

Work and mood among public university employees

O trabalho e o estado de humor de funcionários de uma universidade pública

El trabajo y el estado de humor de los funcionarios de una universidad pública

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ABSTRACT

Objective: to describe the characteristics of work and mood among employees at a public university. **Method:** this quantitative, descriptive, cross-sectional study, conducted at a university campus with 111 employees in a city in São Paulo state, was approved by the research ethics committee (protocol 2.170.360). Data were collected by socioeconomic questionnaire and the Brunel Mood Scale, and were treated using descriptive statistics. **Results:** most of the participants were middle-aged, worked in administrative/financial positions, for 30 hours per week, and had worked there for up to 10 years. High levels of positive mood were identified, especially as regards the vigor factor. Levels of anxious and worried states of mind were also considerable. **Conclusion:** although most of the participants displayed high levels of positive humor, about 40% of the workers returned high scores on items relating to anxiety and worry, which make up the tension factor of the BRUMS mood scale. **Descriptors:** Humor. socioeconomic factors. mental health. worker's health.

RESUMO

Objetivo: descrever as características do trabalho e o estado de humor de funcionários de uma Universidade Pública. **Método:** estudo quantitativo, transversal desenvolvido num campus universitário no interior do estado de São Paulo com 111 trabalhadores, aprovado pelo Comitê de Ética em Pesquisa sob o protocolo 2.170.360. Para a coleta de dados utilizou-se um questionário socioeconômico e Escala de Humor de BRUMS. Os dados foram analisados por meio de estatística descritiva. **Resultados:** A maioria dos participantes era de meia idade, trabalhavam nos setores administrativo/financeiro, com jornada de trabalho de 30 horas semanais e tempo de serviço até 10 anos. Identificaram-se altos níveis de humor positivo, sobretudo no fator vigor. Observou-se também níveis consideráveis dos estados emocionais ansioso e preocupado. **Conclusão:** embora a maioria dos participantes apresentasse altos níveis de humor positivo, identificou-se que cerca de 40% dos trabalhadores apresentaram altos escores nos itens relacionados à ansiedade e preocupação, que compõem o fator tensão da Escala de Humor de BRUMS. **Descritores:** Humor; fatores socioeconômicos; saúde mental; saúde do trabalhador.

RESUMEN

Objetivo: describir las características del trabajo y el estado de humor de funcionarios de una Universidad Pública. **Método:** estudio cuantitativo y transversal, desarrollado en un campus universitario en el interior del estado de São Paulo junto a 111 trabajadores, aprobado por el Comité de Ética de Investigación bajo el protocolo 2.170.360. Para la recolección de datos, se utilizó un cuestionario socioeconómico y Escala de Humor de BRUMS. Los datos se analizaron por medio de estadística descriptiva. **Resultados:** La mayoría de los participantes era de mediana edad, trabajaba en los sectores administrativo/financiero, con jornada de trabajo de 30 horas semanales y tiempo trabajando de hasta 10 años. Se identificaron altos niveles de humor positivo, sobre todo en el factor vigor. Se observaron también niveles considerables de los estados emocionales ansioso y preocupado. **Conclusión:** aunque la mayoría de los participantes presentaba altos niveles de humor positivo, se identificó que cerca del 40% de los trabajadores presentó altos niveles en los ítems relacionados a la ansiedad y la preocupación, los cuales componen el factor tensión de la Escala de Humor de BRUMS. **Descritores:** Humor; factores socioeconómicos; salud mental; salud laboral.

INTRODUCTION

With the technological advancement and the advent of globalization, a process of significant transformations in the world of work can be observed, especially the new demands of the ways of working, which envision the speed of production¹. However, the work environment has, as a characteristic, a double role: on the one hand, providing the development of individuals and the respective increase in expectation and quality of life when exercised under a set of appropriate conditions and, on the other hand, favoring the development of diseases and may even culminate in shortening life or death¹.

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In this sense, the complications arising from the occupational activity are influenced by factors that characterize the routines to which employees are subjected, such as those that require greater improvement, social and physical performance, namely: division of tasks, workload fulfillment, interpersonal relationships, and management of staff and of the multiple activities².

The configuration of labor organizations over the centuries has allowed the social and cognitive development of society, reaffirming the maximum responsibilities and duties. However, given the new communication technologies, the professional is responsible for coding and meeting a larger category of information that, when not properly managed, causes an excess of demands, which may influence mental health through the manifestation of insomnia, fatigue, irritability and other psychic complaints³.

Several aspects inherent to workers' mental health have been studied in recent years due to the high levels of absenteeism, early retirement, and health risks associated with the professional activity, in which more and more people are experiencing work-related emotional distress⁴.

The accumulation of tasks and the development of multiple competences as they evolve subject professionals to stress situations, causing mood impairments, and negatively influencing on the quality of life and on the use of psychoactive substances such as alcohol and tobacco, in addition to interfering with the daily activities and with the functional skills in the workplace, and therefore with productivity and with the absenteeism rates⁵.

Regarding the category of university workers, it is noteworthy that the increase in academic courses, in the vacancies available, and in the implementation of new technologies and software have required frequent adaptations and higher qualification from these professionals to meet such demands, making them susceptible to additional stressors^{6,7}.

Thus, it is understood that exploring the psychological, social and emotional aspects of these workers can foster the development of strategies to be incorporated into work management, aiming to strengthen the subjects' adaptive and coping resources in view of the potentially stressful factors of the work environment.

Therefore, humor, characterized as an internal experience of how the subject's affective tone is at a given moment, can be considered as a relevant indicator of psychological well-being⁸. Although several authors have investigated mood status in the most diverse groupings of people⁷⁻¹⁵, especially among athletes, there is a gap in the literature about studies that investigate the mood of active workers, signaling the relevance of the present study.

Thus, the present study aimed to describe the work characteristics and mood of employees working in a public university. It is understood that the findings of this investigation may assist in the development of organizational actions and guidelines aimed at promoting the mental health of workers, contributing to the improvement of the health and well-being levels of this group.

METHODOLOGY

This is a quantitative, descriptive and cross-sectional study conducted on the University *campus* in the inland of the state of São Paulo, which has eight teaching units and its own Administration Office, responsible for developing the physical infrastructure services to the other units, as well as for promoting socio-cultural and sports activities, supporting teaching and research to the local and external community¹⁶.

The study population consisted of workers from different professional categories of the *campus* Administration Office, except the teachers. The eligibility criteria were being an employed worker, not being removed from work activities during the study period and not being in a probationary period. The convenience sample comprised 111 workers who met these criteria.

The data collection period was from July 2017 to June 2018, performed by a doctoral nurse and by a previously trained undergraduate student. The workers were approached by direct invitation in their work unit and those who met the criteria for participation were given an invitation letter containing the purpose, the research design and the informed consent. Subsequently, individualized messages sent by the researcher in charge were e-mailed to the workers previously invited to the study, containing a brief comment about the study and guidelines for the participant to access the questionnaire on the "GoogleDocs" platform. Having received the research communication, the participant completed the questionnaire and, at the end, the responses were recorded in a database common to all participants and stored *on-line*. It is noteworthy that, for the workers who agreed to participate in the research but did not have access to the Internet or personal email, the researcher in charge delivered the printed instruments to their respective work units.

The instruments used for data collection contained sociodemographic issues, developed by the researchers involved in the study, based on the minimum indicators described by the Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística*, IBGE), covering aspects related to education and living conditions, family, skin color or race and work, and the Brunel Mood Scale, BRUMS¹⁷⁻¹⁸. Such a scale consists of an adaptation of the “*Profile Mood States*” (POMS), created in 1971 by McNair, Lorr, and Droppleman^{17,18} with the purpose of observing the mood fluctuation states of psychiatric patients by means of 65 items. Subsequently, the possibility of extending the use of this instrument to other populations was also observed, being widely used in sport psychology interventions¹⁹. Due to the large scale and the brevity required during data collection in research, several abbreviated versions were developed.

In this sense, BRUMS has been outstanding due to its rigorous validation process, besides demonstrating the same effectiveness of the POMS. The validation of the Brazilian version of the BRUMS was performed by Rohlf in a study with athletes and non-athletes, being sensitive and reliable in the assessment of the altered emotional states of both populations, with a good internal consistency, Cronbach's alpha values being greater than 0.70 for all constructs. It is a self-applying instrument, easy to understand and quick to fill^{19,20}.

The instrument consists of a structured questionnaire with 24 items, subdivided into six domains: 1) Confusion: responses to anxiety/depression, manifested by feelings of uncertainty, and instability to control emotions; 2) Depression: refers to a depressive state in which personal inadequacy is present. Indication of depressed mood and not clinical depression; 3) Fatigue: states of exhaustion, apathy and low energy level; 4) Rage: related to feelings of hostility. Emotional state ranging from mild feelings to autonomic nervous system stimuli; 5) Tension: refers to high musculoskeletal tension not observed directly or by psychomotor manifestations; 6) Vigor: energy, animation and activity states, indicating a positive mood¹⁹.

To calculate the score, the answer options are coded using a *Likert* scale of five points (0 = nothing and 4 = extremely). Thus, by summing the specific scores of each item, we obtain the score that can vary from 0 to 16 for each domain (mood state); the higher the domain value, the greater the manifestation of the respective mood state.¹⁹

In the data analysis phase, the participants' responses were organized in Google Sheets, the consolidated database was transferred to the *Statistical Package for the Social Sciences* (SPSS®), version 17.0, and data submitted to descriptive statistics to define the frequencies, mean value, median and standard deviation.

This study was submitted to the Research Ethics Committee of the Ribeirão Preto Nursing School-USP and was approved under protocol No. 2,170,360. It is noteworthy that the ethical aspects of research involving human beings were contemplated, according to Resolution 466/12 of the National Council on Research Ethics.

RESULTS

In the studied sample we identified male prevalence, the age range ranged from 27 to 70 years old (μ : 47.4; sd: 9.86) and with family income in the range of 1,400 to 23,000 reais (μ : 7,358 reais; sd: 4,629.48). Most declared themselves white, lived in their own home, were married, and had a car. The Catholic religion was the most mentioned. Regarding schooling, it was observed that most had completed high school or college (Table 1).

Table 1 also presents a characterization of the participants' work activities, considering the following aspects: type of occupation, time in the current occupation and weekly working hours.

Regarding the type of occupation, the workers were divided into four groups, according to the type of work, namely: the administrative/financial group, which encompassed the activities of the sectors that performed security, guard, surveillance, organization of materials, purchasing, accounting and storeroom and finally general and personnel services. The second group, called community service, concerns the sectors related to the social promotion service, childcare, housing and cultural, sports and informational/advertising activities; and the third group, called maintenance and operation, involved building, hydraulic, electrical and transportation support services. The fourth group, called transitional support, refers to the vivarium, operationalization, technical support, and library services.

Thus, the predominance of the administrative/financial group was evidenced, with a workweek of 30 hours (μ : 15,1; sd: 11,3; interval obtained from 3 months to 45 years) and 10 years in the current occupation (μ of daily hours 3.2; sd: 0.5; interval obtained from 2 to 4 hours).

Regarding mood states, Table 2 shows the mean value of the total score for each mood scale factor, with emphasis on the vigor factor, referring to the energy, animation and activity states, indicating a positive mood among the participants. In contrast, the factors of confusion and depression presented the lowest levels.

Table 1: Socioeconomic profile and description of participants' work activities, Brazil, 2017.

Variables	n (%)
Age group	
27 to 40 years old	32 (28.8)
41 to 50 years old	25 (22.5)
51 to 70 years old	48 (43.2)
Not informed	06 (5.4)
Skin color	
White/Yellow	81 (73.0)
Black/Brown	28 (25.2)
Gender	
Female	45 (40.5)
Male	66 (59.5)
Marital status	
Married	82 (73.9)
Not married	25 (22.5)
Not informed	4 (3.6)
Schooling level	
Elementary school	11 (9.9)
High school	32 (28.8)
College degree	47 (42.3)
Postgraduate course	17 (15.3)
Not informed	4 (3.6)
Religion	
Catholic	63 (56.8)
Protestant	18 (16.2)
Spiritist	14 (12.6)
Umbanda	1 (0.9)
No religion	0
Other	2 (1.8)
Not informed	4 (3.6)
Home	
Own	101 (91.0)
Leased	7 (6.3)
Other	3 (2.7)
Owned a car	
Yes	105 (94.6)
No	6 (5.4)
Type of occupation	
Administration/Finance	43(38.7)
Community service	36 (32.4)
Maintenance and operation	19(17.1)
Transitional support	08(7.2)
Not informed	05(4.5)
Time in occupation	
Up to 10 years	46 (41.4)
11 to 20 years	26 (23.4)
21 to 30 years	23 (20.7)
Over 30 years	10(9.1)
Not informed	6 (5.4)
Workday/Workweek	
Up to 20 hours	5 (4.5)
Up to 30 hours	81 (73.0)
Up to 40 hours	23 (20.7)
Not informed	2 (1.8)

Table 2: Mean domain score of mood according to type of occupation, Brazil, 2017.

Humor	Type of occupation											
	Administration/ Financial			Community service			Maintenance and operation			Transitional support		
	Interval	μ	sd	Interval	μ	sd	Interval	μ	sd	Interval	μ	sd
Vigor*	3-15	9.2	3.0	6-14	9.8	2.3	0-14	9.0	4.6	5-13	9.5	2.4
Tension	0-15	3.8	2.5	0-11	4.8	3.0	0-8	2.6	2.3	0-12	3.6	4.3
Rage	0-11	3.6	2.5	0-11	4.1	2.9	0-7	1.5	1.8	0-9	3.4	3.2
Fatigue	0-15	4.4	3.9	0-14	5.5	3.8	0-8	1.8	2.4	0-13	4.7	5.3
Confusion	0-12	2.0	2.7	0-7	2.9	2.5	0-5	1.1	1.4	0-10	2.6	3.9
Depression	0-8	1.8	2.2	0-11	3.3	3.1	0-4	0.5	1.2	0-11	1.7	3.9

*Single domain related to positive mood; the higher the score, the better the mood.
 μ – mean value; sd – standard deviation.

Figure 1 shows the distribution of participants, considering the score obtained in the 24 items that compose the mood scale.

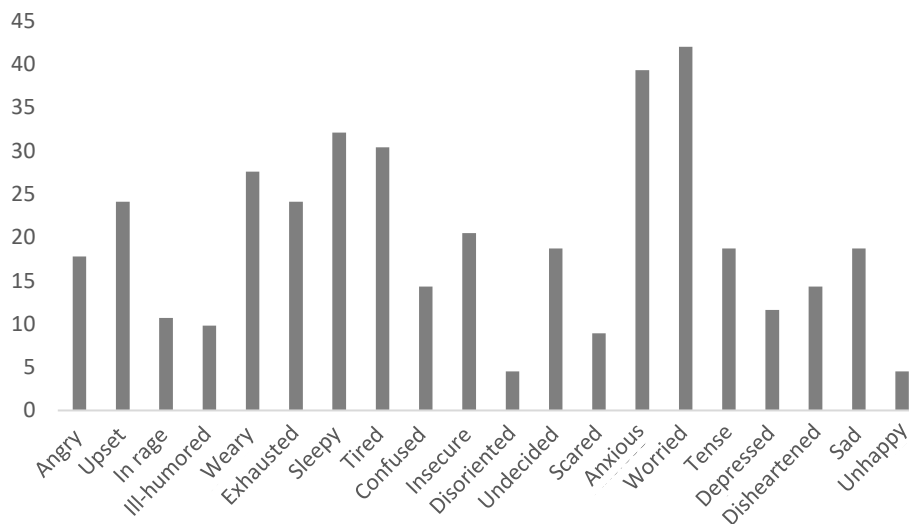


Figure 1 - Distribution of the participants according to the item scores corresponding to the negative mood of the BRUMS Mood Scale, Brazil, 2017.

Thus, although most participants had high levels of positive mood, it was found that about 40% of the workers had high scores on items related to anxiety and worry, which make up the stress factor of the BRUMS mood scale.

DISCUSSION

This study aimed to describe the work characteristics and mood of employees working in a public university. Thus, it was found that most of the workers performed functions related to administrative/financial or community service work, were in the current occupation for 15 years on average, worked about six hours a day and reported a family income of approximately R\$ 7,358.06.

Regarding the socioeconomic profile, the prevalence of males was observed. This finding, although from a convenience sample, corresponds to that identified in previous research with university workers^{21,22}. This maxim further confirms the effects of the patriarchal division that governed social relations, in which men were culturally delegated the responsibility for the financial earnings that would pay for family expenses and women the care of the home, upbringing and child rearing²³.



In addition, women have a double workday, both in the domestic and professional spheres, and this can lead to physical and mental overload and fatigue and, consequently, to illness²² and, when not mitigated, can trigger disorders that affect the mental well-being of these workers. For this reason, sick leaves related to mental health issues such as mood disorders, are more numerous among women^{21,22}. Thus, although the present study did not explore gender differences, it is noteworthy that the specifics of this group raise a closer look at the emotional aspects and their consequences.

Regarding age group, it was observed that 43.2% of the participants in this study were between 51 to 70 years old, demonstrating an aging workforce, a trend corroborated by other studies²²⁻²⁵. According to the literature, aging is an additional risk for developing health problems and productive disability and, grounded on this conception, it is asserted that such factors may make it difficult to perform certain tasks, especially those that require greater physical stress. Given this, the worker feels less productive, has greater difficulties in making decisions, and his mental well-being may be compromised, directly affecting his mood and, consequently, increasing his absenteeism²⁶. On the other hand, the experience to be shared by these workers with the younger ones should be considered because, when well-managed, such exchange can be decisive in relation to productivity in the workplace.

Regarding work activities, the administrative/finance group generally has five basic functions: driving, attending, gathering, participating and concentrating, so it is often restricted to computers and to a unique environment. For this reason, the issue that most affects workers in this area is mental burnout, particularly fatigue and tension, as they are responsible for managing the organizational pressure quickly and resolutely²⁷.

Considering that the individual spends at least one third of the day on his or her workday, it is important to ensure an adequate working environment for his/her personal and professional development, since work is a condition for quality of life and health status. Workers undergoing long workdays may experience states of fatigue and tension as a result of the need to perform a complex, repetitive function that requires attention².

Regarding the sample studied, both the work environment and the weekly workday do not seem to be a source of stress for these employees. From this perspective, it was found that, in general, workers had a positive mood, especially in the vigor factor, which analyzes the energy, animation, alertness and activity states. Previous mood studies with other populations have identified similar results¹⁰⁻¹³. However, it is noteworthy that such investigations remained restricted to athletes and the justifications for these profiles are given specifically by reactions of the sports context.

In the present study, probably, the sociodemographic and occupational characteristics of the sample contributed to the identified positive mood state. Moreover, aspects related to physical space and relationships in the workplace may be potential mediators of such results. Other factors, such as job satisfaction and organizational climate, may influence workers' moods and other mental health spheres^{14,15}.

From this perspective, it is understood that mood can also be related to issues such as division and distribution of tasks, the essential conditions for the work and the psychic functioning of the servants, that is, if the individual finds satisfaction and valorization in the work, he will be able to develop professionally more easily and that certainly contributes to his mood²⁸.

It is noteworthy that a significant percentage of participants had high scores on items related to anxiety and worry, measured by the mood scale. This result may indicate that although the worker has a good mood, some demands of the work or the personal contexts generate such feelings which, in the long run, can culminate in a situation of psychological distress.

Moreover, the possible influences of the current scenario of education and of the Brazilian public universities on the mental health of these workers are worth mentioning. This scenario has occupied an important space for debate in the academic and social sphere with discourses strongly enhanced by the journalistic media²⁹⁻³¹.

Both in academic articles and in some newspaper articles it is argued that even though they are highly qualified professionals and occupy good positions even in international rankings, such institutions have been the target of contingencies and measures that contribute to the precariousness of work such as the Incentive Program for Voluntary Dismissal (*Programa de Incentivo à Demissão Voluntária*, PIDV), the suspension of public tenders and salary increases, the reduction of workload and salaries, the outsourcing of some functions and the privatization speech²⁹⁻³¹.

These authors report that these measures make up a process of “ideological political attack”^{30:627} with a view to disqualifying public servants. They also point out that the media has spread the idea that such workers are highly privileged, uncompromising and inefficient²⁹⁻³¹ without properly contextualizing the “function and specificity”^{30:629} of the work of these officials, which is essential for the effective execution of public and social policies. Therefore, it is understood that the anxiety and concern presented by the participants of the present study is influenced by such characteristics of this socio-political scenario.

Thus, health promotion interventions focused on reducing and/or maintaining these emotional states, as well as on offering a greater repertoire of stress coping strategies should be explored in the workplace, aiming to prevent the psychological distress of this population.

Another finding of this sample is the average time in the current occupation (15 years). Workers who perform the same function for many years may develop physical and mental strain, directly related to the continuous performance of the same activities²⁸. Such perspective can produce effects on their mood, especially on the state of fatigue, generating exhaustion, apathy, low energy levels and consequent negative reactions to the performance of tasks.

From the findings of the present study it is understood that, despite the employees having a positive mood, some characteristics such as job specificity and occupation time are aspects to be considered in terms of emotional health; besides, a remarkable portion of the workers was anxious and worried.

Thus, developing activities to promote and maintain mental health in the workplace can be a preventive aspect in terms of psychological distress, and may contribute to the quality of work and professional enhancement. This recommendation corroborates a previous study whose authors infer about the search for strategies that encourage the engagement in activities to promote the physical and mental well-being of the employees and their employers. In addition, motivational and incentive programs for physical exercise, socializing and self-improvement are recommended²⁸.

The limitations of the present study were its development in only one university campus, as well as the convenience sample, which restricts the possibilities of generalizing the results. Moreover, the use of specific anxiety indicators or tools for screening common mental disorders could provide more conclusive results regarding the mental health of the study group.

CONCLUSION

The results of the study showed good levels of workers' positive mood, especially regarding the vigor factor. Nevertheless, considerable levels of anxious and worried emotional states were verified. It is suggested that some aspects of the working conditions of this sample, such as public careers appeals and professional stability, may influence the mood states of these individuals. In addition, it appears that several aspects related to the current political and social changes may be contributing to the increase of anxiety and concern in this group of workers.

In this perspective, it is understood that the planning of mental health promotion interventions are important actions to be developed in the workplace, aiming at maintaining a positive mood and at reducing anxiety and worry levels, in order to drive growth, as well as to broaden the repertoire of strategies to cope with the adversities of these employees, contributing to the maintenance of their health and well-being.

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