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# Well-being and Quality of Working Life of University Professors in Brazil

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Additional information is available at the end of the chapter

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## Abstract

This chapter presents a study about the perceptions on quality of working life (QWL) regarding factors and indicator in two public universities in Brazil. It aimed also to analyze their perceptions about university working conditions. This exploratory study is based on quantitative and qualitative analyses. A sample of 715 university professors participated on the research. Data collection was carried out in two steps: online survey and focus groups. There is a moderate negative correlation between psychological well-being and work-related stress. Emotional charge also presents a moderate positive correlation with work-related stress, as well as physical charge and psychological distress. Work-life balance is negatively correlated with physical charge, emotional charge, work-related stress, psychological distress, and burnout. We observed also that 43.6% of the professors reported high levels of work-related stress in their everyday work. The precariousness of university teaching is associated with three main elements, which we defined as the tripod of the precarization of university teaching work. It consists of academic productivity, excess of administrative work and bureaucratic activities, and inadequate working conditions. The operating dynamics of this tripod effect professors' well-being, their QWL, and even the quality of the work they develop in public universities.

**Keywords:** quality of working life (QWL), university professors, precariousness of university teaching, college education, worker's health

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## 1. Introduction

The concept of quality of working life (QWL) is quite broad, and many definitions have been developed aiming its understanding. Since the twentieth century, QWL is identified as a key

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element in the promotion of workers' health. Apart from that, quality of working life management is seen as a strategic issue to improve organizational efficacy too. Many researchers created different models to study QWL. Some of them focus on policies and people management practices like the Walton model [1], the structure and organization of work as the Hackman and Oldham model [2], and the biological, psychological, social and organizational variables as the Limongi-França BPSO-96 model [3].

More recently, Morin [4, 5] developed the general quality of working life model in order to explain relationship between QWL factors and indicators, such as (a) the meaning of work and the meaning at work, (b) the characteristics of the work, (c) the characteristics of labor relations, (d) workload, (e) working hours, (f) work-life balance, and (g) safety. Thus, quality of working life may be defined as a general state of well-being in the workplace that can be explained by different factors and indicators created in accordance with the parameters of work organization, considering also individual differences and the strategies that workers develop to adapt to their jobs [5, 6].

QWL may be seen as a set of actions to encourage a healthy work environment and the development of activities that provides meaningful work for employees [7]. Thus, identifying workers' perception on QWL factors and indicators regarding their professional activity is the best way to create a healthy and safe work environment. To better understand QWL, we postulate that it is also necessary to understand the context in which workers are inserted and the peculiarities of the organizations and their external environment.

It is also relevant to consider that work is an ontological founding and structuring category in the human socialization process. Work is a social action that allows the construction of subjectivity and a way for the individual to find a place within a group—through the process of creation and recognition of his status [7, 8]. Because of the jobs centrality in the life of human beings, work also plays an important role in the psychological well-being, fulfilling fundamental psychological function to meet the needs of meaning, affiliation, creativity, and emancipation [8].

Consequently, understanding the levels of psychological well-being and psychological distress is an important issue to propose actions on QWL. Massé et al. [9] investigated psychological distress and psychological well-being, and they found that these two constructs are opposite poles of the same mental health axis or independent constructs to be measured into two separated axes. They conclude that the assessment of mental health in the general population should use concomitant measures of psychological distress and psychological well-being.

In a study conducted with university professors of public institutions in Brazil and Canada, Vilas Boas and Morin [10–12] realized that there is a high positive correlation between work-related stress and mental load and a strong negative correlation between work-related stress and psychological well-being, indicating that psychological well-being decreases with increasing in work-related stress. They realized also that physical load, psychological well-being, and gender determined 55.9% of the scores of work-related stress. They also observed that men and women have different perceptions of work-related stress [12].

In this context, this exploratory study intends to analyze the perceptions on quality of working life regarding some factors and indicators in two public universities in Brazil. It aimed also to analyze their perceptions about university working conditions.

## 2. Literature review

### 2.1. Quality of working life models

In Brazil, several QWL studies have been conducted by authors such as Limongi-França [3, 13], Oliveira and Limongi-França [14], Constantino [15], Tolfo and Piccinini [16], Sant'Anna and Kilimnik [17], and Sampaio [18]. They include examples of development and validation of a generic tool to assess Quality of Life in biopsychosocial indicators with the University of São Paulo community. For this work, Constantino [15] has adapted an instrument based on biological, psychological, and social aspects from the model presented by Kertesz and Kerman [19]. Limongi-França [13] introduces a new conceptual modeling based on interfaces for Management of quality of working life in business administration. In this chapter, the authors seek to provide instrumental support for strategic, managerial, and operational actions on collective and individual challenges, seeking to rebuild well-being in the companies.

Tolfo and Piccinini [16] emphasize the distinction between purpose and meaning of work. For these authors, the construct purpose of work should be studied from a multidisciplinary point of view because it is a "multidimensional and dynamic psychological construct." Additionally, Sampaio [18] states that "the works of Estelle Morin and colleagues are a new influence in the field of QWL and bring theoretical and technical improvements to the classic models, despite its identification with well-being concepts (mainly psychological) and purposes of work." This author also states that the agenda of studies and research on QWL should consider that "the greatest challenge to QWL is the production of a valid knowledge to the new forms of labor relationships and work organization."

Taking that into consideration, this study is based on the systemic quality of working life model that was updated from the general quality of working life model [5]. **Figure 1** shows the variables that are related to QWL and their interrelations. In this model, work organization is presented as determinant for the employees' health, their attitudes, and performances. According to Morin [4], the impact of work organization on health and work performance varies according to the meaning given by people to the work.

The utility of work, autonomy, professional development, moral uprightness, relationships with colleagues, superiors and customers, recognition, workload, working hours, and job security are factors that should be considered to assess QWL. Therefore, the factors affect the perception of the meaning of work, represented herein by meaning of work and meaning at work. Thus, all factors can positively (in terms of employee's health) or negatively (causing disease and psychological distress) affect the quality of working life and lead individuals to have an optimum experience at work or to develop defensive strategies and try to improve their QWL.

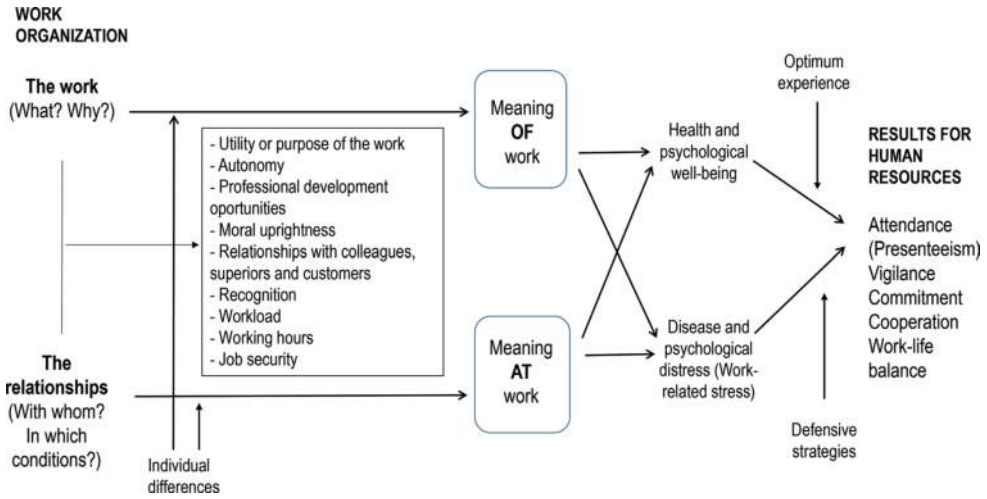


Figure 1. Systemic Quality of Working Life Model

If people see their work in a positive way, if the conditions under which they perform their work are suitable, and if personal relationships they have at work are positive, they tend to find meaning of work and meaning at work and therefore feel good, physically and mentally speaking. On the other hand, if the individuals perceive their work in a negative way, they tend to think that their work has no meaning and much less the environment where they work, which may lead them to show stress symptoms at work or psychological distress.

In addition, Morin [5] and Vilas Boas and Morin [6] say that the impact of work organization on QWL varies according to individual differences, including gender, age, education, emotional tract (i.e., tendency to experience positive or negative emotions) and assigning style (i.e., tendency to believe that we are not responsible for some situations we actually are), emotional intelligence, and guidance for work. Therefore, every study on QWL should pay attention to sociodemographic characteristics and the patterns of work organization.

Keeping these brief considerations about QWL' models in mind, we would like to present a brief description of the educational scenario in Brazil to support readers to understand the results of field research that was carried on with university professors from Brazilian public universities.

## 2.2. Precarious university teaching work

Teaching profession can be considered different from other work activities due to its complexity and the level of physical and emotional exhaustion that are part of the teaching routine. The process of formal education originates from the knowledge that is produced by society, and this is due to the demands of survival experiences and collective productions of a particular social group. Considering that professors play a central role in formal education in nowadays society, it is necessary to recognize the existence of a causal link between teaching

work and the levels of sickness of these professionals—highlighting the impacts that occur in professors health and their professional particularities.

Several changes have taken place in labor and employment relations, which are an indicative of a phenomenon that some authors call “precariousness of current working relations” that are also present in the processes of teaching work [20]. Professors health is directly related to social, economic, and technological factors, and these professionals are at risks of several natures. The main risks present in their work routine are physical, chemical, biological, mechanical, and ergonomic [21].

For these reasons, teaching profession has become an unhealthy activity in different countries of Latin America and Caribe, manifesting itself in work-related illnesses such as burnout, stress, and neurological diseases. These illnesses are positively correlated with the precarious conditions of teaching work [22].

Assunção and Oliveira [21] emphasize that the process of labor intensification, which affects economical sector, can basically occur in two ways: due to the reduction of the number of workers without change in the quantity produced and, in a second case, as a consequence of the growth of production without changes (increase) in the number of workers. In the teaching reality—especially in the university context—this process of intensification of the work with increases in the number of students without the proportional increases in the number of professors is perceived in many institutions in different countries. Educational institution needs a great counterpart of resources to execute such demand [21–23].

Martinez et al. [24] emphasize that the professional practice of teaching, in general, is seen as an activity without many risks compared to other professions (it is common for the teacher to be asked: Do you work or just teach?). Such perception creates an “invisibility” of these professionals. In fact, studies show that the educational activity is permeated by psychological suffering, manifested in depression, anxiety, panic attacks, and psychotic processes, and by physical suffering, manifested by the commitment/loss of voice; pain and stiffness in the lower back, neck, and extremities of the body; diabetes; gastric ulcers; and hypertension [21–25]. All these sufferings can compromise Professors’ health.

Regarding Professors’ physical health problems, we recall that professors’ are among the professionals who present a higher prevalence of specific vocal complaints and also present the highest risk for the development of vocal disorders in comparison with other professionals [21, 25–28]. Karmann and Lancman [25] point out that the current teaching activity is also under the effects of modern educational policies, which follow the neoliberal and managerial logic, characterized by overload and intensification of work, precarious conditions and poor labor contracts, and political disarticulation of workers.

The conditions of precariousness and overload of teaching work, as already seen, are also perceived in the university teaching context. Some studies have already indicated that higher education professors are also subject to precarious working conditions, characterized by flexible contracts, greater intensification of workload, and requirement of polyvalence in the activity [7, 29, 30]. Such a context of labor precariousness may have consequences for professors’ physical and mental health and may trigger diverse illnesses, such as the elevation of the level

of work-related stress [7, 31] and burnout syndrome [32, 33]. This scenario compromises the possibility for university professors to find QWL in their daily activities.

In order to understand the complexity of teaching work within the Brazilian public universities, it is necessary to know the social context that permeates teaching activity in Brazil. This context is changing strongly in recent decades, during which education has suffered great influence of the economic model of managerial neoliberal logic, characterized by overload and intensification of work, precarious conditions, temporary labor contracts, and policy disarticulation of workers. As a result, we now have a scenario marked by the commodification of higher education, a process that has contributed to the precariousness of university teaching. It happens due to the requirements of productivism and the work overload [7].

The academic productivism had its origin in the United States of America in the last century and became known as “public or perish” phenomenon, which already indicated that professors or university researchers who did not meet publication requirements, according to quantitative criteria of public or private funding agencies, would have negated their careers. On this subject, many studies indicate that academic productivism, the logic of “publish or perish,” has increased the academic stress for professors and researchers and may affect their well-being and quality of working life [12, 34–39].

Alcadipani [37] criticizes this commodification scenario of education to indicate that, from the 1990s, with the implementation of the management model in educational institutions, the educational process has been turned into a mere product. In this context, professors have become service providers, students are transformed into customers, and the dynamics of teaching/learning has to occur within a logic of consumer satisfaction.

In Brazil, the academic productivism has been the subject of many criticisms directed especially to the system of postgraduation program evaluation (master and doctorate courses) established by the Coordination for the Improvement of Higher Education Personnel (CAPES) since 1996. At this time, this government agency implemented a number of quantitative criteria for assessing academic production and accrediting postgraduation programs. At this time, a change occurred also in CAPES’s evaluation paradigm. It fails to employ criteria that prioritized the improvement of professors’ training and swap to value researchers’ training. Thus, it is worth to note that the identity of Brazilian university professors became increasingly associated with acting as a researcher and less linked to teaching [39].

To meet publishing requirements of federal bodies, such as CAPES or even the universities themselves, professors need to work longer hours and dedicate themselves to their own researches and the researches of their undergraduate and graduate students, which leads to an increase on workload. Pressures linked to workload may initiate work-related stress, imbalance between work and personal life, and mental, physical, and emotional stress, which may also initiate different health problems and even cause disturbance in relationships with the work environment. In other words, we may say that quality of working life for academics has been drastically affected by work demands or, more precisely, by the high demands of publishing in the last decades [7, 12, 37, 39–41].

According to Vilas Boas and Morin [11, 12, 40, 42], workload is a confirmed factor of psychosocial risk, and currently the workload of university professors has been very high due to the increasing demands on research and publishing [34–36, 38].

Besides the academic productivity, another factor that has contributed to workload in teaching career in public universities in Brazil relates to the effects of the implementation of the Support Program for the Federal University Restructuring and Expansion Plans (REUNI). Although it is necessary to expand the offer of free vacancies in undergraduate courses of the federal universities in Brazil, it should be noticed that public higher education professors have faced great challenges in the last decade after the implementation of REUNI. With the implementation of the REUNI, the increase in the number of places offered to students in the federal public higher education system was not proportionally followed by the increase in the number of professors who had been admitted, a scenario that is generating a workload for professors working in public universities [43, 44].

Given the above, we believe that the changes in university organization standards and in the working conditions affect educational system. These changes can be harmful for teaching standards, and, consequently, they affect professors' QWL. In this context, this study searches to understand how the current Brazilian university scenario, characterized by the precariousness of teaching work, may affect university professors' perceptions on QWL in public universities. It aimed also to analyze their perceptions about university working conditions through group interview. To do so, we will present a brief overview of the research methodology in the sequence.

### 3. Methodology

In this section, we present the methodological procedures that guided the present study. We show also the methods and techniques used for data collection and for the treatment of data collected during the research process.

We developed an exploratory study based on two cases aiming to analyze the perceptions of 715 university professors from Brazilian public universities about quality of working life (QWL). The whole study can be accessed in Paula [7]. For understanding the perceptions that professors have about their work, we choose some QWL factors and indicators to be analyzed, according to the model proposed by Morin [5] and Vilas Boas and Morin [6].

We considered the answers of 428 professors from the University A (59.86% of the sample) and 287 from the University B (40.14% of the sample). We use non-probabilistic sampling by categories/quotas, so that the sample corresponded to 25% of the total number of professors working in the universities analyzed. In addition to the voluntary adhesion to the study, the main criterion of inclusion in the sample was the participant to be an effective professor in the career of Higher Public Education and to be teaching at one of the mentioned universities.

Regarding the procedures used for data collection, we adopted a quantitative-qualitative approach—which seeks to associate the contributions of qualitative and quantitative researches. We also used focus group to enable such quantitative-qualitative association.

We used an online survey with a structured questionnaire for gathering quantitative data. The questionnaire was posted on Survey Monkey®, whose link was made available to the professors by e-mail in the first half of 2015, after approval by the Research Ethics Committee at the Federal University of Lavras, Brazil. This online questionnaire was divided into two parts. Part I consisted of a set of questions that aimed to gather data on the following aspects: (a) personal and sociodemographic information (sex, age, degree of academic qualification, number of children) and (b) information about the current profession and employment history (date of admission into the university, daily/monthly working hours, other university activities developed besides teaching).

Part II was composed of a set of questions with six-point concordance scales (assumed in this study as an interval scale) in which there is an ordered spectrum with quantifiable intervals. The questions were based on an early version of the instrument developed at the Center Research for Health, Work and Organizational Effectiveness (CRITEOS) by École des Hautes Études Commerciales (HEC) in Montreal, Canada [5]. The questionnaire included scales that measured the following indicators: the meaning of work and the meaning at work [45]; psychological distress and psychological well-being [46]; work-related stress [47]; and work-life balance [48]. Apart from that, the questionnaire included one scale to measure three factors related to workload. They were measured by Vidulich and Tsang [49] and Morin [5] instruments to determine physical demand (time to perform their tasks), mental demand (complex tasks), and emotional demand (emotional work related to human relationships).

Since we intended to understand the impact that work organization patterns (working conditions and interpersonal working relations) have on workers' health and performance, it was also important to control personal events that might have occurred in the past and recently in the professors' lives. These personal events also affect their psychological state (e.g., loss of a loved one, illness of the individual himself, and judicial issues). Thus, we used some control measures such as verifying the influences of personal events that may have occurred recently in the professors' lives that may have affected their physical and psychological state using the scale of Dohrenwend [50]. For more details, please refer to Paula [7].

We also controlled the effects of the bias of compliance presented by the respondents by verifying the level of social desirability. In general, people, in expressing their own opinions, have a tendency to express an opinion that is valued by the majority. We used also a scale, composed of 11 statements, to verify the level of social desirability [51]. When we use this scale, we intend to neutralize the respondent's tendency to present socially desirable ideas, which chooses a supposed answer expected by the researcher. For more details, please refer to Paula [7] too.

Methods of descriptive statistics (frequency distribution and mean) and multivariate statistical techniques (Pearson correlation analysis) were used on the quantitative analyses [52]. The data analyses were processed using the software Statistical Package for the Social Sciences



(SPSS®). In developing the statistical analyses, we also considered variables such as age, sex, working institution, working hours, and other elements of labor characterization, apart from analyzing the factors (determinant variables) and the indicators (component variables) related to quality of working life [6].

To collect qualitative data, we used focus groups with 24 professors who agreed to participate voluntarily in these groups. Qualitative data was used in content analysis procedure [53]. These procedures were carried out paying attention always to the initial objectives of the study and other relevant aspects that have been highlighted by the participants during the statistical analyses. One open question, in the end of the questionnaire, also provided appropriated comments and suggestions that guided focus group and the qualitative analysis.

## 4. Results and discussion

Quality of working life is a general state of well-being in the workplace that can be explained by different factors and indicators. If such individual factors and indicators are consistent, the measurement variables should be strongly correlated [5, 6, 40, 41]. QWL factors and indicators result from the patterns of work organization and individual differences. Results for Human Resource Management result from coping strategies, which may involve optimum experience or defensive strategies.

The relationship between health and disease are to be understood as a *continuum*, ranging in levels of health or illness. Since psychological well-being may be considered a health measurement, in this research, we expected a positive correlation between psychological well-being and work-life balance. The individual experiencing psychological well-being tends to keep better work-life balance, possibly perceiving his work positively and finding meaning on his work activities. Following the same logic, a worker who often experiences a feeling of high workload, burnout, and work-related stress will hardly experience psychological well-being at work. Positive psychological experiences are also related to positive meaning of work and meaning at work, while negative psychological experiences, such as psychological distress and work-related stress, are normally associated to lack of meaning of work and meaning at work.

### 4.1. The relationships between QWL factors and indicators

The chosen QWL factors and indicators provided reliable information (internal consistency indexes greater than 0.72) and consistent information. **Table 1** presents the means, standard deviations, Pearson correlation coefficients, the number of statements for each indicator, and the internal consistency index Cronbach's alpha. We can see that the correlation coefficients are significant in the expected direction, which indicates that there is consistency of the information that these measures enable measurement.

There is a strong positive correlation between psychological well-being and work-life balance (0.665;  $p < 0.000$ ). On the other hand, there is a strong negative correlation between

	Means	SD	MOW	MAW	CHAPHY	CHAMEN	CHAEMO	WSTS	PWB	PDS	Burnout	WLB
MOW	16.59	2.00	(Alpha) (nb items)	(0.824) (3)								
MAW	13.52	2.82	r	0.505** (0.722) (3)								
CHAPHY	43.04	10.94	r	-0.068 (0.839)								
CHAMEN	55.83	5.05	r	0.069 (5)								
CHAEMO	47.19	9.71	r	0.267** (0.738) (4)								
WSTS	38.38	11.57	r	-0.077 (0.856) (6)								
PWB	34.68	11.52	r	0.040 (6)								
PDS	29.15	12.15	r	-0.178** (10)								
Burnout	20.23	10.36	r	0.000 (9)								
WLB	40.84	11.83	r	0.338** (9)								
			r	-0.281** (9)								
			r	0.000 (9)								
			r	-0.304** (9)								
			r	0.000 (9)								
			r	0.191** (6)								
			r	0.000 (6)								

Legend: **Indicators** —Meaning of work (MOW); meaning of work (MAW); work-related stress (WSTS); psychological well-being (PWB); psychological distress (PDS) and work-life balance (WLB). **Factors**—Physical charge (CHAPHY), mental charge (CHAMEN) and emotional charge (CHAEMO).  
 Source: Paula ([7], p. 221)

\*Correlation is significant at the level of 0.05 (two-tailed).

\*\*Correlation is significant at the level of 0.01 (two-tailed).

**Table 1.** Means, standard deviation, Pearson correlations among QWL's factors and indicators, scores of internal consistence and number of items (N = 715).

psychological well-being and burnout ( $-0.675$ ;  $p < 0.000$ ), indicating opposite relationships between these variables. We recorded also a strong negative correlation between psychological well-being and psychological distress ( $-0.712$ ;  $p < 0.000$ ), but not high enough to confuse such indicators. There is also a moderate negative correlation between psychological well-being and work-related stress ( $-0.596$ ;  $p < 0.000$ ). This means that when the levels of burnout, psychological distress, and work-related stress increase, psychological well-being experience tends to decrease. It clearly indicates that they are different variables that may influence professors' QWL.

There is also a moderate positive correlation between the meaning of work and the meaning at work ( $0.505$ ;  $p < 0.000$ ). In other words, the meaning of work and the meaning at work are two indicators that measure different aspects but give a consistent information with the latent variable that is supposed to represent, that is, the QWL evaluated by these public university professors.

We perceived a strong negative correlation between work-life balance and psychological distress ( $-0.636$ ;  $p < 0.000$ ), indicating that the two indicators are consistent to compare the QWL of university professors. In addition to this, we may observe on **Table 1** that there is a moderate negative correlation between work-life balance and burnout ( $-0.556$ ;  $p < 0.000$ ) and there is a moderate negative correlation between work-life balance and work-related stress ( $-0.495$ ;  $p < 0.000$ ). These findings indicate that work-life balance decreases if work-related stress, burnout, and psychological distress increase, as observed in previous studies [10, 12, 42].

Considering workload present in everyday teaching in universities, we may observe from the gathered data (**Table 1**) that there is a moderate positive correlation between emotional charge and psychological distress ( $0.472$ ;  $p < 0.000$ ). Emotional charge presents also a moderate positive correlation with work-related stress ( $0.532$ ;  $p < 0.000$ ). Additionally, physical charge is moderately correlated (positive) with work-related stress ( $0.582$ ;  $p < 0.000$ ) and psychological distress ( $0.453$ ;  $p < 0.000$ ), indicating that an increase in physical workload may lead to an increase in psychological distress and in work-related stress.

There is a strong positive correlation between burnout and psychological distress ( $0.793$ ;  $p < 0.000$ ), which is a very recurrent syndrome among teaching professionals [54]. There is also a moderate positive correlation between burnout and work-related stress ( $0.553$ ;  $p < 0.000$ ). We may say that these two indicators are interconnected; thus, an increase in psychological distress may lead to an increase on the levels of burnout and work-related stress.

In summary, the relationship between QWL factors and indicators presents the same patterns as explained the general quality of working life model and in the systemic quality of working life model [5, 6].

#### 4.2. University working conditions and QWL

In order to better understand how the correlations of these QWL factors and indicators are established, we will now turn on to explain university working conditions and, later, explain some health problems triggered by such working relationships. Based on the contributions of the participants, we present the main categories that emerged from the qualitative data (**Table 2**).

Category	Description of category/subcategory
Work-life balance	This subcategory presents the strategies to reconcile the activities of private life with the duties of academic life. It also deals with the effects of the imbalance between personal life and teaching work on professors' physical and mental health.
Work relations	<i>Relations with colleagues:</i> This subcategory describes the relationship established with other university members, such as colleagues, head of department or technical-administrative staff.  <i>Relationship with students:</i> This subcategory gathers the participants' considerations about the relationship with the graduate and undergraduate students.
Precariousness of university teaching work	<i>Academic productivism:</i> This subcategory refers to teachers' manifestations regarding the processes of precariousness of teaching work, with special emphasis on academic productivism experienced in daily teaching.  <i>Excessive administrative work and bureaucratic activities:</i> This subcategory deals with the effects of the overload of bureaucratic and administrative tasks in professors' routine.  <i>Inadequate working conditions:</i> This subcategory describes how professors evaluate their current working conditions, considering the management system that regulates their work activities, physical infrastructure and other resources made available by the institution for teaching work.

Source: Paula ([7], p. 153).

**Table 2.** Description of the categories of qualitative data analysis.

The first category *work-life balance* presents strategies to reconcile activities from private life with the demands of academic life. It addresses also the effects of the imbalance between personal life and academic life.

Nowadays, university professors experience an increase in “invisible” work (especially cognitive and intellectual work). Although it seems that physical overload has been reduced by the information technology, some studies show that physical charge is getting higher and higher among university professors and researchers. It is strictly related to the “publish or perish” phenomenon [12, 34–39, 42]. There is consequently an increase in the complexity of intellectual and emotional demands in academic environment, which also generate an increase in psychological distress and other professional diseases.

With the new communication technologies, professors may be increasingly available to university demands, experiencing a work overload generated by an “invisible work,” as pointed out by Professor 6:

*“[...] today, it seems that work is invisible! it's there all the time ...it's there on Saturday, it's there on Sunday, it's there at dawn on Sunday, it's there at dawn on Monday. So, in that aspect with the technological modernization and with all of these facilitations, it seems that we're working harder than when we have to manage 16, 18 or 20 hours a week at the university. That's awful.”* (Professor 6/ University A)

University professors and researchers are also working long hours to meet the demands of teaching and academic productivism expressed in the numbers of publications, reports, conferences, and so on [38, 42]. This situation generates stress, and it is responsible for increasing the risk of loss of balance between the instances of private and professional life [7, 34, 35].

Under such conditions, their mental health may be at risk because of the stress and fatigue they experience in their work and the imbalance between personal and professional life.

Unfortunately, this overload of teaching work is not an isolated phenomenon, but rather a result of the current model of higher education, whose efforts prioritize results connected with a mercantile and productivist logic. This, to a large extent, serves more interests of the private economic market than the collective social interests [34–38].

Other worrying statistic that confirms this distressing scenario refers to workload, as evidenced by the high number of working hours per week. In this sample, 14.7% of professors reported that they work more than 51 hours per week. When we consider the groups of respondents that works more than 46 hours per week in both universities, we will have 271 (37.9%) professors that represents more than one third of the total of respondents.

It should be noticed that, under current Brazilian labor legislation, the maximum working hours per week is 44 hours. It is relevant to observe that working more than 55 hours per week may lead to illnesses such as sleep disorders, chronic fatigue, stress, gastric problems, hypertension, and even diabetes [30, 55]. In this study, 105 professors (14.7%) are in evident risk of becoming ill—suffering especially from sleep disorders, fatigue, and stress—due to the high number of working hours per week.

We observed that 192 professors (26.9%) declared that they work two weekends per month, while 167 (23.4%) mentioned that they work every weekend. Another 133 respondents (18.6%) indicated that they work three weekends per month. When we observe the group of professors who work at least three weekends per month, we have 300 respondents (42%) in this condition. Such scenario of potential illness has a significant negative effect on the quality of life of these professors, interfering on the balance between personal and professional life too.

The second category *work relations* describes how professors perceive their relationships in the workplace. This category was subdivided into two subcategories (*relations with colleagues* and *relations with students*), which, although complementary, present distinctions as to the origin of the relation and how each one affects the perception of QWL for these professionals.

The subcategory *relations with colleagues* describes the relations established with other university workers, whether there are other professors or technical-administrative workers. In general, the professors reported that the main problems experienced in the relationship with technical-administrative workers are (a) lack of support for the development of teaching activities and (b) delay in answering requests made by them to the institution. In general, the contact between professors and institutional sectors is mediated by technical-administrative workers. On the other hand, the relationship with peers is a factor of great displeasure and dissatisfaction in the work environment of the investigated universities. Bad interpersonal relations among professors have a negative impact on their QWL, due to the conflicts and violence that sometimes permeate these relationships.

There have been reports of episodes of disrespect in the workplace that may damage working relationships and stimulate diseases. The logic of productivism also encourages intra- and extra-institutional competition, increasing the feeling of work overload and suffering, which is reflected in an increase of the number of sicknesses and withdrawals from work or even

death [56]. It is also reflected on the episodes of presenteeism [10, 41]. These informations should be considered to implement Human Resources strategies.

The subcategory *relations with students* gathers considerations of the participating professors about the relation with their graduate and undergraduate students. This category emerged from our data and was not directly mentioned in the QWL model proposed by Morin [5]. It is because the model is general and was designed based on research with other publics, such as health employees and military servants. However, the students can be considered as clients in the updated model we used [6]. It should be noted that the relationship with the students was seen in a very positive way by most of the participants and it was configured as one of the elements that may positively influence the improvement of these professors' QWL. In general, professors indicated that the relationship with students is based on the recognition of their role in the teaching and learning process and the possibility of contributing to the development of students and society, as mentioned by Professor 38:

*"I really like what I do! I feel that I make the difference in students' lives and feel responsible for their future. In the last 24 months, I have been away from work for maternity leave and accompanying my husband abroad and I have felt great desire of coming back. The work makes me feel part of something important, big and relevant."* (Professor 38/University B)

Another category of analysis was created to understand the scenario of *precariousness of the university teaching work* experienced in the daily life by the university professors who took part in the focus group. This category was split into three other subcategories, which must be understood in a broader context. It deals with (a) *academic productivism*, (b) *excess of administrative work and bureaucratic activities*, and (c) *inadequate working conditions* in the universities.

These three elements constitute what we defined as the *tripod of the precarization of university teaching work* (**Figure 2**), which sustains exhausting working conditions in academic environment. We may say that such conditions are also responsible for the patterns of correlations among the studied factors (workload and working hours) and indicators (work-related stress, meaning of work, meaning at work, psychological well-being, psychological distress, and balance between the demands of personal and professional life) and other damages to QWL of public university professors.

We will now deal with the productivist logic that prevails in academic everyday life and its consequences in the professors' life. The subcategory *academic productivism* discusses the process of precariousness of university teaching work, with special emphasis on the scientific productivism experienced in the reality of higher education in Brazil and abroad [7, 11, 34–39, 42].

With the commercialization of the university (which transforms the educational process into a product or commodity), the logic of a university that follows the Taylorist model starts to guide the systems and practices of evaluation of the productivity of Brazilian professors and researchers. We perceive that the product/merchandise (here understood as education and university knowledge) has been offered to the society taking into account, primarily, the interests of the economic market that compromises professors' quality of life and even the quality of the teaching process [7, 25, 29, 30].

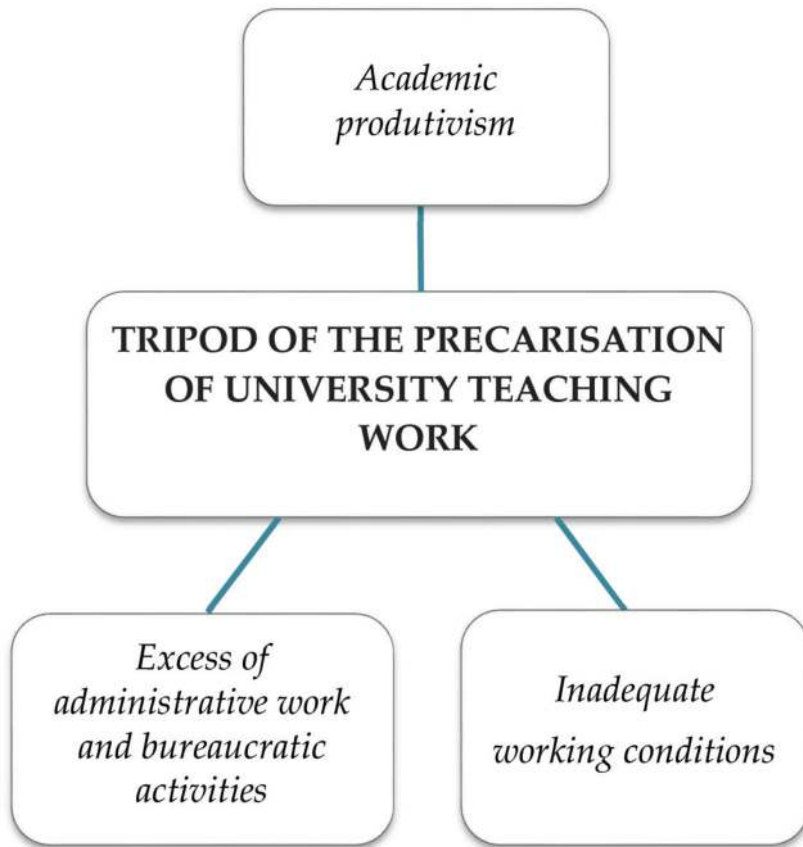


Figure 2. Tripod of the precarization of university teaching work (Source, Paula ([7], p. 192).

This Taylorist productivist system in the university favors the sickness, depersonification, and lack of meaning of work for professors (who become “machines and takers”) for not respecting the time of the professors and the “maturing” process of their researches. Such charges may lead to conflicts in work relationships and even lack of social responsibility with the results of their own researches. One respondent (Professor 84) mentioned that new professors blindly attend the logic of productivity imposed to the universities:

*“The new professors who enter the academic space, especially the young doctors, blindly attend to the logic of productivity so widespread in postgraduate programs in Brazil. People are ‘labeled’ between those who produce and those who do not. The ‘being’ becomes the ‘having’: to have enough published paper, to have productivity grant, etc. In short, we have closed our eyes for those who pay our salary: the people! Honestly, when I think I have at least another 20 years, to stay in this harsh environment, I get to have chills. Many colleagues have become ill. I do not want to get sick too.” (Professor 84 / University A)*

There is also a systematic pressure on the professors involved in postgraduation programs. Such professionals are pressured constantly by deadlines and evaluative metrics of public and private research and development agencies and may present a series of illnesses related to this scene. Thus, we also realize that there is already a generalized culture of charging for “results” and productivity. On addition to this, professors who are not tied up to postgraduate programs reported also that, in addition to their classes and administrative activities, they also feel pressured to produce more even for working weekends or overnight that compromises their family life and their health (Professor 49):

*“There is pressure from the university to do research and publish, however the university does not leave time available for the professor to make research [...] if someone wants to make research he has to work at night or weekend.”* (Professor 49/University B)

The professors emphasized that they are favorable to the production of knowledge, provided that this production is accompanied by a time of maturity of the research. Intellectual production is not seen as a problem. The issue highlighted by these professors as the major problem is the mercantilist logic, tied to the neoliberal model of economics, which dictates work rhythms and research patterns [29]. This acceleration of activities is perceived as something that is unhealthy and stressful.

We emphasize that there is another collective appeal for academic productivity, which is in association with the identity of university professor with the figure of the researcher. To be recognized and to have more status in the academic world, the professor must be more than a professor; he must also be also a researcher, as postulated by Professor 11:

*“There is this idea that your identity as university professor is related to your research. This is very strong! It places a technical labor division, of those who research and those who do not research.”* (Professor 11/University B)

As a virtue of this productivist logic, professors choose as priority the activities that “generate more points.” Another effect of the mercantilist logic of productivism is a proliferation of research groups with superficial debates. Such actions may deteriorate collective construction of knowledge—to strengthen individual actions—and the feeling of dissatisfaction does not meet what is required.

We may see as well as that labor relations are being neglected and this affects the meaning of work, as recommended by Morin [5] and Vilas Boas and Morin [6]. As postulated by Alcadipani [37], the measurement system, based on the mentioned mercantilist logic of productivism with managerial practices, distorts the whole process of building knowledge within the universities.

As discussed above, we may say that working conditions have a direct impact on workers’ health, engagement, and productivity [57, 58]. In this sense, the demands and difficulties arising from the organizational structure and working conditions (especially for the exercise of administrative functions) are supporting the rise of the new subcategory of analysis called *excess of administrative work and bureaucratic activities*.

Performing administrative work and bureaucratic activities, such as advice, direction, commissions, and course coordination, overwhelms professors’ life too. We noted that 198



professors (27.7%) mentioned that they exercise some administrative activity at the university. In general, these administrative functions are disconnected from the reality of the professor and destitute of meaning for the professors carrying them out. Most of the participants declared that they do not have training for the exercise of these administrative functions, as mentioned by Professor 11. A situation that becomes a factor of dissatisfaction and misunderstanding:

*"We do not have structure and training to be a manager/administrator. There is no training to be on course coordinator! There is not any capacitation to assume a course coordination! There is not any capacitation to become Head of Department! You go there and falls by parachute, often peers pressure. [...] This is bad, because you're worn out."* (Professor 11/University A)

Morin [4] pointed out that the characteristics of work are fundamental to establish the *meaning of work* so that, for a job to be meaningful to the worker, it is important that the person does something that is useful and has some purpose for him or for someone else—a job that contributes to others and to the society. Therefore, people are looking for a job that enables them to realize themselves as human beings and feel necessary and participative in a collective and social work. Additionally, the characteristics of the relationships performed in the job and inside the organization are important to establish the *meaning at work*. These two concepts are strictly related to the forms of work organization, and they are so relevant to make a real and effective diagnostic of QWL [5, 6, 40–42].

We realize that such administrative and bureaucratic functions are not appreciated by most of the professors, possibly because of the lack of recognition and meaning, and the physical and emotional exhaustion that these activities trigger. A meaningful and interesting work activity mobilizes workers not only to develop and to exercise their individual professional capacities but also to experience an accomplishment resulting from external factors of their work practice, as recognition of the working groups [59].

Finally, we present the third and last subcategory that make up the last "foot" of what we call the *tripod of the precarization of university teaching work*. The subcategory *inadequate working conditions* describes how the professors evaluated their current working conditions, considering the management system that regulates their work activities, physical infrastructure, and other resources made available by the institution for the accomplishment of university teaching work.

Most of the participants reported a series of complaints about the lack of organizational support or university structure to the development of their work. According to the participants, lack of appropriate structure may affect the quality of their work and represents also an impact on their physical or psychological health, as mentioned by Professors 73 and 36:

*"My quality of working life is affected by the lack of infrastructure. There is not enough offices to accommodate everybody, so I've been "provisionally" housed for almost 2 years in a lab. My work desk is very old and small. The chair, though new, is uncomfortable, causing back pain at the end of the day."* (Professor 73/University A)

*"We work on an ugly campus. Old and ugly buildings, temporary rooms. There is no good space for scientific, artistic, or personal discussions."* (Professor 36/University A)

The lack of financial, technical, or organizational support has negative influence too, such as the lack of financial resources to build the buildings for the studied universities. This indicates how much organizational support appears to be necessary to retain such professionals in the universities and to promote better QWL for them. It is because the precarization of teaching work experienced in the daily life of university professors causes impacts on their perceptions of QWL and in the desire of preserving their careers in public universities [7].

We have seen that all three components of the *tripod of the precarization of university teaching work* are present in the studied universities and they have a harmful effect on the professors' health and in the quality of the work they perform. Such "wear and tear" may compromise QWL of many professors working in public universities, and it may prevent these professionals from finding meaning on their work.

## 5. Final considerations

We developed this study based on the assumptions that some QWL factors and indicators may describe university professors' perception on QWL. It aimed also to analyze their perceptions about university working conditions. This study was based on quantitative and qualitative research with 715 professors in two public universities in Brazil. The whole study can be accessed in Paula [7]. We applied an online questionnaire and implemented four focus groups. We adopted the systemic quality of working life model, from Vilas Boas and Morin [6], as parameters for our analyses.

We noted, from the literature review, that the current Latin American, Caribe, and even other regions suffer from a scenario of precarization of university teaching work and it has a negative impact on professors' QWL and affection of their personal and professional life.

Physical charge, mental charge, emotional charge, and working hours were the factors analyzed in this research along with the following indicators: meaning of work, meaning at work, psychological well-being, psychological distress, work-related stress, and work-life balance. The Pearson correlation coefficients are significant in the expected direction, which indicates the information that these measures offered are reliable and consistent.

The results indicate that work-life balance decreases if work-related stress, burnout, and psychological distress increase. We have also observed that when psychological well-being decreases, professors' psychological distress increases. It was observed in the quantitative analyses and ratified in several comments collected during focus group. It was also observed that the professors' perceptions about the meaning of work and the meaning at work are directly related to their perceptions about the other indicators and factors as predicted by the adopted model that is directly affected by the patterns of work organization [5, 6].

Balance between work demands and the demands from private life become compromised by the acceleration and intensification of university work that ends up invading personal and family spheres. This disequilibrium affects professors' health, as it causes an increase in physical and psychical exhaustion. In addition to this, there is an excess of working hours to

overcome all duties required from university professors who are much more involved with research and publications nowadays than with teaching itself.

We argue that studies on the perceptions that employees have about organizational structure or working conditions are extremely relevant nowadays. It is because competition between companies and markets is extremely dynamic and fierce in dictating economic rules that affect directly public universities in different countries. This scenario pushed public universities to behave according to economic rules. However, healthy people and people compromised with their work activities become the main differential for the organizations, and it may contribute directly to the growth of human being and the organizational success too [60]. In this scenario, the worker's well-being is essential to enable meaning of work and keep workers involved with their organizations, such as public universities [58, 61, 62].

Data from content analyses allowed creating the *tripod of the precarization of university teaching work*. This tripod is composed by academic productivism, excess of administrative work and bureaucratic activities, and inadequate working conditions. All these three aspects affect directly quality of working life in public universities [7].

For further studies on QWL in the public sector, we suggest that similar research should be carried out at other public universities, thus supporting intervention programs and public policies that promote a better working environment for these professionals. It is also relevant to use qualitative approach to reinforce the quantitative findings in other public realities in order to spread this model, which may be considered an innovation on the studies about QWL. It is because this model focuses on many elements that are not addressed, as a whole, by previous models. Faced with all these considerations and notes, we would like to highlight our position that policies that guide actions on QWL should not negate the conflict capital versus work or, worse, ally with the interests of capital. QWT should be understood as a way of improving living conditions for workers and consequently for the organization itself and for the society.

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