

## Quality of Work Life: Comparative Analysis Between two Public Workers Groups\*

Carla Antloga<sup>1,\*\*</sup> , Maurício Sarmet<sup>2</sup> , Marina Maia do Carmo<sup>1</sup> , Veruska Albuquerque<sup>1</sup> , Polyanna Andrade<sup>3</sup> , & Paolo Francesco Cottone<sup>4</sup> 

<sup>1</sup>University of Brasília, Brasília, DF, Brazil

<sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia da Paraíba, João Pessoa, PB, Brazil

<sup>3</sup>University Center of Brasília, Brasília, DF, Brazil

<sup>4</sup>University of Padova, Padova, Italy

**ABSTRACT** – The general objective of the study was to compare the analysis of the perception of Quality of Work Life of workers from two federal entities in the infrastructure area based on the Activity-centered Ergonomics Applied to QWL. A total of 3.136 workers participated in this research. As an instrument it was used an electronic version of the QWL Valuating Inventory. The result presents no significant differences in perception of the two groups of works in relation to the quality of life at work. The element work organization was the worst evaluated indicating alertness and risk of illness. The research indicates issues that deserve attention during the elaboration of QWL Policy and Program in the evaluated organizations.

**KEYWORDS:** ergonomics, quality of work life, work organization

## Qualidade de Vida no Trabalho: Análise Comparativa Entre dois Grupos de Servidores Públicos

**RESUMO** – O objetivo geral do estudo foi comparar a percepção da Qualidade de Vida no Trabalho de trabalhadores de dois órgãos públicos da área de infraestrutura com base na Ergonomia da Atividade Aplicada à QVT. Participaram desta pesquisa 3.136 trabalhadores. Como instrumento foi utilizada uma versão eletrônica do Inventário de Avaliação de QVT. O resultado que não há diferenças significativas na percepção dos dois grupos em relação à qualidade de vida no trabalho. O elemento organização do trabalho foi o pior avaliado indicando alerta e risco de adoecimento. A pesquisa aponta questões que merecem atenção durante a elaboração da Política e Programa de QVT nas organizações avaliadas.

**PALAVRAS-CHAVE:** ergonomia, qualidade de vida no trabalho, organização do trabalho

Over time, the challenges of the world of work have been changing and intensifying. Some events were milestones in this process of change: Scientific Administration, with the application of the scientific method in administration in order to ensure the best cost/benefit to production systems; the Industrial Revolutions, when there was a transition to new manufacturing processes such as wage labor and the use of machines to what we live in today; productive restructuring, which impacted capitalist modes of production; and, recently, the Management 4.0 era and its proposal to be an innovative,

entrepreneurial and technological model. (Antunes & Alves, 2004; Antunes, 2020; Ferreira, 2015)

The interest in investigating workers' health considering the impacts of these models of management/production of work and, consequently, the emergence of discussions on Quality of Work Life (QWL) took place in the mid-1950s. Since then, the emergence of concepts and theoretical models that converge in the sense of understanding QWL as an objection to scientific administration and productive restructuring has been observed. Such factors, through the

\* This article integrates the CAPES/Print project called Clinical Psychology and Culture: Interventions and Professional training at the University of Brasília.

\*\* E-mail: [antlogacarla@gmail.com](mailto:antlogacarla@gmail.com)

■ Submetido: 30/04/2022; Aceito: 11/08/2022.

subjection of the worker and the invisibility of their needs (Lacaz, 2000), culminate in an increase in the demands of work and an increase in its pace (Ferreira, 2015). The QWL movement proposes, then, the rescue of the humanization of work and the promotion of the workers' well-being, marked by improvements and innovations in the work environment and its organization (Sant'Anna et al, 2011).

The literature review developed by Sampaio (2012), based on Brazilian empirical studies, pointed out that QWL is generally associated with the humanization of work, participation in management decisions and well-being. In Ahmad's (2013) analysis, quality of life at work is related to specific organizational situations and practices that enable a perception of safety, satisfaction and growth. The fundamental elements for understanding QWL would be: health and safety; stability or the feeling of security; job satisfaction; occupational stress and a work environment with space for dialogue and respect for individual needs.

The lack of consensus generates incongruence between the concept, theory and method in some studies. What is noticed is that, for the most part, the discussions about QWL did not consider the changes that occurred in the world of work and the specifics of the work context of the population being studied.

Walton's (1973) model was indicated as being the most comprehensive to study QWL in the literature review carried out by Pizzolato et al., (2013). Medeiros and Ferreira (2011), on the other hand, highlight the limitations of the concept as it does not consider current aspects of work organization. In addition, it is observed that the use of instruments without validation for the sample and without verification of psychometric qualities biases the QWL assessment. (Alves, 2010; Pedroso & Pilatti, 2010).

In the scope of the public sector, focus of this study, it is verified, especially in the last decade, the implementation of reforms and the development of policies with the perspective of modernization aiming to guarantee essential parameters for the nation's development, such as transparency, efficiency and the effectiveness of the services provided (Coelho & Menon, 2018; Ferreira et al., 2009). This movement, linked to changes in the world of work, led to the emergence of a new model of people management in public institutions. Consequently, a new servant profile is now required. This scenario highlights the need to invest in QWL policies, which enable the collective construction of projects aimed at preventing health and promoting the well-being of servants.

In 2009, the Federal Government's Integrated Health Care Subsystem - SIASS was instituted. The program, regulated by Decree No. 6.833/2009 aims to "coordinate and integrate actions and programs in the areas of health care, official expertise, promotion, prevention and monitoring of the health of employees of the direct federal, autarchic and foundational administration, in accordance with the health and safety at work policy for federal public servants, established by Law". The creation of SIASS was a milestone for the development of a set of policies aimed at promoting health care, the standardization of official expertise and the promotion, prevention and monitoring of health. Considering the action fronts provided for in the SIASS policy, the adherence between the proposed actions and the importance of interventions in QWL is evidenced.

Next, we present the theoretical-methodological approach called Ergonomics of Activity Applied to Quality of Work Life, which has been shown to be a relevant model in QWL investigations in the Brazilian public sector.

## ERGONOMICS OF ACTIVITY APPLIED TO QWL

The Ergonomics of Activity Applied to Quality of Work Life - EAAQWL (Ferreira, 2015) is a model based on the ergonomics of the Francophone activity (Danielou, 2004; Guérin et al., 2001) and has its origins in studies carried out in the scope of the Brazilian federal public service. Since then, several studies have allowed us to map the perceptions of public servants about QWL and have been subsidizing the construction of QWL policies and programs for the agency.

From a conceptual perspective, QWL is understood from two perspectives: from the perspective of organizations, QWL is a management precept, expressed in norms, guidelines and practices aimed at organizational conditions, work organization and socio-professional relationships aimed at promoting the individual and collective well-being and organizational citizenship. From the perspective of workers, QWL covers the representations they build about the organizational context and that indicate the predominance of experiences of well-being at work, recognition, the possibility

of growth and respect for individual characteristics. According to the approach, five factors structure the quality of life at work, described below (Ferreira, 2015):

- a. Working Conditions: Expresses the physical, material, instrumental and support conditions that influence the work activity and put the worker's physical safety at risk.
- b. Work Organization: Expresses the variables of time, control, task traces and overload and prescription.
- c. Socio-professional Work Relations: Expresses socio-professional interactions in terms of relationships with peers and bosses, communication, harmonious environment and conflicts.
- d. Professional Recognition and Growth: Expresses variables related to job recognition and professional growth.

- e. Work-Social Life Link: Expresses perceptions about the institution, work and analogies with social life.

Studies based on EAAQWL (Branquinho, 2010; Figueira, 2014, Medeiros, 2011; Silva, 2016) show weaknesses in various public agencies. Two factors are at the center of the workers’ negative representations: work organization and professional recognition and growth.

Experiences of ill-being linked to the organization of work relate to a high level of request, excessive demands and pressure (Branquinho, 2010; Fernandes & Ferreira, 2015); excessive bureaucracy, lack of planning and execution of repetitive tasks (Fernandes & Ferreira, 2015); managerial inability (Branquinho, 2010; Fernandes & Ferreira, 2015); and lack of training (Medeiros, 2011). Therefore, there seems to be a generalized scenario of intensification and work overload in the public service.

As for the recognition and professional growth factor, there are extreme situations that deserve attention (Figueira, 2014; Santos, 2014; Lemos, 2017; Medeiros, 2011).

Workers feel undervalued for not perceiving formal practices of recognition and real opportunities for growth. The absence of spaces that enable recognition enhances suffering, ill-being and illness at work (Mattos & Schlindwein, 2015).

Social-professional relationships, on the other hand, appear as a source of well-being in most studies (Branquinho, 2010; Fernandes & Ferreira, 2015; Figueira, 2014; Lemos, 2017; Medeiros, 2011; Santos, 2011; Santos, 2014). Workers perceive that harmonious and cooperative relationships among colleagues substantially contribute to the existence of quality of life at work. In this sense, healthy relationships seem to play a compensating and protective role for workers’

health even when other factors are causing discomfort (Santos, 2014).

The work-social life link has been shown to be a source of well-being at work in different contexts. Globally, the studies carried out show, on the one hand, a positive view of public servants about their work and its importance and, on the other hand, the perception that society does not recognize the role of the work carried out (Branquinho, 2010; Fernandes & Ferreira, 2015; Figueira, 2014; Lemos, 2017; Medeiros, 2011; Santos, 2014).

Considering the context presented so far, there is the following research problem, which guided the conduct of the study: are there similarities and/or differences in perceptions of quality of work life between groups of servants from different agencies, but whose services provided to society are similar? From this perspective, the general objective of the study was to compare the perception of Quality of Work Life of workers from two federal agencies with similar natures of work.

To meet the general objective, the following specific objectives were established: to assess the psychometric adequacy of the Inventory of Evaluation of Quality of Life at Work – IEQLW, an instrument proposed by Ferreira (2009), for making comparisons; assess the instrument’s internal consistency from the comparison between the two groups; describe the perceptions of the five structuring factors of QWL; and characterize the sources of well-being and discomfort in the work of the two groups.

Comparative studies, such as the present work, allow a theoretical in-depth of the QWL theme, favoring the identification of common traits not in public service that can guide the construction of government policies that promote well-being.

## MATERIALS AND METHODS

### Participants

Two groups of workers from two federal autarchies, from the infrastructure area, took part in this study, resulting in a total of 3136 participants. Group 1 was made up by 1682

participants, 42,4% women, 53,7% men and 3,9% who did not want to identify themselves, whereas group 2 counted with 1454 participants, 42,0% women, 54,4% men and 3,6% who did not identify themselves. The type of bound with the institution can be observed in Table 1.

Table 1  
Distribution of participants regarding the bound with the organization

Bound	Group 1		Group 2	
	f	%	F	%
Servant	900	53.5	815	56.1
Outsourced	619	36.8	509	35.0
Intern	63	3.7	49	3.4
Did not identify	100	5.9	81	5.6
Total	1682	100.0	1454	100.0

Note. Elaborated by the s.

## Instrument

The electronic version of the Inventory of Evaluation of Quality of Life at Work – IEQLW (Ferreira, 2009) was used as tool. The IEQLW is made up by quantitative and qualitative parts.

The quantitative part of the inventory is a multifactorial scale of a *Likert* type with a 11-point frequency (0= I totally disagree to 10= I totally agree) and it is made up by 61 items. The items are divided into five factors: work conditions (12 items,  $\alpha = 0,90$ ), work organization (9 items,  $\alpha = 0,73$ ), socio-professional relations of work (16 items,  $\alpha = 0,90$ ), acknowledgment and professional growth (14 items,  $\alpha = 0,91$ ) and the bound between work and social life (10 items,  $\alpha = 0,80$ ).

The qualitative part is made up by four open questions, to know: a) In my opinion, quality of life at work is; b) When I think about my work at the place X, what causes me more ill-being is; c) When I think about my work at the place X, what causes me more well-being is; and, therefore, an open question for comments and suggestions.

## Procedures of data collection and ethical awareness

The data collection of this study was made through an *on-line* survey, built on the administration platform of research Google Forms. The link propagation of the link with the access to the survey was done through the institutional electronic mail, previously allowed by the pertinent organizations. When accessing the *link*, the participant was forwarded to the Free and Clarified Term of Consent, which guarantees the responders’ anonymity, the volunteer trait of the research and the exclusivity of the data for academic ends, according to the Code of Professional Ethics. The participant would only be forwarded to the survey if they had agreed with the presented Term.

After the release, 21 days were reserved for the data collection phase. In the end of this period, the access to the survey was finished and, from the answers obtained, the data analysis proceeded.

## Procedures on the data analysis

The data was submitted to descriptive and inferential statistics analysis with the use of the statistic *software* R (R Core Team, 2013). To analyze of the internal consistent of the instrument, the “psych” pack (Revelle, 2018) was used and, to perform the multigroup factorial analysis, in order to evaluate the invariance of the factorial structure of the instrument, the pack “IsIx” (Huang, 2019) was used. The conducted analysis adopts the PL (*penalized likelihood*) method for structural equations (*structural equation modeling* – SEM) by incorporating elements of exploratory and confirmatory analyses together, with little influence on the dimension of the groups, allowing the comparison of a certain instrument in different groups (Huang et al., 2017). This method establishes each parameter of the model of the group as a component of reference and evaluates how far the parameters of the model in the group are from the reference from a specific increment component of the group (Huang, 2018). The variance difference between groups and the amount of the increment (if any) are used as the measure of instrument invariance.

The answers from the qualitative part of the instrument were compiled and organized in a corpus for lexical analysis with the help of the program *Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires – Iramuteq* (version 0.7 alpha 2) (Ratinaud, 2009). The classes of meanings were generated from the application of the method of Descending Hierarchy Classification – DHC (Reinert, 1990).

To interpretate the results, the average of each factor is analyzed based on the cartography presented on Figure 1.

----	---	--	-	Negative Tendency	Positive Tendency	+	++	+++	++++
0-0,9	1-1,9	2-2,9	3-3,9	4-4,9	5-5,9	6-6,9	7-7,9	8-8,9	9-10
Intense Ill-Being		Moderated Ill-Being		Transition Zone		Moderated Well-Being		Intense Well-Being	
Dominating Ill-Being						Dominating Well-Being			
<p><b>Negative</b> result that evidences the predominancy of <b>ill-being</b> representations at work. Representations that must be <b>changed</b> in the organizational environment.</p> <p><b>Risk of illness</b></p>				<p><b>Middled</b> result. Indicates <b>'limit-situation'</b>. Coexistence of ill-being and well-being at work.</p> <p><b>State of alert</b></p>		<p><b>Positive</b> result that evidences the predominance of representations of <b>well-being</b> at work. Representations that must <b>maintained and consolidated</b> in the organization environment.</p> <p><b>Health Promotion</b></p>			

Figure 1. Cartography of interpretation of the average of the factors that structure the QWL  
Source: Ferreira (2012)

## RESULTS

The instrument kept the internal consistence that is accurate for two groups, with  $\alpha = .85$ ,  $\lambda_2 = .87$ , and  $CCI = .85$  (95% *CI* [.83, .86]) for the Group 1 and with  $\alpha = .84$ ,  $\lambda_2 = .86$ ,  $CCI = .84$ , and (95% *CI* [.83, .85]) for the Group 2. Regarding the invariance of the instruments in the two groups, it was possible to identify the homogeneity in the average of factors for both groups from the PL method and the indexes of adjustment of the model were accepted ( $RMSEA = .07$ , 95% *CI* [.07, .07];  $CFI = .74$ ;  $SRMR = .08$ ) and the analysis of the increments of the instrument parameters for both groups suggest the invariance of the instrument (Table 2).

Once identified the invariance of the instrument, the gathering of the averages and, consequently, the comparison based on the cartography of analysis, it was possible to evidence that, in Group 1, only the factors 1 and 3 (work conditions and socio-professional relations, respectively) are situated in the Moderate Well-Being zone. The factors 2, 4 and 5 (work organization, acknowledgment and professional growth and bound between work and social life, respectively) can be found in the transition zone – positive tendency. In Group 2, the factors 1, 3 and 5 are in the Moderated Well-Being zone, while the factors 2 and 4 are in the transition zone. Regarding the global evaluation about the QLW, it is seen that the average of Group 1 is in the transition zone, and the average of Group 2 is in the Moderated Well-Being zone (Table 3).

Meaningful differences were not identified, from the test *t*, to averages between the groups for specific factors, neither for the general score of QLW. From the correlation biserial-point to the dichotomic variant of sex, meaningful correlations were observed, although weak ones, only in Group 1 between the sex and F1 ( $r_{pb} = .05$ , 95% *CI* [.00, .10],  $p < .05$ ), F4 ( $r_{pb} = -.06$ , 95% *CI* [-.11, -.01],  $p < .05$ ), and F5 ( $r_{pb} = -.05$ , 95% *CI* [-.10, -.01],  $p < .05$ ). Now, the analysis of association between the bound variant, a meaningful association was found between the type of bound and the factors F4 ( $\chi^2 = 607.72$ ,  $df = 352$ ,  $p < .001$ ) and F5 ( $\chi^2 = 592.11$ ,  $df = 270$ ,  $p < .001$ ), only for Group 1, not being found relevant associations for the type of bound or the component factors of QLW for Group 2.

The lexical analysis of the answers of the open question of the instrument from the *Iramuteq* program resulted in 55,230 occurrences, 5,842 ways and 1,547 text segments. It was possible to classify, through the CHD, 1,481 text segments (95.73% of retention) resulted in 6 classes. The most representative ways (words) of the classes for each group can be seen in Figure 2 with the respective values of meaningful  $\chi^2$  ( $p < .001$ ). The CHD conduction for each group did not identify relevant differences neither in the number of classes, nor in the characteristic ways for each group.

Table 2  
Comparison between the parameters of factors in the groups

Factor	Group 1 (Reference)			Group 2 (Increment)		
	Variance	CI		Variance	CI	
F1	140.10	111.69	168.51	-3.80	-24.66	17.05
F2	154.73	144.90	164.56	2.20	-27.66	32.07
F3	156.26	134.89	177.62	-2.53	-27.08	22.01
F4	129.94	113.54	146.35	-2.12	-12.28	8.03
F5	112.11	100.96	123.25	-4.37	-16.02	7.28

Note. Elaborated by the s.

Table 3  
Average scores per Group for the factors of QLW

	Group 1		Group 2	
	A	SD	A	SD
F1	6.25	1.25	7.31	1.87
F2	5.79	1.26	4.91	1.34
F3	6.34	1.20	6.98	1.95
F4	5.24	2.09	5.53	2.21
F5	5.62	1.96	7.38	1.37
QLW	5.85	1.26	6.42	1.39

Note. A = Average, SD = Standard Deviation. Elaborated by the s.

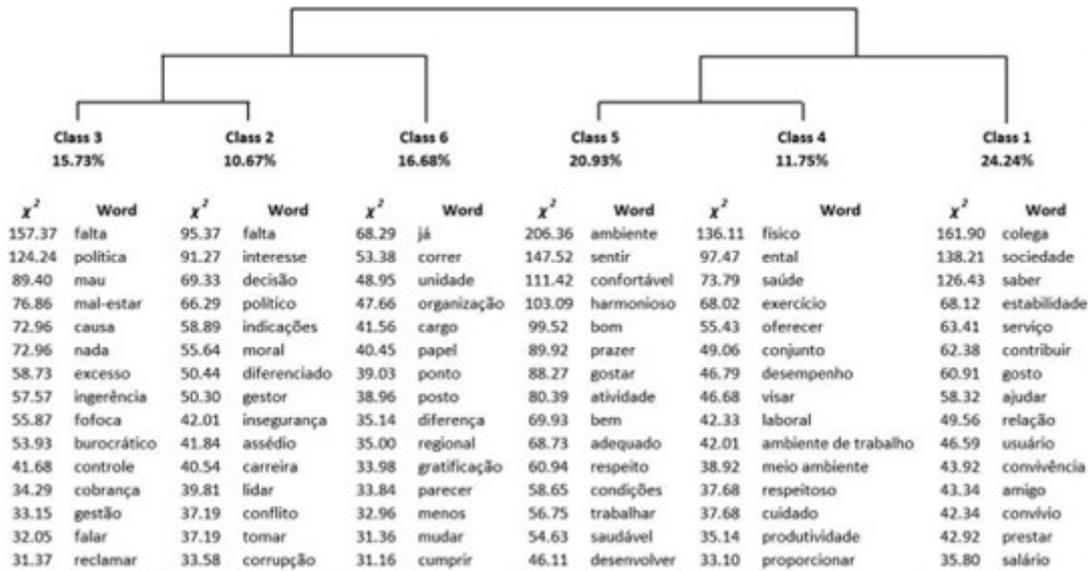


Figure 2. Dendrogram of Descending Hierarchical Classification per Group

The identified classes by the CHD congregate relative terms to sources of well-being (Class 1, 24.24%), QLW (Classes 4 and 5, 32.68%), ill-being sources (Classes 2 and 3, 26.40%) and feeling of duty accomplished (Class 6, 16.68%). The ways and characteristics of each class indicate the vocabulary shared by the participants for the description of factors that were brought up in the qualitative part of the instrument applied.

The qualitative data obtained in this study have the potential of exemplifying and specifying the results obtained in the qualitative analysis, in a way that is possible to identify with precision and scientific validity the sources of well-being and ill-being at work. Such result allows not only to identify the common aspects in both organizations, but also permits to structure QLW politics targeting specifically to the reality of each and specific group.

## DISCUSSION

Research studies that have quality of work life and its factors as an object of study have become increasingly present in the scientific community. Considering the relevance of the subject, Alves (2010) and Pedrosa and Pilatti (2010) highlight two important points to ensure the quality of research: the choice of adequate instruments for the evaluation of components that constitute QWL, aligned with theory; and checking the psychometric qualities of the scales. In this regard, the instrument used in this study had satisfactory internal consistency and invariance for the two groups, which indicates that it measured the same construct in the two agencies, thus allowing comparisons.

The work organization factor was the worst evaluated factor in the two groups of this study. These results are compatible with other research studies carried out based on EAAQWL (Branquinho, 2010; Coelho et al., 2018; Fernandes & Ferreira, 2015; Figueira, 2014; Lemos, 2017; Medeiros, 2011; Santos, 2014). The organization of work seems to be the “Achilles heel” of the public service insofar as it has been shown to be one of the main sources of ill-being in all the studies carried out.

In the qualitative analysis, ill-being combines two classes (Classes 2 and 3) and reflects the results of the quantitative stage insofar as it has terms such as “bureaucratic”, “interference”, “excess”, “demands”, and “management”, all related to the organization of work and, in this specific case, linked to ill-being.

This scenario may be a product of the process of modernization that has been implemented in the public service, especially in the last decade. This process is fundamentally characterized by: pressure for above-average results; increase in the human cost in the development of activities; significant increase in cases of worker illness; introduction of new technologies; and demand for a flexible management of production and work (Ferreira, 2015; Ferreira et al., 2009). However, it is noteworthy that the demands of this modernization oppose a management setup that is still focused on the operational, with no strategic alignment and overburdened by legalism and corporatism (F. S. Coelho & Menon, 2018).

The evaluation of the two groups of workers about work conditions shows the coexistence of ill-being and well-being,

indicating an alertness. The conditions of infrastructure, instruments and technical support do not seem to be adequate enough for the performance of activities, as occurs in other organizational realities (Coelho et al., 2018; Medeiros, 2011; Santos, 2014). A new perspective on work conditions in the public service is necessary, considering that the literature has indicated, for decades, the importance of the adequacy of work conditions to the nature of the task and characteristics of workers, bearing in mind their physical and mental health (Danielou, 2004; Guérin et al., 2001).

In terms of socio-professional relationships, the results of both groups indicate a positive perception of the factor. That is, these relationships appear as a source of well-being at work, corroborating the findings of Branquinho (2010); Fernandes and Ferreira (2015); Figueira (2014); Lemos (2017); Medeiros (2011), and Santos (2014).

The establishment of healthy socio-professional relationships between coworkers and leadership has a compensating and protective nature regarding the health of workers, even when other factors are causing ill-being (Santos, 2014), can contribute to a work environment that is more welcoming and, in addition, promotes the continuity of the flow of organizational prescriptions. This interpretation finds support in the results presented in the qualitative analysis, as evidenced by the typical vocabulary of Class 1, where the terms “coworker”, “friend”, “living together”, and “coexistence” are highlighted among the well-being sources.

The practices of recognition and possibilities of professional growth were perceived in an ambivalent manner by research participants. This evaluation seems to be associated with the imprecision of policies and practices of people management, absence of marketing actions for the work performed for the internal and external public, and a

managerial attitude that does not acknowledge the importance of workers. The lack of recognition hinders the identification with the work and the attribution of meaning to it, which can lead to suffering and illness (Mattos & Schlindwein, 2015), apparently leading to the development of a defense strategy that we call “duty accomplished” and that contemplates the terms of Class 6: “accomplish”, “role”, and “difference”. The link of Class 6 with Classes 3 and 2 (sources of ill-being) evidences the ambivalence in the practices of recognition and possibilities of growth.

The data presented indicate the situation of quality of work life of both organizations, specifying what causes ill-being, as well as what provides well-being and maintains the difficulties of this work. Considering the quantity of respondents in both organizations, it is understood that the sample is representative of the population studied, which provides the data presented with statistical validity.

The complaints involving lack of recognition, and function progression based mainly on political interests instead of professional merit have been shown to be a common source of ill-being for both groups. They also draw attention to the fact that work organization has been the worst evaluated factor in both groups, indicating once again the issue in the field of public agencies due to the current management setup. In this regard, the present study has potential for specifying to such organizations the issues that deserve special attention during QWL policy making in these agencies.

Besides these potentialities, given that the agencies have similar functions, such results cannot be generalized for all areas and levels of public service, despite having good indicators of what may be explored in future studies with other public organizations.

## REFERENCES

- Ahmad, S. (2013). Paradigms of quality of work life. *Journal of Human Values*, 19(1), 73-82. <https://doi.org/10.1177/0971685812470345>
- Alves, E. F. (2010). Qualidade de vida no trabalho: Indicadores e instrumentos de medidas. *Diálogos e Saberes*, 6(1), 77-87.
- Antunes, R., & Alves, G. (2004). As mudanças no mundo do trabalho na era da mundialização do capital. *Educação & Sociedade*, 25, 335-351. <https://doi.org/10.1590/S0101-73302004000200003>
- Antunes, R. (2020). Trabalho intermitente e uberização do trabalho no limiar da indústria 4.0. *Uberização, trabalho digital e indústria*, 4(1).
- Branquinho, N. G. S. (2010). *Qualidade de vida no trabalho e vivências de bem-estar e mal-estar no trabalho em professores da rede pública de ensino de Unai/MG*. (Master's thesis, University of Brasília).
- Coelho, F. S., & Menon, I. O. (2018). A quantas anda a gestão de recursos humanos no setor público brasileiro? Um ensaio a partir das (dis) funções do processo de recrutamento e seleção—os concursos públicos. *Revista do Serviço Público*, 69, 151-180. <https://doi.org/10.21874/rsp.v69i0.3497>
- Daniellou, F. (2004). *A ergonomia em busca de seus princípios debates epistemológicos*. In *A ergonomia em busca de seus princípios debates epistemológicos*. Edgard Blucher.
- Decreto No. 6.833, dated April 29, (2009). *Institui o Subsistema Integrado de Atenção à Saúde do Servidor Público Federal - SLASS e o Comitê Gestor de Atenção à Saúde do Servidor*.
- Fernandes, L. C., & Ferreira, M. C. (2015). Qualidade de vida no trabalho e risco de adoecimento estudo no poder judiciário brasileiro. *Psicologia USP*, 26(2), 296-306. <https://doi.org/10.1590/0103-656420130011>
- Ferreira, M. C. (2009). Inventário de Avaliação de Qualidade de Vida no Trabalho (IA\_QVT): Instrumento de diagnóstico e monitoramento de QVT nas organizações. *Anais da 61ª Reunião da Sociedade Brasileira para o Progresso da Ciência*.
- Ferreira, M. C. (2012). *Qualidade de Vida no Trabalho. Uma Abordagem Centrada no Olhar dos Trabalhadores*. 2<sup>nd</sup> edition. Paralelo 15.
- Ferreira, M. C. (2015). Ergonomia da Atividade aplicada à Qualidade de Vida no Trabalho: lugar, importância e contribuição da Análise Ergonômica do Trabalho (AET). *Revista Brasileira de Saúde Ocupacional*, 40(131), 18-29. <https://doi.org/10.1590/0303-7657000074413>
- Ferreira, M. C., Alves, L., & Tostes, N. (2009). Gestão da qualidade de vida no trabalho (QVT) no Serviço Público Federal: O descompasso entre problemas e práticas gerenciais. *Psicologia*:

- Teoria e Pesquisa*, 25(3), 319-327. <https://doi.org/10.1590/S0102-37722009000300005>
- Figueira, T. G. (2014). *Bem-Estar, Mal-Estar e Qualidade de Vida no Trabalho em uma Instituição Pública Brasileira*. (Master's thesis, University of Brasília).
- Guérin, F., Laville, A., Daniellou, F., Duraffourg, J. & Kerguelen, A. (2001). *Compreender o Trabalho para Transformá-lo: A prática da ergonomia*. Blucher.
- Huang, P. H. (2018). A penalized likelihood method for multi-group structural equation modelling. *British Journal of Mathematical and Statistical Psychology*, 71(3), 499-522. <https://doi.org/10.1111/bmsp.12130>
- Huang, P. H. (2019). *lslx: Semi-Confirmatory Structural Equation Modeling via Penalized Likelihood*. Retrieved from <https://cran.r-project.org/web/packages/lslx/lslx.pdf>
- Huang, P. H., Chen, H., & Weng, L. J. (2017). A penalized likelihood method for structural equation modeling. *Psychometrika*, 82(2), 329-354. <https://doi.org/10.1007/s11336-017-9566-9>
- Lacaz, F. A. C. (2000). Qualidade de vida no trabalho e saúde/doença. *Ciência & Saúde Coletiva*, 5(1), 151-161. <https://doi.org/10.1590/S1413-81232000000100013>
- Lemos, S. M. S. D. (2017). *A qualidade de vida no trabalho (QVT) antes e depois: análise comparativa no Poder Judiciário brasileiro*. (Master's thesis, University of Brasília).
- Mattos, C. B. M., & Schlindwein, V. D. L. D. C. (2015). "Excelência e produtividade": novos imperativos de gestão no serviço público. *Psicologia & Sociedade*, 27(2), 322-331. <https://doi.org/10.1590/1807-03102015v27n2p322>
- Medeiros, L. F. R. (2011). "Somos a cara da prefeitura? Então somos a cara abandonada": *Ergonomia da atividade aplicada à qualidade de vida no trabalho no contexto do serviço público municipal*. (Doctoral Dissertation, University of Brasília).
- Medeiros, L. F. R., & Ferreira, M. C. (2011). Qualidade de vida no trabalho: Uma revisão da produção científica de 1995-2009. *Gestão Contemporânea*, 8(9), 9-34.
- Pedroso, B., & Pilatti, L. A. (2010). Revisão literária dos modelos clássicos de avaliação da qualidade de vida no trabalho: Um debate necessário. In R. Vilarta, G. L. Gutierrez, & M. I. Monteiro (Org.), *Qualidade de vida: Evolução dos conceitos e práticas no século XXI* (pp. 197-206).
- Pizzolato, B. P., Moura, G. L., & Silva, A. H. (2013). Qualidade de Vida no Trabalho: uma discussão sobre os modelos Teóricos. *Contribuciones a la Economía*, (2013-04), 1-16.
- R Core Team (2013). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing, Vienna, Austria. Retrieved from <http://www.R-project.org/>
- Ratinaud, P. (2009). *IRAMUTEQ: Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires*. Retrieved from <http://www.iramuteq.org>
- Reinert, M. (1990). ALCESTE, une méthodologie d'analyse des données textuelles et une application: Aurélia de G. de Nerval. *Bulletin de Méthodologie Sociologique*, 28, 24-54. <https://doi.org/10.1177/075910639002600103>
- Revelle, W. (2018). *Psych: procedures for personality and psychological research*. Northwestern University.
- Sampaio, J. R. (2012). Qualidade de vida no trabalho: Perspectivas e desafios atuais. *Psicologia: Organizações e Trabalho*, 12(1), 121-136.
- Sant'Anna, A. S., Kilimnik, Z. M., & Moraes, L. F. R. (2011). Antecedentes, origens e evolução do movimento em torno da qualidade de vida no trabalho. In A. de S. Sant'Anna, & Z. M. Kilimnik (Org.), *Qualidade de vida no trabalho: Abordagens e fundamentos* (pp. 3-30). Elsevier.
- Santos, L. A. (2014). "Quando chega domingo, fico triste de ter que trabalhar na segunda": a qualidade de vida no trabalho em questão no serviço público federal. (Doctoral Dissertation, University of Brasília).
- Silva, A. Q. (2016). *Diagnóstico, política e programa de qualidade de vida no trabalho em uma instituição pública brasileira e a percepção dos trabalhadores como premissa para mudanças no contexto organizacional* (Master's thesis, University of Brasília).
- Walton, R. E. (1973). Quality of Work Life: What is it? *Cambridge Sloan Management Review*, 15(1), 11-21.