

Occupational health and university professors' lifestyle: Integrative literature review

Saúde do trabalhador e o estilo de vida dos docentes universitários: revisão integrativa de literatura

Salud del trabajador y estilo de vida de los profesores universitarios: Revisión integradora de la literatura

Márcio André Cauterrucio Ângelo de Oliveird^I; Renan Fernandes de Carvalho^I; Magda Guimarães de Araujo Faria^I; Mercedes Neto^I; Tatiana Rodrigues de Araujo Eleuterio^I; Donizete Vago Daher^{II}

^IUniversidade do Estado do Rio de Janeiro, Rio de Janeiro, RJ, Brazil; ^{II}Universidade Federal Fluminense, Niterói, RJ, Brazil

ABSTRACT

Objective: to identify the lifestyle of university professors in the international scientific literature. **Method:** this integrative literature review was conducted in January 2021 in the Scientific Electronic Library Online (SciELO), Latin American and Caribbean Health Science Literature (Lilacs), Current Nursing and Allied Health Literature (Cinahl), Web of Science and Scopus databases, by combining the descriptors "lifestyle" AND "faculty". **Results:** analysis of the manuscripts indicated 21 articles, which addressed the following dimensions of lifestyle: family and friends, physical activity, nutrition, alcohol, tobacco and other drugs, sleep and stress, and personality type. **Conclusion:** there is a gap in knowledge about specific habits such as illegal substance use and consumption of medications. A broader diagnostic view of faculty lifestyle is needed in new studies that can detail local region and cultural differences.

Descriptors: Occupational Health; Universities; Faculty; Life Style.

RESUMO

Objetivo: identificar o estilo de vida dos docentes em âmbito universitário na literatura científica internacional. **Método:** revisão integrativa de literatura realizada em janeiro de 2021 nas bases de dados *Scientific Electronic Library Online* (SciELO), Literatura Latino-Americana e do Caribe em Ciências da Saúde (Lilacs), *Current Nursing and Allied Health Literature* (Cinahl), *Web of Science* e *Scopus* por meio da combinação dos descritores *lifestyle* AND *faculty*. **Resultados:** a análise dos manuscritos apontou a existência de 21 artigos os quais abordaram as seguintes dimensões do estilo de vida foram: família e amigos, atividade física, nutrição, álcool, tabaco e outras drogas, sono e estresse e, tipo de personalidade. **Conclusão:** há um hiato de conhecimento sobre hábitos específicos como o uso de substâncias ilícitas e o consumo de medicamentos. É necessário ampliar o olhar diagnóstico sobre o estilo de vida docente em novas investigações que possam detalhar diferenças loco-regionais e culturais.

Descritores: Saúde do Trabalhador; Universidades; Docentes; Estilo de Vida.

RESUMEN

Objetivo: identificar el estilo de vida de los profesores universitarios en la literatura científica internacional. **Método:** revisión integradora de la literatura realizada en enero de 2021 en las bases de datos de la *Scientific Electronic Library Online* (SciELO), Literatura Latinoamericana y del Caribe en Ciencias de la Salud (Lilacs), *Current Nursing and Allied Health Literature* (Cinahl), *Web of Science* y *Scopus* a través de la combinación de descriptores *lifestyle* & *faculty*. **Resultados:** el análisis de los manuscritos indicó la existencia de 21 artículos que abordaron las siguientes dimensiones del estilo de vida: familia y amigos, actividad física, nutrición, alcohol, tabaco y otras drogas, sueño y estrés y tipo de personalidad. **Conclusión:** existe un vacío de conocimiento sobre hábitos específicos como el uso de sustancias ilícitas y el consumo de medicamentos. Es necesario ampliar la visión diagnóstica sobre el estilo de vida de los profesores en nuevas investigaciones que puedan detallar las diferencias locorregionales y culturales.

Descritores: Salud Laboral; Universidades; Docentes; Estilo de Vida.

INTRODUCTION

The expanded perspective of health sees the individual beyond a physical body and advances towards dimensions that are structured by diverse scientific evidence and that transcend the biomedical health model, in which salutogenesis and health promotion are inseparable concepts. Salutogenesis is understood as the process of studying the mechanisms that guide concepts of healthy practices, predictable diseases and how to deal with stressors and diverse evidence that negatively affect the subject, while health promotion is considered as a coping strategy for the disease process and brings as a possibility the relationship of health determinants with the mobilization of cultural and institutional resources, which are necessary for diagnosis of the population, lifestyle analysis being essential¹.

Lifestyle can be understood as the users' individualized expression regarding the living conditions that are proposed and addressed during their experiences. Through this measurement, it is possible to identify risk factors and

Corresponding author: Magda Guimarães de Araujo Faria. E-mail: magda.faria@live.com
Scientific Editor: Cristiane Helena Gallasch; Associate Editor: Cintia Fassarella

practices adopted by the individuals that lead them to an illness condition; added to this, lifestyle is a journey built throughout human development and integrates biological, social and cultural factors, determining habits, physical activities, diet and, especially, vulnerabilities².

In addition, the work environment, the multiple determinants of health and the individual behaviors can be associated in a labor context, as exposure to situations that may endanger the individual's health without preparation and qualification for such can lead to an illness condition³. That demand can be institutional or even arise from the users themselves, where limitations directly affecting the healthy practices are not respected⁴.

Lifestyle analysis is essential as a preliminary situational diagnosis towards devising health promotion activities. In this sense, the academic setting is seen as an underexplored but fertile environment for the creation of health promotion activities with the paradigmatic perspective of the Health Promoting Universities, which considers health promotion as part of its social project, establishing institutional policies that promote health and quality of life in the academic community. In these institutions, health promotion acts in a cross-sectional manner, affecting from specific projects to the institutions' curricula⁵⁻⁷.

The health of the professors working in higher education institutions still corresponds to a gap in performance and research within collective health itself due to the incipency of the institutional proposals and policies to improve quality of life in these workers, which corroborates the thematic pertinence of the research. Consequently, the objective of this article was to identify the university professors' lifestyle in the international scientific literature.

The relevance of the theme for Nursing is highlighted, as this category has health promotion activities as an integral part of its work process, acting in educational activities and health interventions for health maintenance or recovery. In addition, the significant adherence of the analysis presented in this study to the understanding of the salutogenic paradigm is asserted, as lifestyle can be a strategy for individual empowerment, considered indispensable for the success of the health promotion activities⁸.

METHOD

An Integrative Literature Review (ILR) with its operationalization scope being the selection of validated scientific material regarding a single theme with the intention of developing a synthesis⁹.

This study primarily follows the thought elaborated through gradual stages, the first of which is the creation of a guiding question that structures the entire basis of reasoning and critical thinking throughout the study. The PICO strategy (Population, Phenomenon or Intervention, and Context) strategy was used to elaborate the research question. In this sense, the question elaborated for this research is as follows: "Which are the characteristics of the university professors' lifestyle identified in the scientific literature?".

The second step of the ILR is selecting the criteria and strictness to be used in the search for the scientific materials. Thus, the documents searched followed these criteria: article format based on original research studies with full text available in Portuguese, English and Spanish, published in the last 10 years. The search was carried out in January 2021 and focused on the reference manager called Rayyan[®], where the manuscripts were later evaluated by three different researchers.

Combined descriptors were used to conduct the search, giving rise to the following Boolean construction: "*lifestyle*" AND *Faculty*. The following databases were used for the search: Scientific Electronic Library Online (SciELO), Latin American and Caribbean Literature in Health Sciences (*Literatura Latino-Americana e do Caribe em Ciências da Saúde*, LILACS), Current Nursing and Allied Health Literature (CINAHL), Web of Science and Scopus.

In the third step of the ILR, the variables to be analyzed in the articles were defined, which originated an instrument in a spreadsheet format, which was filled out with the following information: numbering, database, title of the article, authors, year and thematic considerations.

In the fourth step of the ILR, the research studies to be included for analysis were selected. The articles were quantified and matched to the database selected; subsequently, they were progressively filtered by the listed criteria, exhaustively read and analyzed until a final sample was reached. Finally, this last stage ends with assistance in decision-making for the research and assesses development of the theme in the scientific databases. It is noted that the aforementioned search and selection of articles was conducted in January 2021. A flowchart inspired on the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) model was used to illustrate the inclusion flow of papers in this ILR, as shown in Figure 1.

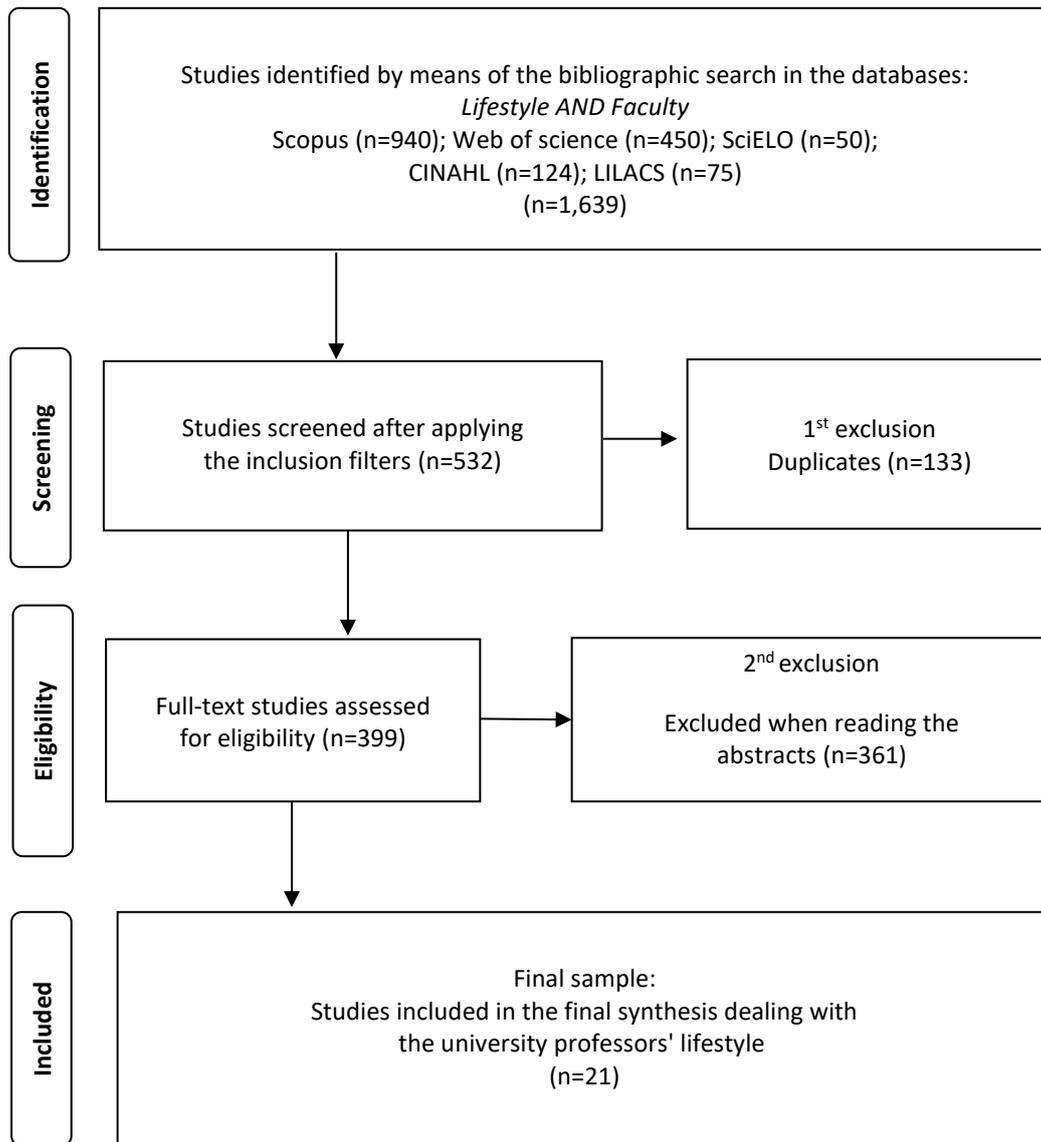


FIGURE 1: Flowchart corresponding to the inclusion of manuscripts. Rio de Janeiro, RJ, Brazil, 2021.
 Source: Elaborated by the authors, based on research data, 2021

In the fifth step, the studies were analyzed descriptively and interpretatively, taking into account the ethical aspects and respecting authorship of the ideas, concepts and definitions pointed out by the authors.

Selection of the relevant studies was made by incorporating the inclusion and exclusion criteria into the first search result, followed by reading the titles and abstracts and, then, the entire publication. Finally, in the last stage of the ILR, the data are presented in order to facilitate and bring the content closer to the reader.

RESULTS

Analysis of the manuscripts pointed to the existence of 21 articles dealing with the research object. Their geographical distribution includes the following countries: Mexico, United States, Colombia, Ethiopia, Iran, Brazil, Peru, India, Canada, Hungary, Barbados and Cyprus.

In the analysis of the Lifestyle dimensions, thematic categories were elaborated based on the FANTASTIC classification, namely: Family and Friends, Physical Activity, Nutrition, Tobacco and other Drugs, Alcohol, Sleep and Stress, Type of Personality, Introspection and Career¹⁰. It is valid to emphasize that the classification was chosen for being an instrument with categories validated at the national level¹¹. The synthesis of the studies included in the research analysis corpus can be seen in Figure 2.

Population, Country and Year	Objective	Lifestyle Dimensions
University employees (Barbados, 2011) ¹²	To determine the prevalence of the risk factors for chronic non-communicable diseases among university professors	Nutrition; Physical Activity; Alcohol, Tobacco and other Drugs
University Professors (Hungary, 2013) ¹³	To assess the level of daily physical activity among senior professors	Physical Activity; Nutrition
University employees (Brazil, 2013) ¹⁴	To assess the concern, preventive measures, health-related problems and prevention of diseases in a public institution	Physical Activity; Type of Behavior
University employees (United States, 2014) ¹⁵	To identify the prevalence of Blood Pressure (BP) control, medication use, BP monitoring, depression, physical activity and access to health resources	Physical Activity; Type of Behavior; Nutrition
University professors (Colombia, 2014) ¹⁶	To identify the influence of fear on the Colombian university professors' lifestyle	Alcohol, Tobacco and other Drugs; Type of Behavior
University professors (United States, 2015) ¹⁷	To analyze the academic lifestyle and the level of professional satisfaction	Alcohol, Tobacco and other Drugs; Sleep and Stress; Type of Behavior
University professors (United States, 2015) ¹⁸	To examine the relationship between sedentary professors and demographic characteristics	Physical Activity; Nutrition; Type of Behavior
University employees (Colombia, 2015) ¹⁹	To describe the modifiable cardiovascular risk factors and the preserved self-care ability in employees from a university institution	Nutrition; Alcohol, Tobacco and other Drugs; Physical Activity
University employees (Colombia, 2016) ²⁰	To establish the profile of cardiovascular risk and physical fitness of professors and employees from a public higher education institution	Physical Activity; Nutrition; Alcohol, Tobacco and other Drugs
University professors (Canada, 2016) ²¹	To describe diet, exercise, smoking habit, alcohol consumption and habits among university professors and to relate the professional lifestyle and counseling practices to the patients	Nutrition; Alcohol, Tobacco and other Drugs; Physical Activity
University employees (United States, 2016) ²²	To identify the factors that influence university employees' lifestyle	Nutrition; Physical Activity; Sleep and Stress; Type of Behavior; Family and Friends
University employees (Mexico, 2017) ²³	To analyze the variables of a health-promoting lifestyle	Nutrition; Physical Activity; Type of Behavior; Sleep and Stress; Family and Friends
University professors and employees (Iran, 2017) ²⁴	To identify vulnerabilities in sedentary lifestyle	Physical Activity
University employees (United States, 2017) ²⁵	To analyze the implementation and need for programs that support the health of the workers from a university	Sleep and Stress; Type of Behavior; Nutrition; Physical Activity; Alcohol, Tobacco and other Drugs
University professors (United States, 2017) ²⁶	To analyze the health indicators and the risk factors caused by remaining longer periods of time in a sitting position	Nutrition; Physical Activity; Alcohol, Tobacco and other Drugs
University professors (Peru, 2018) ²⁷	To determine the frequency of obesity and overweight, and to assess the cardiovascular and metabolic risks	Nutrition; Physical Activity
University professors (India, 2018) ²⁸	To analyze physical, spiritual and mental health in university institutions	Nutrition; Physical Activity; Sleep and Stress; Type of Behavior
University professors (Cyprus, 2018) ²⁹	To investigate the risk factors for pathologies related to the voice in university professors	Alcohol, Tobacco and other Drugs; Sleep and Stress; Type of Behavior
University employees (Brazil, 2019) ³⁰	To assess the prevalence of ideal cardiovascular health and its relationship with stress at work in an isolated area of a developing country	Sleep and Stress; Type of Behavior; Physical Activity; Nutrition
University employees (Ethiopia, 2020) ³¹	To analyze the correlation between sedentary lifestyle and cardiovascular risks	Physical Activity
University professors (United States, 2020) ³²	To identify factors that contribute to the "Burnout" Syndrome in health care	Type of Behavior; Sleep and Stress

FIGURE 2: Synthesis of the ILR findings. Rio de Janeiro, RJ, Brazil, 2021.

Source: Elaborated by the authors, based on research data, 2021

DISCUSSION

Two studies addressed the Family and Friends dimension linked to the university professors' lifestyle^{22,23}. It is important to emphasize that maintaining good quality social relationships, that is, based on support and affection as expected in family relationships and with close friends, exerts a positive impact on people's health³³.

Nevertheless, it is pointed out that collective and individual health is linked to the lifestyle evidenced by habits and is also associated with risk factors acquired by complications and vulnerabilities that can be related to self-care management, where culture and family ties can influence decision-making and appreciation of healthy practices²².

The support networks are considered as the first instance of care after self-care, presenting functionalities such as monitoring, listening to desires and motivational support, among others; and, generally, integration or isolation in the networks are essential for the emotional protection or distress of the actors involved³⁴.

According to the Theory of Social Networks³⁵, in social relationships, weak ties between the actors involved can be fundamental for the construction of networks, as they allow fluidity in communication in a work environment even influencing employability, while denser relationships are observed among close friends and family members³⁶. Therefore, the need of weak ties for university professors is emphasized, in which influencing mechanisms act even on quality of life at work^{22,23}.

Regarding physical activity, 17 studies^{12-15,18-28,30,31} proved to be pertinent to the theme, which indicated that frequency and intensity of the activities culminated in improved physical performance of the professors.

The scientific literature identifies a low number of subjects who perform regular physical activities^{13-15,30}, which results in 42% of professors at high cardiovascular risk²⁷. It was observed that most of the activities performed by the individuals are considered minimal, that is, they do not require energy expenditure, although they are not something planned and structured, which cannot be considered physical exercise³⁷.

An index varying from 72% to 92% of participants with sedentary lifestyles and abdominal obesity was identified, that is, individuals who perform up to 420 minutes of physical activity per week^{19,20,22-24}. In addition to that, 71% also presented diagnoses of dyslipidemia and metabolic diseases¹⁹.

Cardiovascular risk is considered one of the most prevalent in the world's population, and the main prevention method is to implement lifestyle changes towards habits that are beneficial to health¹⁹. In this sense, it is possible to state that sedentary lifestyle, inactivity and insufficient time for self-management of the body generate complications and trigger illness processes and chronicity of already existing conditions among the population under study^{12,14,15}. High indices were observed in the diagnosis of comorbidities such as Diabetes Mellitus (DM), with 20%, and Systemic Arterial Hypertension (HAS), with 62%³¹.

This scenario was also influenced by the nutritional habits, which were discussed in fourteen studies^{12,13,15,18-23,25-28,30}. Nutrition in the study of lifestyle intervenes in the user's diet: if it is adequate in broad nutritional aspects, or through specific guidance that also meets beneficial-healthy objectives. It also encompasses excess of food products that are frequently consumed and can cause harms to health, such as high consumption of salt, sugar, animal fat and oils^{18,25}.

The discussion about healthy eating habits and lifestyle usually permeates the articulation with findings about the Body Mass Index (BMI)¹². In this sense, a high BMI index associated with the excessive consumption of food products rich in calories such as fast-food meals was observed among university professors^{12,15,19,21,22}.

A variation between 3% and 10% of the professors' reports about daily intake of vegetables was observed in the scientific findings^{12,21}, which, along with other habits, culminates in an increase of the BMI with its obesity index varying from 55% to 71%^{12,13,20,26}.

The discussion about alcohol, tobacco and other drugs was based on the results of eight articles^{12,16,17,19-21,25,26,29}. Thematic analysis is focused on assessing the consumption of licit substances (such as alcohol and tobacco), illicit substances (such as marijuana, cocaine and their derivatives), and also abuse of medications and the consumption frequency of substances with high caffeine content, "cola drinks" and teas^{10,11}.

Substance use causes not only direct harms to physical health, but can also be associated with mental health issues such as chemical dependence, associated with the use of socially accepted licit substances such as tobacco and alcohol^{16,19}.

In this sense, it is necessary to remember that tobacco consumption corresponds to the leading cause of avoidable deaths in the world, especially related to cardiovascular and respiratory causes³⁸, in addition to being directly related

to chronic irritation in the eyes, nose and oropharynx, as well as to changes in tissue cell shape and increased lung secretions^{20,26}. The situation is potentially worsened in the social groups that make continuous use of cigarettes, especially with consumption rates over 10 times a day¹⁶. The scientific literature on tobacco use among university professors indicates that more than 40% presented respiratory allergies and that 35% indicated risk factors and predisposition to voice disorders²⁹.

In relation to alcohol consumption, it is noticed that it exerts a direct influence on 6% of the world's annual deaths, with repercussions varying from violence-related issues to liver lesions³⁹. In the evaluation of the university professors, it was observed that frequent alcohol consumption varied from 21% to 86%, and 7% admitted to having suffered substance poisoning in the last year since the time of the survey¹⁷. The predisposition of male professors with 250% chances of becoming "excessive drinkers" is also emphasized¹².

Regarding consumption of illicit drugs, it was observed that the theme is still considered a taboo for the academic community, given the scarcity of data that precluded precise analyses and discussions.

A total of 10 studies were included in relation to the type of behavior^{14-18,25,28-30,32}. This theme is organized as the behavioral types referring to individual health and awareness, in which the following are included, for example: assessments of hygiene habits, condom use in sexual practices, and behavioral responses to everyday situations¹⁰.

One of the main frameworks in the professors' behavior evidenced by studies on lifestyles is the presence of the affective state called "fear", which can be seen as the aversive response to a previous experience that has generated negative feelings or sensations⁴⁰. In the university professors' professional career, fear is constant and decisive in their professional performance and development, affecting their working conditions, private life and health, especially for being associated with factors such as emotional exhaustion and personal fulfillment observed in the statements related to the uncertainties regarding the future^{16,32}.

The aforementioned insecurities explicitly act as determinants of the individual health status and apply to any teaching workplace, even in countries with better quality of life^{25,41}. In this sense, the role of introspection is emphasized as an influential factor on habits and self-care, as it is characterized by the feeling of self-satisfaction through individual reflection on one's experiences and inner self¹¹. Thus, fear, precarious and stressful working conditions, absence of basic healthy habits and the negative self-perception itself are influencing factors for this condition^{16,17,28}.

The Sleep and Stress dimension encompassed seven articles^{17,22,23,25,28,30,32}. Sleep and stress are topics exhaustively discussed when related to occupational health, especially when associated with additional working hours, high work demands, work overload, professional dissatisfaction, hopelessness and impaired verbal communication⁴². In this sense, the individual skill to deal with each of the stressors is a protective factor against illness processes²².

It is worth noting that there is a direct link between stress and sleep patterns, as work-related stressors associated with potentially low social support can culminate in a direct response related to the individual's mental health, in which sleep disorders are commonly present⁴³.

The literature outlines some reasons for university professors' work-related stress that range from excessive working hours that commonly exceed 40 hours per week⁴⁴ to the intense production demand inherent to the nature of the academic work process^{17,23,25}.

The procedural illness of the teaching category follows a linear path that goes through stress levels, vulnerabilities, lack of self-care and of healthy lifestyle habits until establishing some pathological diagnosis, in general, comorbidities and chronic non-communicable diseases^{18,23,28}.

The analysis of the stress levels in university professors indicates a high index of up to 56% risk for Burnout Syndrome³². In relation to the sleep pattern, 10% report constant insomnia and nearly 74% state sleeping a mean of 6 hours a day¹⁷.

Study limitations

One the study limitations was the scarcity of specific research studies about university professors' lifestyle, especially in discussions focused on the use of illicit substances. In addition, it was observed that many studies contained diverse information about the lifestyle of other actors involved in the academic setting, such as students, thus being necessary to filter the results.

CONCLUSION

The professors' lifestyle can be the origin of countless sources of vulnerabilities and can be influenced by the following: political aspects, especially marked by the scarcity of support programs for the faculty; sociocultural aspects, which refer to learning collective social skills and to adequacy of the habits; and labor aspects, which refer to the employment contracts with their respective functions, exposure to risks, workload, and the introspective view of themselves in the work environment.

The tendency to focus on specific lifestyle dimensions is also emphasized, such as "Physical Activity" and "Nutrition", while there are real knowledge gaps about equally important habits, such as use of illicit substances and consumption of medications. Thus, it is necessary to expand the diagnostic perspective about the professors' lifestyle by means of new research studies that may detail loco-regional and cultural differences.

REFERENCES

1. Mittelmark M, Bauer G. The Meanings of Salutogenesis. In: *The Handbook of Salutogenesis*. 2017. p. 7-13.
2. Magalhães C, Ribeiro MF, Esteves MR, Aires L, Lima S, Silva G, et al. Behavioral profile, lifestyle and social skills in Portuguese adolescents. *BMC Public Health* [Internet]. 2021 [cited 2021 Jun 30]; 21:384. DOI: <https://doi.org/10.1186/s12889-021-10355-1>.
3. Hulsegge G, Proper KI, Loef B, Paagman H, Anema JR, van Mechelen W. The mediating role of lifestyle in the relationship between shift work, obesity and diabetes. *Int. Arch. Occup. Environ. Health* [Internet]. 2021 [cited 2021 Jun 30]; 94:1287-95. Available from: <https://doi.org/10.1007/s00420-021-01662-6>.
4. Galdino MJQ, Martins JT, Robazzi ML do CC, Pelloso SM, Barreto MFC, Haddad M do CFL. Burnout, workaholism e qualidade de vida entre docentes de pós-graduação em enfermagem. *Acta Paul. Enferm.* [Internet]. 2021 [cited 2021 Apr 8]; 34:eAPE00451. DOI: <http://dx.doi.org/10.37689/acta-ape/2021AO00451>.
5. Faria MG de A, Carvalho RF, Gallasch CH, Alves LVV. Contributions of the health-promoting universities' movement: An integrative literature review. *J. Educ. Health Promot.* [Internet]. 2021 [cited 2021 Mar 31]; 10. Available from: <https://www.jehp.net/article.asp?issn=2277-9531;year=2021;volume=10;issue=1;spage=114;epage=114;aulast=Faria>.
6. Muñoz M, Cabieses B. Universidades y promoción de la salud: ¿cómo alcanzar el punto de encuentro? *Rev. Panam. Salud Pública* [Internet]. 2008 [cited 2021 Nov 1]; 24(2):139-46. Available from: <https://scielosp.org/pdf/rpsp/2008.v24n2/139-146/es>.
7. Arroyo H V. El movimiento de universidades promotoras de la salud. *Rev. Bras. em Promoção da Saúde* [Internet]. 2018 [cited 2021 Nov 1]; 31(4):1-4. Available from: <http://periodicos.unifor.br/RBPS/article/view/8769>.
8. Marçal CCB, Heidemann ITSB, Fernandes GCM, Rumor PCF, De Oliveira LS. The salutogenesis in health research: An integrative review. *Rev. enferm. UERJ* [Internet]. 2018 [cited 2021 Apr 20]; 26:e37954. Available from: <http://dx.doi.org/10.12957/reuerj.2018.37954>.
9. Mendes KDS, Silveira RC de CP, Galvão CM. Revisão integrativa: método de pesquisa para a incorporação de evidências na saúde e na enfermagem. *Texto Context enferm.* [Internet]. 2008 [cited 2020 Apr 27]; 17(4):758-64. Available from: <http://dx.doi.org/10.1590/S0104-07072008000400018>.
10. Wilson DMC, Nielsen E, Ciliska D. Lifestyle Assessment: Testing the FANTASTIC Instrument. *Can. Fam. Physician* [Internet]. 1984 [cited 2021 Apr 3]; 30:1863-4. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2154238/>.
11. Rodriguez Añez CR, Reis RS, Petroski EL. Brazilian version of a lifestyle questionnaire: translation and validation for young adults. *Arq. Bras. Cardiol.* [Internet]. 2008 [cited 2021 Jun 30]; 91(2). Available from: <https://doi.org/10.1590/S0066-782X2008001400006>.
12. Morris E, Unwin N, Ali E, Brathwaite-Graham L, Samuels TA. Chronic non-communicable disease risk factor survey 2010 among University of the West Indies Staff at Cave Hill, Barbados. *West Indian Med. J.* [Internet]. 2011 [cited 2021 Jun 30]; B60(4):452-8. Available from: <https://pubmed.ncbi.nlm.nih.gov/22097677/>.
13. Ekler J, Nagyvárad K, Kiss-Geosits B, Csányi T. Moderate and vigorous physical activity in the 55+ teachers' daily routine. *J. Hum. Sport Exerc.* [Internet]. 2013 [cited 2021 Jun 30]; 8(2 SUPPL):204-10. DOI: <http://dx.doi.org/10.4100/jhse.2012.8.Proc2.23>.
14. Tome ACN, Canello TB, Luna EJ de A, Andrade Junior HF de. Health problems awareness during travel among faculty members of a large university in Latin America: preliminary report. *Rev. Inst. Med. Trop. Sao Paulo* [Internet]. 2013 [cited 2021 Jun 30]; 55(1):55-9. DOI: <https://doi.org/10.1590/S0036-46652013000100010>.
15. Breaux-Shropshire TL, Whitt L, Griffin RL, Shropshire AT, Calhoun DA. Characterizing workers participating in a worksite wellness health screening program using blood pressure control, self-monitoring, medication adherence, depression, and exercise. *Work Heal Saf* [Internet]. 2014 [cited 2021 Jun 30]; 62(7):292-300. DOI: <https://doi.org/10.1177/216507991406200704>.
16. González-González MA. Metáforas y paradojas de los miedos en los sujetos docentes. *Rev. Latinoam. Ciencias Soc. Niñez y Juv.* [Internet]. 2014 [cited 2021 Jun 30]; 12(1):355-70. Available from: <http://www.dx.doi.org/10.11600/1692715x.12121052013>.
17. Lindfelt TA, Ip EJ, Barnett MJ. Survey of career satisfaction, lifestyle, and stress levels among pharmacy school faculty. *Am. J. Heal. Pharm.* [Internet]. 2015 [cited 2021 Jun 30]; 72(18):1573-8. Available from: <https://dx.doi.org/10.2146/ajhp140654>.
18. Keenan M, Greer AE. Sedentary behavior and related factors among full-time, university faculty. *Int. J. Work Heal. Manag.* [Internet]. 2015 [cited 2021 Jun 30]; 8(3):206-13. Available from: <https://doi.org/10.1108/IJWHM-09-2014-0034>.
19. Loaiza C, Jiménez M, Valencia M, Valencia C, Rodríguez J. Factores de riesgo cardiovascular modificables y agencia de

- autocuidado en funcionarios de una institución universitaria de la ciudad de Manizales, Colombia, 2014. Arch. Med. [Internet]. 2015 [cited 2021 Jun 30]; 15(2):266-81. Available from: <https://revistasum.umanizales.edu.co/ojs/index.php/archivosmedicina/article/download/814/1463?inline=1>.
20. Wilches-Luna EC, Hernández NL, Chavarro PA, Bernal-Sánchez JJ. Perfiles de riesgo cardiovascular y condición física en docentes y empleados no docentes de una facultad de salud. Rev. Salud Publica [Internet]. 2016 [cited 2021 Jun 30]; 18(6):890-903. Available from: <https://doi.org/10.15446/rsap.v18n6.42708>.
 21. Klein D, Guenther C, Ross S. Do as I say, not as I do: Lifestyles and counseling practices of physician faculty at the university of Alberta. Can. Fam. Physician [Internet]. 2016 [cited 2021 Jun 30]; 62(7):e393-9. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4955105/>.
 22. Melnyk BM, Amaya M, Szalacha LA, Hoying J. Relationships Among Perceived Wellness Culture, Healthy Lifestyle Beliefs, and Healthy Behaviors in University Faculty and Staff: Implications for Practice and Future Research. West J Nurs Res [Internet]. 2016 [cited 2021 Jun 30]; 38(3):308-24. DOI: <https://doi.org/10.1177/0193945915615238>.
 23. Bernardino EJ, Aguirre AÁ, Lilia B, Rocha R, Casique LC, Manuel J, et al. Health-promoting lifestyle and assertiveness in university workers Health-promoting lifestyle y assertiveness in university workers. Invest. Educ. Enferm. [Internet]. 2017 [cited 2021 Apr 3]; 35(1):26-34. Available from: <http://www.dx.doi.org/10.17533/udea.iee.v35n1a04>.
 24. Mohaghegh S. Physical activity among Iranian physicians and faculty members: A cross sectional study. Biosci. Biotechnol. Res. Commun. [Internet]. 2017 [cited 2021 Jun 30]; 10(4):805-9. Available from: <https://dx.doi.org/10.21786/bbrc/10.4/29>.
 25. Lloyd LK, Crixell SH, Bezner JR, Forester K, Swearingen C. Genesis of an Employee Wellness Program at a Large University. Health Promot. Pract. [Internet]. 2017 [cited 2021 Jun 30]; 18(6):879-94. Available from: <https://doi.org/10.1177/1524839917725500>.
 26. Sturgeon LP, Garrett-Wright D, Main E, Blackburn D, Jones MS. Nurse Educators' Occupational and Leisure Sitting Time. Work Heal. Saf. [Internet]. 2017 [cited 2021 Jun 30]; 65(5):184-7. DOI: <https://doi.org/10.1177/2165079916665849>.
 27. Morales J, Matta H, Fuentes-Rivera J, Pérez R, Suárez C, Alvines D, et al. Exceso de peso y riesgo cardiometabólico en docentes de una universidad de Lima: oportunidad para construir entornos saludables. Educ. Médica [Internet]. 2018 [cited 2021 Jun 30]; 19:256-62. DOI: <https://doi.org/10.1016/j.edumed.2017.08.003>.
 28. Jain A, Mishra S, Yadav G. Physical, emotional and spiritual health of faculty: An exploratory study. Int. J. Work. Organ. Emot. [Internet]. 2018 [cited 2021 Jun 30]; 9(4):348-61. Available from: <https://doi.org/10.1504/IJWOE.2018.097176>.
 29. Kyriakou K, Petinou K, Phinikettos I. Risk Factors for Voice Disorders in University Professors in Cyprus. J. Voice [Internet]. 2018 [cited 2020 Apr 3]; 32(5):643.e1-643.e9. Available from: <https://doi.org/10.1016/j.jvoice.2017.07.005>.
 30. Muniz DD, Siqueira KS, Cornell CT, Fernandes-Silva MM, Muniz PT, Silvestre OM. Ideal cardiovascular health and job strain: A cross-sectional study from the amazon basin. Arq. Bras. Cardiol. [Internet]. 2019 [cited 2021 Apr 3]; 112(3):260-8. Available from: <https://doi.org/10.5935/abc.20190005>.
 31. Janakiraman B, Abebe SM, Chala MB, Demissie SF. Epidemiology of general, central obesity and associated cardio-metabolic risks among university employees, Ethiopia: A cross-sectional study. Diabetes, Metab Syndr Obes Targets Ther [Internet]. 2020 [cited 2021 Jun 30]; 13:343-53. DOI: <https://dx.doi.org/10.2147/DMSO.S235981>.
 32. Duke NN, Gross A, Moran A, Hodsdon J, Demirel N, Osterholm E, et al. Institutional Factors Associated With Burnout Among Assistant Professors. Teach. Learn Med. [Internet]. 2020 [cited 2021 Jun 30]; 32(1):61-70. DOI: <https://dx.doi.org/10.1080/10401334.2019.1638263>.
 33. Sbarra DA, Coan JA. Relationships and Health: The Critical Role of Affective Science. Emot. Rev. [Internet]. 2018 [cited 2021 Apr 5]; 10(1):40-54. DOI: <https://doi.org/10.1177%2F1754073917696584>.
 34. Portugal FB, Campos MR, Correia CR, Gonçalves DA, Ballester D, Tófoli LF, et al. Social support network, mental health and quality of life: a cross-sectional study in primary care. Cad. Saude Publica [Internet]. 2016 [cited 2021 Apr 5]; 32(12). DOI: <http://dx.doi.org/10.1590/0102-311x00165115>.
 35. Granovetter M. The Strength of Weak Ties: A Network Theory Revisited. In: Sociological Theory. 1983. p. 201-33.
 36. Mehreen A, Hui Y, Ali Z. A social network theory perspective on how social ties influence perceived employability and job insecurity: evidence from school teachers. Soc. Netw. Anal. Min. [Internet]. 2019 [cited 2021 Apr 13]; 9(1). DOI: <https://doi.org/10.1007/s13278-019-0572-z>.
 37. Oliveira LMFT de, Silva AO da, Santos MAM dos, Ritti-Dias RM, Diniz PRB. Exercise or physical activity: which is more strongly associated with the perception of sleep quality by adolescents? Rev. Paul. Pediatr. [Internet]. 2018 [cited 2021 Apr 5]; 36(3):322-8. DOI: <https://doi.org/10.1590/1984-0462/2018;36;3;00014>.
 38. Lariscy JT. Smoking-attributable mortality by cause of death in the United States: An indirect approach. SSM – Popul. Heal. [Internet]. 2019 [cited 2021 Apr 4]; 7. DOI: <https://doi.org/10.1016/j.ssmph.2019.100349>.
 39. Sudhinaraset M, Wigglesworth C, Takeuchi DT. Social and cultural contexts of alcohol use: Influences in a social-ecological framework. Alcohol Res. Curr. Rev. [Internet]. 2016 [cited 2021 Jun 30]; 38(1):35-45. DOI: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4872611/>.
 40. Asok A, Kandel ER, Rayman JB. The Neurobiology of Fear Generalization. Front Behav. Neurosci. [Internet]. 2019 [cited 2021 Jun 30]; 12(329). DOI: <https://doi.org/10.3389/fnbeh.2018.00329>.
 41. Tan RMR, Ong GY-K, Chong S-L, Ganapathy S, Tyebally A, Lee KP. Dynamic adaptation to COVID-19 in a Singapore paediatric emergency department. Emerg. Med. J. [Internet]. 2020; Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85084272499&doi=10.1136%2Femermed-2020-209634&partnerID=40&md5=3174017a0f65dbb3c6a43aac5cb8a66>.
 42. Eriksson M, Lindström B. Antonovsky's sense of coherence scale and its relation with quality of life: A systematic review. J. Epidemiol. Community Health [Internet]. 2007 [cited 2021 Jun 30]; 61(11):938-44. DOI:



Research Article
Artigo de Pesquisa
Artículo de Investigación

Oliveira MACA, Carvalho RF, Faria MGA, Neto M, Eleuterio TRA, Daher DV
University professors' lifestyle

DOI: <http://dx.doi.org/10.12957/reuerj.2021.60812>

<https://dx.doi.org/10.1136%2Fjech.2006.056028>.

43. Furuichi W, Shimura A, Miyama H, Seki T, Ono K, Masuya J, et al. Effects of Job Stressors, Stress Response, and Sleep Disturbance on Presenteeism in Office Workers. *Neuropsychiatr. Dis. Treat.* [Internet]. 2020 [cited 2021 Apr 6]; 16:1827-33. DOI: <https://doi.org/10.2147/NDT.S258508>.
44. Hassan Z, Jazli NF. II Conference on Business Management Research. Factor related to occupational stress among lecturers: a case study in public university. 2015. p. 8.