

Association between workaholism and quality of life in *stricto sensu* graduate professors in nursing

Associação entre workaholism e qualidade de vida em docentes de pós-graduação stricto sensu em enfermagem
Asociación entre adicción al trabajo y calidad de vida en stricto sensu Profesores graduados en enfermería

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ABSTRACT

Objectives: to investigate the association between workaholism and quality of life in *stricto sensu* graduate professors in Nursing. **Methods:** a cross-sectional study developed with a total of 333 professors working in the Graduate Programs of Brazilian public universities. Data collection took place in the second semester of 2018, using an electronic form containing a characterization questionnaire, the Dutch Work Addiction Scale and the World Health Organization Quality of Life Instrument-BREF. The data were analyzed by univariate and multiple logistic regression. **Results:** it was observed that 82.3% of the professors reported low general quality of life and 19.5%, high level of excessive work and 20.1% of compulsive work. Professors who worked compulsively and excessively were less likely to have a high quality of life in the overall, physical, psychological, social relations and environment domains ($p < 0.05$). **Conclusions:** the high work demands that are characteristic of the *stricto sensu* professors' work process are directly associated with low quality of life. **Descriptors:** Work; Quality of Life; Professors; Nursing; Universities.

RESUMO

Objetivos: investigar a associação entre o *workaholism* e a qualidade de vida em docentes de pós-graduação *stricto sensu* em Enfermagem. **Métodos:** estudo transversal desenvolvido com 333 docentes atuantes nos Programas de Pós-Graduação de universidades públicas brasileiras. A coleta de dados ocorreu no segundo semestre de 2018, por um formulário eletrônico contendo questionário de caracterização, a Dutch Work Addiction Scale e o World Health Organization Quality of Life Instrument-BREF. Os dados foram analisados por regressão logística univariada e múltipla. **Resultados:** observou-se que 82,3% dos docentes referiram baixa qualidade de vida geral, 19,5% alto nível de trabalho excessivo e 20,1% mencionaram trabalho compulsivo. Os docentes que trabalhavam compulsiva e excessivamente apresentaram menores chances de alta qualidade de vida nos domínios overall, físico, psicológico, relações sociais e ambiente ($p < 0,05$). **Conclusões:** as altas demandas de trabalho características do processo de trabalho dos docentes *stricto sensu* estão associadas diretamente à baixa qualidade de vida.

Descritores: Trabalho; Qualidade de Vida; Docentes; Enfermagem; Universidades.

RESUMEN

Objetivos: investigar la asociación entre la adicción al trabajo y la calidad de vida de profesores de posgrado *stricto sensu* en Enfermería. **Métodos:** se trata de un estudio transversal, desarrollado con 333 profesores que trabajan en programas de posgrado de universidades públicas brasileñas. La recolección de datos tuvo lugar en el segundo semestre de 2018 mediante un formulario electrónico que contenía un cuestionario de caracterización, según la Escala Holandesa de Adicción al Trabajo y el Instrumento de Calidad de Vida de la Organización Mundial de la Salud (BREF). Los datos se analizaron con regresión logística univariante y múltiple. **Resultados:** se observó que el 82,3% de los docentes mencionó una baja calidad de vida en general, el 19,5% un nivel alto de trabajo excesivo y el 20,1% comentó sobre trabajo compulsivo. Los profesores que trabajaban compulsivamente y en exceso presentaron menos posibilidades de tener calidad de vida alta en el ámbito general, físico, psicológico, de las relaciones sociales y del entorno ($p < 0,05$). **Conclusiones:** las grandes demandas laborales típicas del proceso de trabajo de los docentes *stricto sensu* están directamente relacionadas a una calidad de vida baja.

Descritores: Trabajo; Calidad de Vida; Docentes; Enfermería; Universidades.

INTRODUCTION

The search for efficiency and efficacy in universities contributed for professors to intensify their work routine. In particular, for graduate professors, the workload has increased considering the pressure for production of articles and the performance in different areas, such as teaching, commissions and supervising students⁽¹⁻²⁾.

In this context, the professor work goes through a redefinition of the position in the social organization of work, in which subjectivity is built based on productivism, immediacy, resolute professionals and attentive to constant updates and unbridled competition⁽¹⁻²⁾. This scenario can contribute in a negative way, directly affecting the health of these professors. It is known that it is necessary for professors to spend a large amount of their time in graduate activities, which contributes to a compulsion for work and can be characterized as workaholic (addicted to work)⁽³⁾.

Workaholism is the excessive and uncontrollable need to work, comparing it to other addictions, such as alcoholism. There are five aspects of the addict's behavior at work: (I) working beyond what was asked; (II) self-esteem due to high productivity (III) abdication of personal needs and relationships; (IV) perfectionism; (V) constant mental concern with work⁽⁴⁾.

People addicted to work performs activities far beyond the proposals, not doing them because they are asked, but because they believe they are necessary and ends up getting in the way of their daily routines due to the high expectations on themselves, showing a lack of control over the hours dedicated to work and about the work itself⁽⁵⁾, which can harm their quality of life.

Quality of life (QL) involves how individuals perceive their position in life and it is a broad concept, which encompasses health in its physical, psychological spheres, independence level, social relationships, personal beliefs and the environment⁽⁶⁾.

In addition to the importance of knowing more deeply the quality of life phenomenon and its relationship with professor work, their working conditions as Graduate professors are added. Verifying the aspects involved in the work process of professors of Graduate Programs will allow the implementation of actions that favor their quality of life, as well as can produce benefits in the training of new professor-researchers nurse. Studies on educators' working conditions are included in national and international research agendas⁽⁷⁻⁸⁾.

OBJECTIVES

To investigate the association between workaholism and quality of life in *stricto sensu* graduate professors in Nursing.

METHODS

Ethical aspects

The study followed the resolution of the National Health Council 466/2012, it was submitted and approved by the Research Ethics Committee (REC) from the State University of Londrina.

Design, setting and period of study

This is a cross-sectional study, with a quantitative approach, carried out with professors from the Graduate Nursing Programs

(PPGENF) recommended or recognized by CAPES, from Brazilian public universities.

The description of this study followed the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE).

Population or sample; inclusion and exclusion criteria

The 917 professors of the referred PPGENF composed the study population, considering the following inclusion criteria: being a permanent professor, linked to a PPGENF in 2018. Exclusion criteria was professor in any kind of leave. Based on the population, the sample size was calculated adopting a prevalence of 50%, as it results in the largest sample number, 95% confidence interval and maximum error of 5%, which resulted in a minimum number of 270 professors. All 917 professors were invited to participate in the study by email, however, a total of 333 professors consented to participate in the study. Thus, this is an intentional sampling.

Study protocol

We used a total of three research instruments, composed of a questionnaire prepared by one of the authors with sociodemographic, lifestyle and health (gender, age, physical activity and use of antidepressants) and occupational variables (area of training, type of university, employment relationship and work regime, years of activity in higher education, number of links in graduate programs and number of master's/PhD students). This questionnaire was subjected to an intersubjective evaluation process by five doctored professors from graduate programs in the health area and not part of the study sample, who indicated their relevance and clarity in relation to the study object.

The Dutch Work Addiction Scale (DUWAS) was used to assess workaholism, the Brazilian version was validated, and its reliability was tested in Brazilian professionals, with Cronbach's alpha greater than 0.70. The instrument contains a total of 10 items evaluated on a 4-point Likert scale, and measures both dimensions: Compulsive Work (CW) and Excessive Work (EW). Higher concomitant scores in each dimension indicate workaholism⁽⁹⁾.

Quality of life was assessed by the World Health Organization Quality of Life Assessment Instrument - Bref (WHOQOL-Bref), the Brazilian version was translated and validated, with Cronbach's alpha coefficient between 0.69 and 0.84. The instrument contains a total of 26 items, with five-point Likert scale format responses, two general and the other ones were divided into four domains: physical (seven questions), psychological (six questions), social relations (three questions) and the environment (eight questions). The higher the score of the domains, the better the quality of life⁽¹⁰⁾.

The study instruments were inserted in an internet platform, built for this purpose by a team of programmers. The final version of the instrument was made available through a link sent to the professors' e-mail, which was obtained from the PPGENF pages. Access to the page was released only after acceptance to participate and sign the Informed Consent Form (ICF), and the instruments were available for completion from July to December 2018.

Analysis of results and statistics

The data were analyzed in the Statistical Package for the Social Sciences (SPSS), version 22.0. The scores for the dimensions of workaholism and quality of life were divided into high and low, using the 75th percentile.

In descriptive statistics, frequencies and percentages were calculated. In inferential statistics, the relationship between the domains of quality of life and the dimensions of workaholism was assessed by univariate logistic regression and, later, by multiple logistic regression, the characterization variables were inserted in the model to adjust the relationship. $P < 0.05$ was considered statistically significant and the results were presented by odds ratio and 95% confidence interval.

RESULTS

Of the 333 professors, most were women (87.7%), whose age ranged between 28 and 75 years old. Regarding lifestyle and health habits, 25.8% of participants self-reported being physically active and 14.4% reported using antidepressants. About working time, 45.6% of the professors had been teaching for more than 20 years and 66.7% had employment bond to federal universities. 45% of professors worked more than 11 hours a week in addition to the workload of their work contract, 70.3% were linked to only one PPGENF and 55.9% had 1 to 5 students being supervised at *stricto sensu* level (Table 1).

Table 1 – Sociodemographic and occupational characteristics of *stricto sensu* graduate professors in nursing (N=333), Brazil, 2018

| Variables | Absolute frequency | Relative frequency |
|--|--------------------|--------------------|
| Gender | | |
| Male | 41 | 12.3 |
| Female | 292 | 87.7 |
| Age range | | |
| 28 to 50 | 147 | 44.1 |
| 51 to 75 | 186 | 55.9 |
| Physically active* | | |
| No | 247 | 74.2 |
| Yes | 86 | 25.8 |
| Depression | | |
| No | 285 | 85.6 |
| Yes | 48 | 14.4 |
| Type of university | | |
| State | 111 | 33.3 |
| Federal | 222 | 66.7 |
| Years of teaching in higher education | | |
| 1 to 20 | 181 | 54.4 |
| 21 to 51 | 152 | 45.6 |
| Senior professor | | |
| No | 309 | 92.8 |
| Yes | 24 | 7.2 |
| Weekly hours in addition to workload hours | | |
| 0 to 10 | 183 | 55.0 |
| 11 to 58 | 150 | 45.0 |
| Number of graduate programs linked | | |
| 1 | 234 | 70.3 |
| 2 | 87 | 26.1 |
| 3 | 12 | 3.6 |
| Number of students being supervised | | |
| 1 to 5 | 186 | 55.9 |
| 6 to 17 | 147 | 44.1 |

Note: *Person who practices physical activity for at least 150 minutes and at least twice a week.

Table 2 -Description of the domains of quality of life and workaholism of *stricto sensu* graduate professors in nursing (N=333), Brazil, 2018

| Variables | Frequency | % |
|--|-----------|------|
| Overall quality of life | | |
| Low | 274 | 82.3 |
| High | 59 | 17.7 |
| Quality of life –Physical Domain | | |
| Low | 153 | 45.9 |
| High | 180 | 54.1 |
| Quality of life –Psychological domain | | |
| Low | 130 | 39.0 |
| High | 203 | 61.0 |
| Quality of life -Social relationships domain | | |
| Low | 167 | 50.2 |
| High | 166 | 49.8 |
| Quality of life –Environment domain | | |
| Low | 188 | 56.5 |
| High | 145 | 43.5 |
| Compulsive work | | |
| Low | 266 | 79.9 |
| High | 67 | 20.1 |
| Excessive work | | |
| Low | 268 | 80.5 |
| High | 65 | 19.5 |
| Workaholism | | |
| No | 298 | 89.5 |
| Yes | 35 | 10.5 |

Table 3 - Multiple models of the association of quality of life with workaholism in professors of the *stricto sensu* graduate nursing program (N=333), Brazil, 2018

| Multiple Models | p value | Odds ratio (95% confidence interval) | p value | Odds ratio ^{adjusted*} (95% confidence interval) |
|---|---------|--------------------------------------|---------|---|
| Overall quality of life | | | | |
| Excessive work | 0.014 | 0.162 (0.038-0.696) | 0.024 | 0.183 (0.042-0.803) |
| Compulsive work | <0.001 | 0.314 (0.166-0.594) | 0.005 | 0.376 (0.190-0.745) |
| Quality of life – Physical domain | | | | |
| Excessive work | <0.001 | 0.243 (0.128-0.459) | <0.001 | 0.250 (0.125-0.501) |
| Compulsive work | <0.001 | 0.247 (0.119-0.514) | 0.001 | 0.255 (0.113-0.576) |
| Quality of life – Psychological domain | | | | |
| Excessive work | <0.001 | 0.230 (0.125-0.424) | <0.001 | 0.242 (0.126-0.463) |
| Compulsive work | <0.001 | 0.152 (0.058-0.395) | <0.001 | 0.153 (0.055-0.427) |
| Quality of life - Social relationships domain | | | | |
| Excessive work | <0.001 | 0.283 (0.150-0.536) | 0.001 | 0.318 (0.163-0.618) |
| Compulsive work | 0.003 | 0.385 (0.204-0.726) | 0.018 | 0.448 (0.230-0.874) |
| Quality of life – environment domain | | | | |
| Excessive work | <0.001 | 0.203 (0.095-0.431) | <0.001 | 0.209 (0.093-0.468) |
| Compulsive work | <0.001 | 0.288 (0.153-0.544) | 0.002 | 0.351 (0.178-0.689) |

Note: *adjusted for gender, age, being physically active, depression, years of teaching in higher education, being a senior professor, weekly hours in addition to workload hours, number of graduate programs linked and students being supervised; Hosmer and Lemeshow of the adjusted models: $p=0.236$, $p=0.368$, $p=0.443$, $p=0.693$ and $p=0.122$, respectively.

In Table 2, it was observed that 82.3% of the professors reported low general quality of life. The results also revealed that 19.5% had a high level of excessive work and 20.1% of compulsive work.

It was noted that excessive work and compulsive work are negatively and significantly associated with overall, physical, psychological, social relationship and environment domains (Table 3).

DISCUSSION

The results obtained through the sociodemographic characterization questionnaire showed that most professors are women (87.7%). In a research carried out with graduate professors at a public institution, 69.4% of the sample consisted of women⁽²⁾. The predominance of women in the teaching profession is a phenomenon resulting from historical issues regarding the position of women in society⁽¹¹⁾. Despite entering the job market, women, in addition to work, accumulate family responsibilities, which contributes to the loss of quality of life.

Another study indicates that the gender variable had a significant difference, with women showing higher rates of Excessive Work⁽⁶⁾. It was found that there is a risk profile made up of women, professionals with high workload and overtime, who perceive themselves to be less healthy and have less satisfaction with life in general.

This study showed high QoL in the psychological, social relations and physical domains, however, in the environment domain, it was low. A study carried out with a total of 293 professors from a higher education institution in southern Brazil, using the WHOQOL-BREF, also found a higher score for the psychological, social relations and physical domains⁽¹¹⁾, with values similar to those found in this study.

In a study carried out with professors from Curitiba, Parana, with the purpose of investigating the QoL of professors from private and public higher education institutions, identified that the highest mean score occurred in the domain of social relations, 71.76 in the Public HEI and 74.68 in Private HEI, similar to that found in this investigation, that is, the quality of social life was also good⁽¹²⁾.

QoL, in all its domains, was negatively correlated with excessive and compulsive work ($p < 0.05$), which was corroborated by a study carried out in Paraiba that related workaholism with quality of life and it was proved that the greater the addition to work, the lower the quality of life in all its domains: physical, psychological, social relations, environment and overall quality of life⁽⁶⁾.

It was possible to observe that the more addicted to work, the greater the deterioration of the professors' QoL, an aspect that indicates that addiction to work can harm the QoL of this professional.

The multiple activities of higher education professors related to *stricto sensu* graduate studies are carried out in short periods⁽¹²⁾, causing them to work excessively. Due to high productivity requirements⁽¹⁴⁾, they can think obsessively about work.

This study shows that workaholism negatively impacts the quality of life of professors due to the strong association of both constructs in those investigated, indicating that by becoming a priority, work deteriorates the quality of life⁽³⁾, being physical, psychological, social relations and the environment where they live.

Limitations of the study

As a limitation of this study, the cross-sectional methodology is pointed out, in which the outcome and exposure are measured simultaneously. Also, the self-reported questionnaire, whose answers can be influenced by the participants' interest. For future studies, longitudinal methods with the measurement of objective clinical data are suggested in order to fill the existing gaps regarding the long-term relationship between workaholism and QL.

Contributions to the area of nursing, health or public policy

The study promoted advances in knowledge about the association of high work demands related to the quality of life of professors. We hope that the results found can provide support for health institutions to be attentive to these addicted professionals, since such behavior does not only compromise sociability with the work team, with the family and their health, but decreases productivity, increases the rates of absenteeism and illness, impacting the quality of services provided.

CONCLUSIONS

It was noted that the distribution of the domain's overall quality of life, physical, psychological, social relations, and environment, suffered a significant and negative influence from excessive and compulsive work. The high work demands that are characteristic of the *stricto sensu* professors' work process are directly associated with quality of life.

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