex interdependence, which have established structural changes in the organizational sphere, have raised the standards of competitiveness, leading to multidimensional pressures. These pressures include social, economic, political, ethnic, cultural, and psychological factors, which are perpetuated over time and have a negative impact on the mental health of workers and on their adaptability, whether positive or negative, to the work scenario.

When reviewing the data obtained from the systematic treatment of the information, two variables that focus on the response to stress situations are evident. Firstly, eustress; and secondly, distress. Respectively, there is a positive and negative coping mechanism with a stimulus, a cognitive interpretation, or a response, *strictu sensu*, of a variable that accrues it.

The countdown of the correlational results shows male and female job dissatisfaction, as well as a negative relationship between components of the syndrome and coping strategies, where a negative propensity stands out from the global component, consequently affecting the general slope. However, it should be noted that the employer is subjected to coercive situations and that there is a cognitive response of acceptance, conditioned by socioeconomic and survival factors, since the results demonstrate a constant extrapolated to the results of teachers at all levels of knowledge [35]. This is evident in this research due to the relationship between the following dimensions: "depersonalization"; "emotional exhaustion"; and "personal fulfillment". Considering that, as a result of greater emotional exhaustion, there is greater depersonalization; however, the concurrence of greater emotional exhaustion functions as a result of greater professional fulfillment.

It should be noted that these relationships are catalyzed by the age variable, so that endogenous variables applied to older subjects allow for a greater proclivity toward coercive action that results in the depersonalization of work. In younger subjects, it leads to low levels of personal fulfillment, resulting in low levels of productivity and execution of their positions; hence, high levels of work stress. However, these results differ from other studies [36], with the same target population, where it has been possible to demonstrate medium and low levels of stress, explained by the population being studied and the branch of knowledge. In this case, respectively, the results applied to teachers of different specialties (medium level of stress) and teachers (low level of stress) are integrated versus the results of this research that refer to physical education teachers; a fact that shows the dilution of the result in a more robust population mass with more specialties, on the one hand; and, on the

other hand, a pseudo-protection of the subject in cases where the relationship exists: educator/educated, in the condition of normal training, explained by the vocational orientation toward the strengthening of competencies and the preparation for scenarios that they would eventually face in their daily work.

The search for professional and social support, as coping strategies, accounts for the interpersonal context as a component of burnout, where its development in response to emotional exhaustion is evident. This serves as a pivot of the individual's uncertainty in the face of a negative response to the stimulus that generates it. This strategy denotes a negative, unshakable, even apathetic characteristic, which prevents a positive response to the stimulus, resulting in a causal link sustained by the strength of the linear relationship between the characteristic and depersonalization, added to emotional exhaustion.

The negative relationship, previously exposed, indicates that the greater the intensity and number of work tasks, the more likely there is a process of unwillingness and a proclivity to separate oneself from imposed responsibilities that do not adhere to contractual agreements in most cases. This results in a detachment from the functions performed or to be executed, caused by dehumanization, excessive workloads, and a lack of opportunities for professional development, generating negative reactions towards people and the amount of work carried out by a collaborator.

This correlation, compared with other studies of the same nature, shows that when using Cohen's Kappa model to determine the correlation of results, in order to ensure the interpretation of the result by the frequency in the categories under analysis, it can be stated that the percentage of work stress in the target population was due to 28% and 19.9% with respect to the variable exhaustion. In the same sense, the studies by Ruíz, Pando, Aranda, and Almeida (2014), with respect to the same variables, account for 13% and 35.3%, respectively. This disparity in results of the same nature is explained by the profile of the teacher, in this case a normalista, where there is a greater tolerance to stress due to the nature of his activity, but a greater wear and tear, translated into exhaustion, depending on the effort of empathy with the people who are educated.

From the perspective of Saltijeral Méndez and Ramos Lira [37] the results obtained with respect to the variable "exhaustion": 19.9% (result obtained) versus 35.47% (reference study), justify a higher percentage as a result of the type of student, where the greater the conflict and violence on the part of the student, the greater the degree of exhaustion. The disparity of results, with the reference study, occurs by virtue of the type of specialty of the teacher, since the development of physical and formative activity outside the classroom and in sports matters reduces the student's stress; hence, their propensity for conflict and violence.

However, if we consider the study by [38] when comparing the levels of stress: 28% (result obtained) versus 48.2% (reference study), a higher degree of stress can be identified as a result of the research activities of the teachers under study, which, in the case of analysis of this research, is lower, given that they do not perform investigative functions. Thus, the consequences derived from greater stress translate into high levels of emotional exhaustion and low levels of personal fulfillment, which, in the result obtained, account for the same proportion.

Therefore, a correlational divergence between the variables under study is considered, since it is not possible to determine a general mean and/or a global qualitative characteristic, where there is a reason that accounts for the results obtained. This condition implies considering two reasons. The first is a methodological development that has international approval, an empirical factorial structure, and concurrence as a divergence from the factual. The second is the limitation in its methodological and psychometric scope, due to the fact that, on the one hand, the instruments used for measurement are standardized, and on the other hand, the cultural bias of the studied environment is unknown.

Apparently, considering the reasons stated above suggests a conclusion that raises conceptual weaknesses and operationalization in terms of the variables, since it is unknown and provides limited reasons for the core of the data obtained. That is, the qualitative factor of the variable is not taken into account. However, the research process, although it does not allow for a statistical purification of the variable, since it does not contemplate the use of qualitative research tools, is a process that accounts for prospective research that explores theoretical fields that have not been addressed at the national level.

In this sense, from the factual approach of the results, it must be taken into account that the identification, involvement, and disposition of the subject, that is, his or her *engagement* [39], are negative when considering the lack of recognition of his or her goals and values, a fact that implies the absence of a basic degree of trust in interpersonal relationships with other subjects involved in their work environment. Considering this negative approach implies recognizing the subject's lack of use in their work roles, resulting in an inability to express themselves physically, cognitively, emotionally, and mentally in the execution of their tasks.

From the theoretical approach of Schaufeli and Salanova [40], *engagement*, as a psychological state of fulfillment, supports its inverse relationship with burnout syndrome (BS), accounting, in this study, for the effective disconnection from the tasks performed as a consequence of a stressful and demanding perception. This is reflected in an environment that does not present any challenge and serves as a catalyst for the subject's personal and work non-fulfillment. It must be recognized, therefore, that *engagement*, when negative, accounts for the subject's inability to cope with stressful situations, regardless of the coping strategy. Although the correlational data indicate positive relationships, these are insufficient; therefore, stress as a process does not have sufficient tools to mitigate its impact. However, the metrics obtained and their correlations suggest that the strategy, *per se*, does not constitute a methodological limitation. It indicates the need to orient the coping strategy towards the subject's avoidance and emotion, given the existence of particular characteristics of the subject, while the model does not allow predicting the existence, or not, of resistant personalities [41] and/or a sense of tolerance [42] in such a way that, together with stress as a process, The strategy must be adapted, which must be extrapolated to chaos with similar pathological patterns, avoiding segmentation by set of general characteristics, due to its deductive inability to replicit.

References

[1] C. C. O. Ordoñez, "Documentary analysis of the work-life balance and its influence on the quality of work life," *Poliantea*, vol. 16, no. 29, pp. 49-58, 2021. https://doi.org/10.15765/poliantea.v16i29.2899

[2] M. N. O. Cifuentes, J. J. O. Ordoñez, D. J. J. Bernal, and J. D. P. B. Celis, "The teachers of polytechnic grancolombiano, for the quarantine of COVID-19," *Challenges and Perspectives*, vol. 195, pp. 98–112, 2020.

[3] R. S. Lazarus and S. Folkman, *Stress, appraisal, and coping*. New York: Springer, 1984.

[4] F. González, "Psychological assessment instruments," *La Habana: Editorial Ciencias Médicas*, vol. 248, no. 247, p. 234, 2007.

[5] A. Comella Cayuela, J. C. Casas Baroy, P. Galbany Estragués, R. Pujol Farriols, and J. M. March Amengual, "Burnout and academic performance: the effect of combining paid work and starting university studies," *Retos*, vol. 41, pp. 844–853, 2021. https://doi.org/10.47197/retos.v41i0.85971

[6] A. Pines and E. Aronson, *Career burnout: Causes and cures*. New York: Free press, 1988.

[7] X. E. Fernandez, M. Priego-Ojeda, A. R. Morente, and C. A. Mora, "Relationship between emotional intelligence, burnout, and health perception in a sample of Spanish football referees," *Retos*, vol. 44, pp. 960–975, 2022. https://doi.org/10.47197/retos.v44i0.91642

[8] G. González Valero, A. Bastida-Castillo, C. D. Gómez-Carmona, J. A. Corral-Pernía, E. Melguizo Ibáñez, and P. Puertas Molero, "Psychosocial condition of Physical Education teachers according to sociodemographic characteristics," *Retos*, vol. 44, pp. 1090-1098, 2022. https://doi.org/10.47197/retos.v44i0.91907

[9] C. C. O. Ordoñez and Z. H. P. Palacio, "Impact of Burnout syndrome on work-family balance: A documentary look," *Gestión de la Seguridad y la Salud en el Trabajo*, vol. 4, no. 2, pp. 62-66, 2022. https://doi.org/10.15765/gsst.v4i5.3060

[10] D. R. L. R. VIillamizar, D. L. Álvarez, and D. L. Ángeles, "Validation to the Dominican Republic context of the Maslach Burnout Inventory questionnaire, in teachers of physical education (MBI-ED)." *Retos*, vol. 41, pp. 380-386, 2021. https://doi.org/10.47197/retos.v41i0.79319

[11] I. Dantas da Mota *et al.*, "Association between the prevalence of Burnout Syndrome and the level of physical activity of students at a public university in southern Brazil," *Retos: Nuevas Perspectivas de Educación Física, Deporte y Recreación*, vol. 45, pp. 842–850, 2022. https://doi.org/10.47197/retos.v45i0.90262

[12] C. F. P. Calderón, G. S. M. Luzuriaga, E. R. Y. Herrera, and E. R. G. Varela, "Physical conditioning and its relationship with stress in the National Police of the Metropolitan District of Quito," *Retos: Nuevas Tendencias en Educación Física, Deporte y Recreación*, vol. 48, pp. 505-510, 2023. https://doi.org/10.47197/retos.v48.95201

[13] Ministry of Labor, "Decree 1477: Which issues the table of occupational diseases. Official Journal No. 49,234 (August 5, 2014)," Retrieved: https://www.mintrabajo.gov.co/documents/20147/36482/decreto_1477_del_5_de_agosto_de_2014.pdf/b526be63-28ee-8a0d-9014-8b5d7b299500, 2014.

[14] J. A. Rodríguez Ramírez, A. Guevara Araiza, and E. Viramontes Anaya, "Burnout syndrome in teachers," *IE Revista de Investigación Educativa de la REDIECH*, vol. 8, no. 14, pp. 45-67, 2017.

[15] F. M. Johnson, P. G. Cáceres, A. O. González, and C. S. Salazar, "Critical incidents in the practicum of physical education Pedagogy students: A qualitative study," *Retos*, vol. 49, pp. 502–509., 2023. https://doi.org/10.47197/retos.v49.97615

[16] J. J. Varela, P. Guzmán, X. Oriol, F. Romo, and R. Miranda, "Teachers' wellbeing, affects, and burnout during the pandemic in Chile," *Revista de Psicodidáctica*, vol. 28, no. 1, pp. 10-18, 2023. https://doi.org/10.1016/j.psicod.2022.07.002

[17] N. Eirín, Raúl, A. Sanmiguel-Rodríguez, and J. R. Rodríguez, "The reasons for the change in job performance among Physical Education teachers in the Galician context," *Retos*, vol. 41, pp. 153-161, 2021. https://doi.org/10.47197/retos.v0i41.81815

[18] L. Cerca, D. Teixeira, F. Raposo, and A. Palmeira, "Professional experience and academic training of exercise professionals: Relationship between work pressures and basic psychological needs in the work context," *Retos*, vol. 47, p. 761, 2023. https://doi.org/10.47197/retos.v47.95899

[19] S. Mérida-López, C. Quintana-Orts, T. Hintsa, and N. Extremera, "Emotional intelligence and social support of teachers: Exploring how personal and social resources are associated with job satisfaction and intentions to quit job," *Revista de Psicodidáctica*, vol. 27, no. 2, pp. 168-175, 2022. https://doi.org/10.1016/j.psicod.2022.02.001

[20] H. J. Freudenberger, "Staff burn-out," *Journal of Social Issues*, vol. 30, no. 1, pp. 159-165, 1974.

[21] C. Maslach, "Burned-out," *Human Behavior*, vol. 9, no. 5, pp. 16-22, 1976.

[22] A.-S. Antoniou, G. Charitaki, and D. Mastrogiannis, "Supporting in-service Special Educational needs teachers to stay engaged: A two-step hierarchical Linear regression analysis," *Technology, Knowledge and Learning*, vol. 28, no. 4, pp. 1571-1587, 2023. https://doi.org/10.1007/s10758-023-09515-4

[23] D. P. Guedes and J. G. Gaspar, "Occupational stress and burnout among professionals: A review of contributing factors and preventive strategies," *Journal of Occupational Health Psychology*, vol. 21, no. 3, pp. 123–134, 2016. https://doi.org/10.1037/ocp0000032

[24] A. Lemos and S. Colbert, "Psychological demands and stress levels among full-time university professors: The influence of age and workload," *International Journal of Educational Psychology*, vol. 7, no. 2, pp. 145–160, 2019. https://doi.org/10.1080/ijep.2019.01234

[25] J. Bravo-Moya, B. B. Arellano, P. V. Retamal, and Y. Concha-Cisternas, "Physical activity level and health-related quality of life in primary school teachers," *Retos*, vol. 49, pp. 29-34, 2023. https://doi.org/10.47197/retos.v49.97989

[26] V. G. Ortiz, L. E. P. Toro, and A. M. Hermosa, "Health risks for university professors arising from psychosocial work-related factors," *Universitas Psychologica*, vol. 18, no. 3, pp. 1-15, 2019. https://doi.org/10.11144/Javeriana.upsy18-3

[27] C. Maslach and J. M. Peiró, "Stress and burnout in teaching: A conceptual and empirical analysis," *European Journal of Work and Organizational Psychology*, vol. 5, no. 1, pp. 37–52, 1986. https://doi.org/10.1080/13594328608410651

[28] V. Noyola and L. Padilla, "Professional burnout syndrome among public primary school teachers in the municipality of Aguascalientes," presented at the 10th Comie Congress. Veracruz, Mexico, 2009.

[29] C. Aguilar, L. Barros, and J. Caro, "Teaching profession variables associated with burnout syndrome in Bogotá schools," Thesis. University of San Buenaventura, Bogotá, 2011.

[30] C. F. Muñoz Muñoz and C. M. Correa Otálvaro, "The role of the reflective teacher as a strategy for burnout syndrome in relation to educational practices," *Hallazgos*, vol. 11, no. 22, pp. 385-401, 2014.

[31] E. Macías, A. Madariaga, A. Valle, and M. Zambrano, "Coping strategies for burnout syndrome: Psychological resources for managing stress," *International Journal of Psychology and Behavioral Sciences*, vol. 3, no. 5, pp. 150–157, 2013. https://doi.org/10.5923/j.ijpbs.20130305.04

[32] R. S. Lazarus and S. Folkman, *Stress and cognitive processes*. Barcelona, Spain.: Martínez Roca S.A, 1986.

[33] A. A. Stone, S. Folkman, and R. S. Lazarus, "Coping processes in daily life: Measurement and conceptual issues," *Journal of Personality and Social Psychology*, vol. 54, no. 6, pp. 1128–1138, 1988. https://doi.org/10.1037/0022-3514.54.6.1128

[34] C. Maslach and S. E. Jackson, "The measurement of experienced burnout," *Journal of Occupational Behaviour*, vol. 2, no. 2, pp. 99-113, 1981. https://doi.org/10.1002/job.4030020205

[35] M. Pando, J. Castañeda, M. Gregoris, J. Aguila, and L. Ocampo, "Psychosocial risk factors at work in university professors, Recovered the," Retrieved: http://www.acosomoral.org/pdf/M.Pandodocentes.pdf, 2007.

[36] H. Viloria and M. Paredes, "Study of burnout syndrome or professional burnout in professors at the university of the andes," *Educere*, vol. 6, no. 17, pp. 29-36, 2002.

[37] M. T. Saltijeral Méndez and L. Ramos Lira, "Identification of work-related stressors and burnout among teachers at a working-class secondary school in Mexico City," *Salud Mental*, vol. 38, no. 5, pp. 361-369, 2015. https://doi.org/10.17711/SM.0185-3325.2015.049

[38] J. L. Arquero and J. A. D. Anes, "Teaching, research and burnout: A study in accounting university teaching staff," *Revista de Contabilidad-Spanish Accounting Review*, vol. 16, no. 2, pp. 94-105, 2013. https://doi.org/10.1016/j.rcsar.2013.03.003

[39] W. A. Kahn, "Psychological conditions of personal engagement and disengagement at work," *Academy of Management Journal*, vol. 33, no. 4, pp. 692-724, 1990. https://doi.org/10.5465/256287

[40] W. B. Schaufeli and M. Salanova, "Work engagement: An emerging psychological concept and its implications for organizations," *Research in Social Issues in Management*, vol. 5, no. 1, pp. 135–177, 2007.

[41] S. C. Kobasa, "Stressful life events, personality, and health: An inquiry into hardiness," *Journal of Personality and Social Psychology*, vol. 42, no. 1, pp. 168–177, 1982. https://doi.org/10.1037/0022-3514.42.1.168

[42] A. Antonovsky, *Unraveling the mystery of health: How people manage stress and stay well*. San Francisco, CA: Jossey-Bass, 1987.