



Article

Adaptation of the Work-Related Quality of Life-2 Scale (WRQoL-2) among Portuguese Workers

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Abstract: In the present study we aimed to fulfill two main goals. The first was to adapt the WRQoL-2 Scale among Portuguese workers and the second was to verify the associations between WRQoL-2 dimensions and perceived organizational performance dimensions (e.g., social and economic). To reach our research goals, we used a sample of 635 Portuguese workers. The WRQoL Scale has been widely used for academic and practical ends and comprises six dimensions: Job and Career Satisfaction, Control at Work, General Well-Being, Home-Work Interface, Stress at Work, and Working Conditions. Recently, the authors proposed a revised measure—WRQoL-2—in which they added a seventh dimension—Employee Engagement. As this second version had not yet been translated into the Portuguese language for Portugal, this was our first goal. By performing a set of statistical analyses such as EFA, CFA, reliability, convergent and discriminant validity, and invariant analysis, the results suggested a six-factor structure where the dimensions of Job and Career Satisfaction and Employee Engagement were united. The final structure suggested good reliability as well as convergent and discriminant validity as it showcased invariance according to gender and sector. Because there is a lack of studies focusing on the links between quality of work life and organizational performance, we then tested the interplay between WRQoL-2 and perceived organizational performance dimensions, and we verified that, although most are significantly associated, the results suggest a low intensity. This work also presents several theoretical and practical implications.

Keywords: quality of work life; Work-Related Quality of Life Scale; WRQoL-2; organizational performance



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1. Introduction

According to data from the Report on the Cost of Stress and Psychological Health Problems at Work, produced by the Portuguese Psychologists' Association (OPP) in 2022, absenteeism and presenteeism caused by stress and psychological health problems cost Portuguese companies around €5.3 billion [1]. International data also support this pattern as a study by the American Institute of Stress suggested that the total economic impact of stress on US employers was estimated at \$300 billion. This study included stress-related factors such as absenteeism, turnover, diminished productivity, increased medical costs, and increased legal costs [2]. A recent study developed in the UK stated that burnout and stress cost the UK economy £28 billion a year [3].

Recent research has shown how management practices impact employees' attitudinal and behavioral responses, particularly in terms of satisfaction [4], productivity, involvement, absenteeism, or turnover [5,6]. For example, the most predictive factors of employees' turnover intentions can result from unsatisfactory organizational policies, stress, and poor communication [7], as well as emotional exhaustion [8] or reduced levels of autonomy and

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high demands associated with tasks [9]. These implications are relevant to individuals' well-being and happiness in the workplace, who, by being happy, are also more productive, and this is reflected in organizational results [6] mainly in terms of organizational performance.

In this sense, if low levels of well-being and precarious working conditions are reflected in significant productivity losses [1] and entail huge costs for organizations and immeasurable costs for employees, an inevitable question arises. How can we better assess perceived well-being and quality of work life (QWL) by identifying key factors that impoverish or enhance its levels, to design sustained interventions that benefit both parties, fitted to the organizational culture and the needs of individuals?

Despite its increased research interest and high managerial implications, there is no consensus regarding how QWL can be addressed as multiple definitions and factor structures have been presented [6,7,10–12].

With regards to the QWL definition, even though there is no consensual definition of the construct [6,13], there seems to be an agreement regarding the multidimensionality of this construct [6,10,14], which encompasses aspects related to the work environment; training and development opportunities; compensation and benefits; occupational stress; work–life balance; participation in decision-making; job security; and interpersonal relationships [11]. In the present work, we will consider the QWL definition proposed by Van Laar et al. [15] (p. 325), which stated that QWL is "the way in which work is good for you in the widest context in which an employee would evaluate their job".

As for its factorial structure, Van Laar et al. [15] (p. 325) affirmed that "previous research has produced inconsistent factor structures and inadequate psychometric properties for a range of quality of working life measures". Thus, the authors presented the Work-Related Quality of Life Scale (WRQoL), which is an instrument with a factor structure consisting of 23 items distributed over six different dimensions, and an additional item that assesses overall quality of life. Afterwards, the authors created the "Quality of Working Life: research-based organizational scales and surveys", a "university-based research and consultancy organization specializing in employee staff surveys and developing new psychometric scales" (Quality of Working Life (QoWL): surveys, scales, research, and advice home page), the WRQoL Scale being the most used one. The scale is now translated into 12 languages, and through their website, we can assess the scales and the user manual. The initial WRQoL 24-item scale was already translated and adapted for the Portuguese population by Gomes et al. [16].

Later on, to achieve better psychometric qualities of this instrument, Easton and Van Laar [13] developed and presented a second version—the Work-Related Quality of Life-2 Scale (WRQoL-2), which proposes a set of 31 items reorganized into seven dimensions: Control at Work (CAW), Employee Engagement (EEN), General Well-Being (GWB), Home–Work Interface (HWI), Job and Career Satisfaction (JCS), Stress at Work (SAW), and Working Conditions (WCS) plus one general item previously mentioned: Overall Quality of Working Life. This second version is only translated into five languages—English, Arabic, French, Hungarian, and Thai. To the best of our knowledge, no studies have been published with the translation and adaptation of the WRQoL-2 Scale for Portuguese as, in the present study, we aim to contribute with a first adaptation for Portugal.

Employees are key players in organizational development [17]. Thus, organizations that offer healthy work environments that promote well-being, with high levels of QWL, gain a competitive advantage in attracting and retaining talent [17]. When employees feel good about their work environment, their loyalty, performance, and quality of service increase [18], which increases organizational performance [19].

The QWL has been widely studied in different settings, and the literature suggests that the QWL contributes positively to organizational performance [20,21], even assuming the mediating role between corporate social responsibility (CSR) and the organization's economic performance [22]. Although some authors have already established a relationship between some dimensions of QWL and organizational performance [18,21,23–25], no studies were found verifying the association between the seven dimensions of the WRQoL-2 mea-

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sure and organizational performance. Therefore, the second goal of this study is to verify the links between each dimension of the WRQoL-2 Scale and organizational performance.

To recapitulate, in the present study, we aim to pursue two main goals: Firstly, to contribute with the number one adaptation of the WRQoL-2 Scale for Portuguese workers, and second, to analyze the associations between the WRQoL-2 dimensions and the social and economic dimensions of the perceived organizational performance. By doing so, and considering the previous work done on this topic, we seek to add some contributions. Through the proposal of an adaptation of the WRQoL-2 Scale for Portuguese workers and analyzing if—and which—dimensions are significantly associated with both dimensions of organizational performance—social and economic—we will not only be contributing with an adaptation of the revised version of WRQoL, but we will also enhance its implications for organizational performance, boosting the scientific research on this topic.

From a managerial point of view, WRQoL Scales have been widely used in the organizational setting to assess different organizational contexts based on their dimensions. By translating the new version of the WRQoL Scale, we will allow Portuguese organizations to use it on their internal assessments, adding a seventh dimension to their analysis.

2. Theoretical Framework

2.1. Quality of Work Life

The origin of research regarding quality of work life (QWL) dates to the 1960s with the contribution of Elton Mayo, as one of the first authors to use this term in studies carried out to understand how the work environment affects individuals' performance [13].

The definition of QWL is not consensual, as there is no consensus regarding its components. An economic perspective relates the QWL to remuneration or the number of working hours, for example. In contrast, sociological and psychological views understand it more broadly, encompassing aspects related to well-being, satisfaction, autonomy, personal development, and the balance between personal and professional life [26].

Even though our intention is not to make an exhaustive literature review of all the definitions presented so far, we propose three QWL designations that meet our goal of (1) understanding the WRQoL-2 Scale and (2) relating it to perceived organizational performance. Thus, firstly, Fontinha et al. [14] (p. 786) define QWL "as the part of the general quality of life that is influenced by work". From another perspective, Sirgy et al. [6] (p. 242) state QWL as "worker satisfaction with a variety of needs through resources, activities, and results arising from their participation in the work context". Also, Swamy et al. [27] (p. 281) propose that QWL is "the extent to which an employee feels their personal and work needs are satisfied, through participation in the workplace while achieving the organization's objectives".

Based on the proposals above, QWL can be understood as part of the overall quality of life influenced by work/employment [14]. Hence, it is the result of the analysis and comparison that each person makes between their desires, needs, and expectations, and what is perceived as reality in their work environment [18].

The lack of consensus about the multiple definitions and instruments for measuring QWL [28], in addition to the convergence of studies mostly focused on the health and social service sectors in particular [29–31], gives relevance and pertinence to the present study as it reinforces existing research and contributes to an in-depth understanding of the factors that influence the quality of life of employees in different contexts and professional areas and the respective repercussions on perceived organizational performance.

Whatever its nomenclature, the different dimensions of QWL allow "researchers, individuals, or organizations to identify and monitor which are the most important aspects that most affect, positively or negatively, the overall experience of people in a context of work" [13] (p. 7), thus acting in a targeted manner to create and promote positive, healthy workplaces that meet different individuals' needs.

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2.2. Assessing Quality of Work Life: The Work-Related Quality of Life Scale (WRQoL)

As previously mentioned by Edwards et al. [10], the assessment of a wide range of dimensions related to work and how they affect the well-being and satisfaction of employees brings benefits to organizations, since the data resulting from this diagnosis will make it possible to define, implement, and measure intervention programs and internal improvement actions aimed at the objectives to be achieved. As a consequence, the identification and use of a measurement instrument that aggregately evaluates aspects related to the dimensions frequently associated with QWL becomes an important step.

Although several instruments exist, including the Quality of Work Life Scale (QWLS); the Quality of Working Life Systemic Inventory (QWLSI) [32]; the Work-Related Quality of Life Scale [15]; and the Quality of Work Life Measure [33], the selection of the Work-Related Quality of Life Scale (WRQoL) is based on the fact that this is a comprehensive instrument in terms of applicability to diverse professional contexts, encompassing, in turn, aspects of professional and non-professional life, which can allow employers to evaluate and support their workforce more effectively [12].

The WRQoL was proposed and developed by Van Laar et al. [15] for healthcare professionals in the United Kingdom. The authors proposed an instrument with a factorial structure consisting of 23 items distributed across six distinct dimensions, and an additional item that assesses overall quality of life. This tool has already been translated into different languages and used to study different groups and in a wide range of professional contexts [14], comprising higher education professionals in the United Kingdom [10]; police in the United Kingdom [34]; train drivers in Iran [35]; nurses in Uganda [36]; nurses in Turkey [37]; HR managers in Thailand [38]; and general surgery residents in the USA [39].

The initial scale of 24 items was translated and adapted for the Portuguese population—the Work-Related Quality of Life Scale—by Gomes et al. [16]. When adapting the scale to the Portuguese context, by performing an exploratory factorial analysis, the results suggested a structure comprising four factors—Well-Being/Satisfaction at Work; Home–Work Relationship; Control at Work; and Stress at Work—which is not in line with the original proposal [10]. Based on the four-factor structure KMO values, the total explained variance and internal consistency of the dimensions were presented in line with recommendations [40,41]. No information regarding confirmatory factorial analysis, discriminant and convergent validity, and sensibility values of the items were presented.

Later on, and to achieve better psychometric qualities of this instrument, Easton and Van Laar [13] developed and presented a second version—the Work-Related Quality of Life-2 Scale (WRQOL-2), which proposes a set of 31 items reorganized into seven dimensions in total, plus one item previously mentioned assessing the quality of life in general. Since then, the scale has been translated into six different languages—English, French, Persian, Chinese, Hungarian, and Thai. The seven dimensions are characterized as follows:

Home–Work Interface (HWI): this factor assesses the extent to which the worker perceives a balanced balance between professional and personal/family life, including, for example, the presence of adequate support and flexibility at work [4,12]. According to Fontinha et al. [14], the items reflect the reconciliation between family commitments and work demands.

Working Conditions (WCS): according to Easton and Van Laar [12], this dimension assesses the extent to which the individual is satisfied with the conditions in which they work, particularly about the presence/absence of the resources and conditions necessary for the work to be performed effectively. The items reflect aspects such as the temperature and noise levels of the work environment, the number of working hours, safety, tools, and equipment available.

Job and Career Satisfaction (JCS): the items in this dimension seek to assess the extent to which the workplace provides the individual with a feeling of accomplishment and high self-esteem [14], reflecting the clarity of the objectives and roles assigned, evaluation, recognition, and rewards, as well as the benefits and opportunities for training and career development [12].

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Control at Work (CAW): this dimension aims to assess the degree to which the individual feels involved and perceives a sense of control over decisions that affect them in the work context [12].

Stress at Work (SAW): this factor reflects the extent to which the individual perceives high levels of pressure at work or experiences work stress [14]. Easton and Van Laar [12] stated that demands in the work context can constitute a positive and stimulating aspect of work when maintained at acceptable levels and aligned with perceived resources. However, their effect can be harmful when stress levels become excessive and exceed the individual's ability to deal with and provide an adequate response.

Employee Engagement (EEM): this dimension is added to highlight the importance of commitment to the organization as an antecedent of well-being [14].

General Well-Being (GWB): this dimension reflects aspects related to physical and psychological well-being [4,12]. The general feeling of happiness and satisfaction with life and individual experiences are aspects that impact or are impacted by the situation and the lived experience in the work context.

It should be noted that the WRQoL-2 Scale, and the underlying conceptual model composed of the seven dimensions, was partly influenced by the work of Fontinha et al. [14], who sought to develop a mediation model in which individual perceptions regarding the different dimensions associated with WRQoL are positively related to the absence of stress and commitment and, finally, the establishment of a positive relationship between these variables with general well-being, thus starting from the original WRQoL Scale of 23 items and adding three items to capture employees' involvement in the organization. Regarding the previously mentioned research, the psychometric nature of the model composed of the seven identified dimensions (representatives of QWL) and four individual indicators (age, gender, seniority, and position in the ranking), and via confirmatory factor analysis (CFA), acceptable fit indices were obtained ($\chi^2/df = 1.89$; CFI = 0.93; TLI = 0.91; RMSEA = 0.04). The levels of internal consistency of the different dimensions were also good (ranging between $\alpha = 0.77$ and $\alpha = 0.90$), considering the recommended values [42].

We could not access all the research that adapted this scale; however, we present some results regarding the psychometric properties obtained in previous studies.

When translating and adapting the WRQoL-2 Scale (Li et al., 2022) into Chinese, confirmatory factor analysis (CFA) showed good adjustment indices ($\chi^2/df = 1.65$; RMSEA = 0.04; CFI = 0.96; GFI = 0.88), revealing a factorial structure composed of the same theoretical seven dimensions. Regarding internal consistency, Cronbach's α values were 0.94 for the scale, varying between 0.81 and 0.92 for the different factors. Nevertheless, in this study, Cronbach's α of the total scale would increase if the items corresponding to the "Stress at Work" (SAW) dimension were removed; the authors kept them in the final model due to the theoretical impact that the absence of occupational stress has on the quality of professional life [43].

Also, in the adaptation to the Persian language, in a study carried out in a community of nursing professionals, the factor analyses executed revealed the existence of 31 items organized into six distinct dimensions responsible for explaining 62.03% of the variance of the variables, observing good levels of reliability [35].

As discussed, the WRQoL Scale has been adapted and validated for the Portuguese population, but not the WRQoL-2 Scale. Very few published studies used this new version of the scale, most of which were applied in health contexts, and none in Portugal. This shortage makes this work relevant, as it provides a useful measure for Portuguese organizations, which they can apply, for example, internally and longitudinally, to compare and analyze the impacts of organizational practices implemented to promote the quality of work life of their workforce.

2.3. Perceived Organizational Performance

Employees are key players in organizational transformation and development [17]. With a continually dynamic workforce whose interests and needs change over time, organi-

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zations that offer the best benefits, as well as healthy and well-being-promoting work environments, gain a competitive advantage when it comes to hiring and retaining talent [17]. According to Nayak and Sahoo [18], organizational performance concerns the ability of an organization to achieve its objectives through the efficient use of available resources.

In the past, organizational performance was measured exclusively through financial indicators; however, today, organizations realize that their performance results from a balance between financial and non-financial measures, essential for organizational success in a holistic way [25]. Although organizational performance is commonly perceived and evaluated through financial performance measures, such as profit and sales growth, among others, a more comprehensive view of this concept must include non-financial indicators of performance, such as market share, quality of the product(s) or service(s), innovation, etc. [17].

The perceived organizational performance scale was proposed by the authors Delaney and Huselid [44], allowing the assessment of perceived organizational performance in two distinct facets. The first facet—perceived organizational performance—allows us to analyze respondents' perceptions of their organization's performance over the last three years, particularly regarding aspects such as product quality, customer satisfaction, or the ability to attract employees, compared to similar organizations. In the second aspect, and particularly aimed at companies (as profit-making organizations), the perceived market performance is evaluated through economic results and those related to profit, market share, etc., also from a comparative perspective compared to other competing organizations. The study carried out by Delaney and Huselid [44] reveals the beneficial impact that positive human resource management practices have on perceptions of organizational performance.

2.4. Quality of Life at Work and Organizational Performance: What Is the Relationship?

Employees constitute a fundamental asset for achieving organizational goals, so improving their QWL becomes essential for organizations to achieve organizational performance [25]. A study performed by Lau and May [17], which sought to relate the QWL and employee satisfaction with organizational financial performance, presents evidence of the advantages of creating human resources management strategies that encompass the interests and needs of all the stakeholders involved, namely, providing safe and satisfactory working conditions, in a win–win situation that favors all parties. In addition, the same pattern was found, as it has been identified that organizations whose employees have higher levels of QWL obtain greater profitability and growth than other organizations [45]. On the contrary, factors related to occupational stress, control at work, insecurity, and perceptions of organizational injustice have aroused interest as aspects that negatively affect the QWL and result in significant productivity losses for organizations [46].

In the same direction, a study carried out by Nayak and Sahoo [18] analyzed the relationship between quality of work life (QWL) and organizational performance, using employee commitment as a mediating variable in healthcare units. The results showed that QWL is a determining factor for performance and that the work environment significantly affects these levels of individual commitment, with the commitment variable assuming a partially mediating role in this association. In this sense, and in line with the results of this study, to achieve greater commitment from workers and consequently better organizational performance, organizations should direct their attention to the different dimensions of QWL, reflecting on which practices can boost them.

Research by Muthukumaran [47], undertaken in the context of banking, also identified a positive and significant correlation analysis between QWL, job satisfaction, and organizational performance. However, the results revealed a greater influence of QWL on satisfaction than on organizational performance.

3. Materials and Methods

3.1. Research Design and Data Collection Procedure

Based on our goals, the present study presents a non-experimental, exploratory, and correlational design.

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Concerning the data collection procedure, regarding the WRQoL-2 Scale, we started by identifying which items from WRQoL were the same. We used the Portuguese version already translated by Gomes [16] which is available on the WRQoL website. The new items presented in the second version which is being adapted in the present study needed to be translated into Portuguese. We also translated the organizational performance scale. We based this process on the WRQoL website recommendations, which align with Hill and Hill's recommendations [48].

To translate all scales to Portuguese for Portugal, we used the back translation method. Thus, we asked two bilingual translators, experts on organizational behaviors, for help. The first one translated the items from English to Portuguese. Afterwards, the second one used the Portuguese version from the first translator and translated it again into English without seeing the original version of the items. The two versions were practically identical as the two translators reunited to discuss small adjustments. We then ask a team of specialized practitioners and academics on the research topic to look at the terms and the items and discuss them, reaching our final proposal.

In the next phase, we created the questionnaire on Qualtrics, which also included informed consent, ensured confidentiality, and stressed that there were no right or wrong answers. The items were presented by instrument as all items were randomly organized, and we also used different rating scales [49]. We used a convenience sample, as the survey was available on Qualtrics, and a link was distributed on social media like LinkedIn, Facebook, and Instagram. We also sent private emails to our network. Data were collected between September and November 2023.

3.2. Participants

This study's sample comprised 635 participants aged between 19 and 73 (M = 33.04; SD = 11.22). As for their gender, they were very similar in distribution between males and females (Table 1). Regarding academic qualifications, the highest percentages were among participants with a master's degree, followed by those with a bachelor's degree (Table 1). As for tenure, most of the participants have worked for the organization for less than two years (Table 1). As for whether they hold a managerial position, the highest percentage of participants do not hold a managerial position (Table 1). Concerning the sector in which they work, most participants reported working in the private and service sectors (Table 1).

Table 1. Sample distribution.

Variable		Frequency	Percentage
G 1	Female	304	47.9%
Gender	Male	331	52.1%
	12th grade or less	126	19.8%
	University degree	207	32.6%
Academic qualifications	Postgraduate	49	7.7%
-	Master's	239	37.6%
	PhD	14	2.2%
	Up to 1 year	201	31.7%
	1 to 2 years	168	26.5%
Tenure	3 to 5 years	100	15.7%
	6 to 10 years	71	11.2%
	More than 10 years	95	15%
Managarial Davitian	Yes	137	21.6%
Managerial Position	No	498	78.4%
	Public	128	20.3%
Sector	Private	472	74.3%
	Public/private	35	5.5%
	Industry	65	10.2%
Activity sector	Services	343	54%
renvity sector	Logistics, distribution, and trade	56	8.8%
	Other	171	26.9%

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3.3. Data Analysis Procedure

The initial step in our research procedure was to import the data into SPSS Statistics 29 software (IBM Corp., Armonk, NY, USA). This software is widely recognized for its robust data analysis capabilities. We then conducted an exploratory factor analysis (EFA), to discover and analyze the structure of a set of interrelated variables to construct a measurement scale for (intrinsic) factors that in some way (explicitly) control the original variables [50]. We calculated the KMO value, which should be greater than 0.70 [40]. The total variance explained was also calculated, which should be greater than 50%. For the factor weights of each item, we considered all items with factor weights greater than 0.50. The internal consistency of each dimension was tested using Cronbach's alpha, which should be greater than 0.70 [41].

Next, we conducted confirmatory factor analyses (CFAs) using the AMOS Graphics 29 software for Windows (IBM Corp., Armonk, NY, USA). Our procedure followed a 'model generation' logic [51]. We adhered to the established recommendations [42], combining six fit indices with the following reference values: Chi-square ratio/degrees of freedom (χ^2 /gl 5); Tucker–Lewis Index (TLI > 0.90); Goodness-of-fit Index (GFI > 0.90); Comparative Fit Index (CFI > 0.90); Root Mean Square Error of Approximation (RMSEA < 0.08); and lower Root Mean Square Residual (RMSR).

After testing the measurement model, we tested the construct reliability for each dimension, which should be greater than 0.70. Convergent validity was tested by calculating the average variance extracted (AVE), which should be greater than 0.50 [52]. When the Cronbach's alpha value is greater than 0.70, AVE values greater than 0.40 are acceptable, indicating good convergent validity [53]. For discriminant validity, the square root of the AVE was calculated and must be greater than the correlation between the factors [54–56].

Afterward, we conducted sensitivity testing to ensure the robustness of our findings. We checked that the items had responses at all the response points, the median was not close to one of the extremes, and the absolute values of asymmetry and kurtosis were below 2 and 7, respectively [55,56]. This comprehensive testing ensures the reliability of our results.

To test cross-validation, we also performed an invariance analysis using gender (male/female) and sector (public, private, and public/private) to indicate whether the construct is interpreted similarly by independent groups [57–59]. Finally, the association between the WRQoL-2 dimensions and social and economic performance was tested using Pearson's correlations.

3.4. Instruments

Work-Related Quality of Life-2 Scale (WRQoL-2). We used the Work-Related Quality of Life-2 Scale (WRQoL-2), developed by Easton and Van Laar [13]. This instrument consists of 32 items that assess seven different dimensions, namely the following: (1) Job and Career Satisfaction (JCS)—items 1, 3, 8, 11, 18, 20; (2) Control at Work (CAW)—items 2, 12, 23, 30; (3) General Well-Being (GWB)—items 4, 9, 10, 15, 17, 21; (4) Home–Work Interface (HWI)—items 5, 6, 14, 25; (5) Stress at Work (SAW)—items 7, 19, 24, 29; (6) Working Conditions (WCS)—items 13, 16, 22, 31; and (7) Employee Engagement (EEN)—items 26, 27, 28. The response scale is a 5-point Likert scale, ranging from 1—"Strongly disagree" to 5—"Strongly agree". It should be noted that this scale resulted from the development of the initial WRQoL Scale (Van Laar et al., 2007), which comprised 24 items aggregated into six dimensions.

Organizational Performance. Organizational performance was measured using the scale proposed and developed by Delaney and Huselid [44], which consists of 11 items divided into two different factors: (1) perceived organizational performance/social performance—items 1, 2, 3, 4, 5, 6, 7; and (2) perceived market performance/economic performance—items 8, 9, 10, 11.

Participants were asked to evaluate their organization's performance over the last three years, comparing it with other competing organizations, using a Likert response Societies **2024**, 14, 120 9 of 20

scale that allowed respondents to classify it as (1)—Much worse; (2)—Worse; (3)—Same; (4)—Better; and (5)—Much better. It should be noted that an additional answer option was given—"Not applicable/no knowledge of the subject".

The CFA showed adequate fit indices ($\chi^2/gl = 2.43$; GFI = 0.98; CFI = 0.99; TLI = 0.98; RMSEA = 0.047; SRMR = 0.068). Regarding composite reliability, social performance scored 0.87, and economic performance scored 0.80. There was also good convergent validity with an AVE of 0.51 for social performance and 0.71 for economic performance. Discriminant validity was also found, as the square root of the AVE values is higher than the correlation between the factors (r = 0.59). Regarding internal consistency, social performance has a Cronbach's alpha of 0.89 and economic performance of 0.85. It was also found that none of the items that make up this instrument grossly violate normality.

4. Results

4.1. Exploratory Factor Analysis

The first step was to carry out an exploratory factor analysis (EFA) to test WRQoL-2's factor structure. A KMO of 0.95 was obtained, which is considered very good [40]. Bartlett's test of sphericity was significant at p < 0.001, indicating that the sample in this study comes from a multivariate population [53,56]. It was found that the structure of this instrument is based on six factors, which is not in line with the authors' results, which suggested a structure of seven factors. A total explained variance of 66.59 was obtained, which indicates that the six dimensions explain 66.59% of the total variance of the scale. It should be noted that items 3, 11, and 23 were removed because they had low factor weights. All the other items had factor weights above 0.50 (Table 2). The factor structure obtained is as follows: factor 1 (items 4, 9, 10, 15, 17, and 21); factor 2 (items 1, 8, 18, 20, 26, 27, and 28); factor 3 (items 5, 6, 14, and 25); factor 4 (items 7, 19, 24, and 29); factor 5 (items 13, 16, 22, and 31; factor 6 (2, 12, and 30).

Factors 1, 3, 4, 5, and 6 kept the names given to them by the instrument's authors. After carrying out a semantic analysis of the items in factor 2, it was decided to give this factor the following name: Job and Career Satisfaction and Employee Engagement.

Table 2. Factors and factor weights of the items (in Portuguese and English).

Items —			Factor					
Items	1	2	3	4	5	6		
 Tenho um conjunto claro de objetivos e metas que me permitem realizar o meu trabalho. I have a clear set of goals and aims to enable me to do my job. 	0.17	0.64	0.04	0.04	0.13	0.43		
2. Sinto-me capaz de expressar opiniões e influenciar alterações na minha área de atividade.2. I feel able to voice opinions and influence changes in my area of work.	0.23	0.17	0.18	0.03	0.28	0.71		
4. Sinto-me bem neste momento.4. I feel well at the moment.	0.64	0.23	0.10	0.19	0.26	0.34		
5. A minha entidade patronal oferece instalações adequadas e flexibilidade para conjugar o trabalho com a vida familiar.5. My employer provides adequate facilities and flexibility for me to fit work in around my family life.	0.16	0.21	0.70	0.16	0.35	0.10		
6. O meu horário/padrões de trabalho atuais adequam-se às minhas circunstâncias pessoais.6. My current working hours/patterns suit my personal circumstances.	0.24	0.11	0.79	0.21	0.15	0.06		
7. Sinto-me frequentemente sob pressão no local de trabalho.7. I often feel under pressure at work.	0.16	0.09	0.13	0.82	0.03	-0.01		
8. Quando faço um bom trabalho, o meu superior hierárquico reconhece-o.8. When I have done a good job it is acknowledged by my line manager.	0.10	0.58	0.14	0.11	0.08	0.45		
9. Ultimamente tenho-me sentido infeliz e deprimido(a).9. Recently, I have been feeling unhappy and depressed.	0.75	0.19	0.07	0.30	0.05	0.17		
10. Estou satisfeito(a) com a minha vida.10. I am satisfied with my life.	0.85	0.14	0.09	0.10	0.11	0.04		
12. Estou envolvido(a) em decisões que me afetam na minha própria área de trabalho. 12. I am involved in decisions that affect me in my own area of work.	0.17	0.25	0.04	0.06	0.06	0.69		

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Table 2. Cont.

			Fa	ctor		
Items	1	2	3	4	5	6
13. A minha entidade patronal disponibiliza-me tudo o que preciso para realizar o meu trabalho eficazmente.13. My employer provides me with what I need to do my job effectively.	0.19	0.46	0.22	0.09	0.59	0.01
 14. O meu superior técnico promove de forma ativa horários/padrões de trabalho flexíveis. 14. My line manager actively promotes flexible hours/patterns. 	0.11	0.36	0.67	0.15	0.01	0.20
15. Em muitos aspetos, a minha vida está próxima do ideal.15. In most ways my life is close to ideal.	0.71	0.25	0.27	0.01	0.09	0.05
16. Trabalho num ambiente seguro. 16. I work in a safe environment. 17. Do forma garal, as existent firm me corrido ham	0.13	0.25	0.32	0.21	0.58	0.12
 17. De forma geral, as coisas têm-me corrido bem. 17. Generally things work out well for me. 18. Estou satisfeito(a) com as minhas oportunidades de carreira disponíveis na minha 	0.70	0.22	0.20	0.07	0.22	0.13
organização. 18. I am satisfied with the career opportunities available for me here.	0.34	0.67	0.17	0.04	0.14	0.21
19. Sinto frequentemente níveis excessivos de stress no local de trabalho.19. I often feel excessive levels of stress at work.	0.18	0.09	0.15	0.82	0.09	0.05
20. Estou satisfeito(a) com a formação que recebo para realizar o meu trabalho atual. 20. I am satisfied with the training I receive in order to perform my present job.	0.18	0.66	0.01	0.18	0.30	0.08
 21. De forma geral, tenho-me sentido bastante feliz ultimamente. 21. Recently, I have been feeling reasonably happy all things considered. 22. As condições de trabalho são satisfatórias. 	0.84	0.21	0.15	0.14	0.07	0.16
22. The working conditions are satisfactory.24. Tenho prazos inatingíveis.	0.25	0.44	0.40	0.10	0.51	0.03
24. I have unachievable deadlines.25. Consigo alcançar um equilíbrio saudável entre trabalho e vida pessoal.	0.08	0.15	0.07 0.60	0.70	0.11	-0.02
25. I am able to achieve a healthy balance between my work and home life.26. A organização comunica bem com os seus colaboradores.	0.33	0.70	0.19	0.30	0.12	0.17
26. The organization communicates well with its employees.27. Tenho orgulho em dizer a outras pessoas que faço parte desta organização.27. I am proud to tell others that I am part of this organization.	0.33	0.68	0.17	0.08	0.14	0.16
28. Recomendaria esta organização como um bom local para trabalhar. 28. I would recommend this organization as a good one to work for.	0.27	0.69	0.32	0.15	0.19	0.18
29. Sou pressionado(a) para trabalhar muitas horas. 29. I am pressured to work long hours.	0.06	0.13	0.43	0.62	0.07	0.07
30. Tenho oportunidades suficientes para questionar as chefias sobre mudanças no trabalho. 30. I have sufficient opportunities to question managers about change at work.	0.12	0.42	0.22	0.24	0.03	0.53
31. Sinto-me bem com o ambiente físico onde normalmente trabalho. 31. I am happy with the physical environment where I usually work.	0.20	0.40	0.32	0.15	0.50	0.08

4.2. Internal Consistency

The reliability of each of the dimensions was tested. All the dimensions, except for the Control at Work (CAW) dimension, have Cronbach's alpha values above 0.80, which indicates that they have good internal consistency [48] (Table 3). The CAW dimension has a Cronbach's alpha value of 0.71, considered acceptable [41] (Table 3).

Table 3. Internal consistency of the dimensions.

Dimension	Number of Items	α
General Well-Being (GWB)	6	0.90
Employee Engagement (EEN) + Job and Career Satisfaction (JCS)	7	0.87
Home–Work Interface (HWI)	4	0.84
Stress at Work (SAW)	4	0.81
Working Conditions (WCS)	4	0.83
Control at Work (CAW)	3	0.71

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4.3. Confirmatory Factor Analysis

To confirm the factor structure of the WRQoL-2 Scale, we conducted several confirmatory factor analyses (CFAs). Initially, a seven-factor confirmatory factor analysis was carried out to test the structure proposed by the authors. Items 3, 11, and 23 were removed as they had a low factor weight. The fit indices obtained were adequate, except for the GFI and SRMR values, which were not provided by the AMOS Graphics software, indicating that there was not a good fit (Table 4). A new seven-factor CFA was carried out with a second-order factor. Items 3, 11, and 23 were removed as they had a low factor weight. The fit indices obtained are adequate, but once again, we were not provided with the GFI and SRMR values, which indicates that we are dealing with a poor fit (Table 4).

Table 4. Confirmatory factor analysis results.

Model	χ²/gl	CFI	GFI	TLI	RMSEA	SRMR
7-factor CFA	3.86	0.94	-	0.93	0.053	-
7-factor CFA with second-order factor	3.33	0.92	-	0.91	0.061	-
6-factor CFA	2.81	0.94	0.91	0.93	0.053	0.056
6-factor CFA with second-order factor	3.05	0.94	0.90	0.92	0.057	0.067

The results also suggested that Employee Engagement (EEN) and Job and Career Satisfaction (JCS) were highly correlated, with a correlation value of 0.96. We then tested a new version, similar to the one obtained in the EFA, with six dimensions, as Employee Engagement (EEN) and Job and Career Satisfaction (JCS) united. Like the previous seven-factor structure, items 3, 11, and 23 had to be removed as they presented a low factor weight. The adjustment indices obtained were adequate (Table 4). Then, a new CFA with a second-order factor was also performed, with items 3, 11, and 23 being removed due to their low factor weight (Table 4).

By analyzing Table 4, the model that presents the best goodness of fit indicators is the six-factor model.

Table 5 shows the factor weights of each item obtained in the six-factor CFA.

Table 5. Factor weights of each item obtained in the six-factor CFA.

Dimension	Item	Factor Weights
	4. I feel well at the moment.	0.85
	9. Recently, I have been feeling unhappy and depressed.	0.88
Conoral Well Poins (CWP)	10. I am satisfied with my life.	0.71
General Well-Being (GWB)	15. In most ways my life is close to ideal.	0.79
	17. Generally things work out well for me.	0.80
	21. Recently, I have been feeling reasonably happy all things considered.	0.83
	1. I have a clear set of goals and aims to enable me to do my job.	0.51
	8. When I have done a good job it is acknowledged by my line manager.	0.64
Employee Engagement	18. I am satisfied with the career opportunities available for me here.	0.76
(EEN) + Job and Career	20. I am satisfied with the training I receive in order to perform my present job.	0.65
Satisfaction (JCS)	26. The organization communicates well with its employees.	0.74
	27. I am proud to tell others that I am part of this organization.	0.85
	28. I would recommend this organization as a good one to work for.	0.77
	5. My employer provides adequate facilities and flexibility for me to fit work in around my family life.	0.79
Home–Work Interface	6. My current working hours/patterns suit my personal circumstances.	0.78
(HWI)	14. My line manager actively promotes flexible hours/patterns.	0.71
	25. I am able to achieve a healthy balance between my work and home life.	0.84

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Dimension	Item	Factor Weights
	7. I often feel under pressure at work.	0.64
Change of Marcala (CAMAI)	19. I often feel excessive levels of stress at work.	0.72
Stress at Work (SAW)	24. I have unachievable deadlines.	0.60
	29. I am pressured to work long hours.	0.74
	13. My employer provides me with what I need to do my job effectively.	0.72
Working Conditions	16. I work in a safe environment.	0.66
(WCS)	22. The working conditions are satisfactory.	0.83
	31. I am happy with the physical environment where I usually work.	0.74
	2. I feel able to voice opinions and influence changes in my area of work.	0.67
Control at Work (CAW)	12. I am involved in decisions that affect me in my own area of work.	0.58
	30. I have sufficient opportunities to question managers about change at work.	0.74

4.4. Construct Reliability

All the dimensions showed good construct reliability, ranging from 0.70 to 0.92 (Table 6).

Table 6. Construct reliability of the dimensions.

Dimension	Number of Items	Construct Reliability
General Well-Being (GWB)	6	0.92
Employee Engagement (EEN) + Job and Career Satisfaction (JCS)	7	0.87
Home–Work Interface (HWI)	4	0.86
Stress at Work (SAW)	4	0.77
Working Conditions (WCS)	4	0.83
Control at Work (CAW)	3	0.70

4.5. Convergent Validity

Regarding convergent validity, four of the dimensions of this instrument have AVE values equal to or greater than 0.50, which indicates good convergent validity (Table 7). The Stress at Work (SAW) and Control at Work (CAW) dimensions have AVE values of less than 0.50. However, according to Hair et al. [53], in cases where Cronbach's alpha value is equal to or greater than 0.70, AVE values equal to or greater than 0.40 are acceptable. This is the case with these two dimensions.

Table 7. Convergent validity of the dimensions.

Dimension	Number of Items	AVE
General Well-Being (GWB)	6	0.66
Employee Engagement (EEN) + Job and Career Satisfaction (JCS)	7	0.50
Home–Work Interface (HWI)	4	0.51
Stress at Work (SAW)	4	0.46
Working Conditions (WCS)	4	0.54
Control at Work (CAW)	3	0.44

4.6. Discriminant Validity

As seen in Table 8, all the dimensions have good discriminant validity, as the square root of the AVE values is higher than the correlation between the respective factors (Table 8).

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	1.1	1.2	1.3	1.4	1.5	1.6
1.1. EEN + JCS	0.71					
1.2. GWB	0.62 **	0.81				
1.3. CAW	0.67 **	0.50 **	0.67			
1.4. HWI	0.60 **	0.54 **	0.43 **	0.78		
1.5. SAW	-0.38 **	-0.39**	-0.23**	-0.53**	0.68	
1.6. WCS	0.70 **	0.55 **	0.52 **	0.65 **	-0.42**	0.74

Note: In bold is the square root of the AVE for each dimension. General Well-Being (GWB); Employee Engagement (EEN) + Job and Career Satisfaction (JCS); Home–Work Interface (HWI); Stress at Work (SAW); Working Conditions (WCS); Control at Work (CAW). ** p < 0.01

4.7. Sensitivity of Items and Dimensions

In this instrument, no item has a median close to one of the extremes, all items have responses at all points, and their absolute values of asymmetry and kurtosis are below 2 and 7, respectively, which indicates that they do not grossly violate normality (Table 9).

Table 9. Measures of central tendency and item form.

Item	Median	Skewness	Std. Error of Skewness	Kurtosis	Std. Error of Kurtosis	Minimum	Maximum
1	4.00	-1.41	0.10	1.93	0.19	1	5
2	4.00	-0.97	0.10	0.30	0.19	1	5
4	4.00	-0.93	0.10	0.02	0.19	1	5
5	4.00	-0.89	0.10	-0.18	0.19	1	5
6	4.00	-1.04	0.10	0.12	0.19	1	5
7	3.00	0.11	0.10	-1.08	0.19	1	5
8	4.00	-0.64	0.10	-0.52	0.19	1	5
9	4.00	-0.36	0.10	-1.16	0.19	1	5
10	4.00	-0.61	0.10	-0.54	0.19	1	5
12	4.00	-0.58	0.10	-0.63	0.19	1	5
13	4.00	-0.87	0.10	-0.20	0.19	1	5
14	4.00	-0.75	0.10	-0.48	0.19	1	5
15	3.00	-0.25	0.10	-0.99	0.19	1	5
16	5.00	-1.60	0.10	2.34	0.19	1	5
17	4.00	-1.01	0.10	0.79	0.19	1	5
18	3.00	-0.24	0.10	-1.09	0.19	1	5
19	3.00	0.09	0.10	-1.18	0.19	1	5
20	4.00	-0.38	0.10	-0.94	0.19	1	5
21	4.00	-0.43	0.10	-0.86	0.19	1	5
22	4.00	-1.05	0.10	0.51	0.19	1	5
24	4.00	-0.74	0.10	-0.35	0.19	1	5
25	4.00	-0.90	0.10	0.11	0.19	1	5
26	4.00	-0.35	0.10	-1.10	0.19	1	5
27	4.00	-0.58	0.10	-0.26	0.19	1	5
28	4.00	-0.66	0.10	-0.57	0.19	1	5
29	4.00	-0.71	0.10	-0.57	0.19	1	5
30	4.00	-0.43	0.10	-0.73	0.19	1	5
31	4.00	-1.09	0.10	0.51	0.19	1	5

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As far as the WRQoL-2 dimensions, none follow a normal distribution (p < 0.001). However, their absolute asymmetry and kurtosis values are below 2 and 7, respectively, which indicates that they do not grossly violate normality. All the dimensions have a negative asymmetry and a platykurtic distribution (<0) (Table 10).

Table 10. Test of normality,	skewness, and	l kurtosis of	dimensions.
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Variable	KS	df	p	Skewness	Kurtosis
EEN + JCS	0.09	635	< 0.001	-0.44	-0.57
GWB	0.11	635	< 0.001	-0.57	-0.40
CAW	0.13	635	< 0.001	-0.56	-0.13
HWI	0.14	635	< 0.001	-0.88	-0.25
SAW	0.08	635	< 0.001	-0.19	-0.69
WCS	0.15	635	< 0.001	-1.10	-1.03

General Well-Being (GWB); Employee Engagement (EEN) + Job and Career Satisfaction (JCS); Home–Work Interface (HWI); Stress at Work (SAW); Working Conditions (WCS); Control at Work (CAW).

4.8. Cross-Validation

To test cross-validation, we performed two invariance analyses: one according to gender (female and male) and the other according to the sector of activity (public, private, and public/private). We then used two independent sub-samples from the data set [53] which may increase robustness of the adaptation process as most of the adaptation of QWL's measurements usually do not perform this specific analysis [57,58].

The invariance analyses for this instrument were evaluated by comparing the free model (with factor weights and free factor variances/covariances) with the constrained model, where the two groups' factor weights and variances/covariances were fixed. The significance of the two models was measured using the Chi-square test described by Marôco [56].

For gender, the constrained model, with factor weights and fixed variances/covariances in the two groups, did not show a significantly worse fit than the model with free parameters ($\Delta \chi^2 \lambda(22) = 21.02$; p = 0.516). It was also found that the intercepts were invariant between female and male participants ($\Delta \chi^2 i(21) = 30.73$; p = 0.078), indicating that we are dealing with a strong invariant model. The invariance of the factor model between male and female participants is demonstrated.

Regarding the sector of activity, the constrained model, with factor weights and fixed variances/covariances in both groups, did not show a significantly worse fit than the model with free parameters ($\Delta\chi^2\lambda(44)=44.56$; p=0.448). It was also found that the intercepts were invariant between groups ($\Delta\chi^2$ i(21) = 33.59; p=0.819), indicating that we are dealing with a strong invariant model. The invariance of the factor model between participants working in different sectors (public, private, and public/private) is demonstrated.

4.9. Descriptive Statistics for the Variables under Study

Descriptive statistics were carried out and the results suggested that all the dimensions are significantly above the scale's center point (3), except the Stress at Work dimension, which is significantly below the scale's center point (Table 11).

The two performance dimensions were also significantly above the scale's center point (2) (Table 11).

Finally, an attempt was made to verify if the WRQoL-2 Scale's dimensions are significantly associated with social and economic performance. The results suggested that all WRQoL-2 dimensions were found to be positively and significantly associated with social performance, except Stress at Work, which had a negative and significant association (Table 12).

The association between the scale's dimensions and economic performance was also proved to be positively and significantly associated, except for Stress at Work, whose association was not significant (Table 12).

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Variable	t	df	р	d	Mean	SD
EEN + JCS	16.674 ***	635	< 0.001	0.66	3.59	0.90
GWB	14.397 ***	635	< 0.001	0.57	3.55	0.96
CAW	16.770 ***	635	< 0.001	0.67	3.60	0.90
HWI	23.473 ***	635	< 0.001	0.93	3.88	0.94
SAW	-8.938 ***	635	< 0.001	0.36	2.66	0.96
WCS	31.003 ***	635	< 0.001	1.23	4.04	0.85
Social performance	20.989	635	< 0.001	0.83	2.95	1.14
Economic performance	8.580	635	< 0.001	0.34	2.49	1.44

Table 11. Descriptive statistics for the variables under study.

Note: *** p < 0.001; General Well-Being (GWB); Employee Engagement (EEN) + Job and Career Satisfaction (JCS); Home–Work Interface (HWI); Stress at Work (SAW); Working Conditions (WCS); Control at Work (CAW).

Table 12. Association between the variables under study.

	1.1	1.2	1.3	1.4	1.5	1.6	2.1	2.2
	1.1	1.2	1.5	1.4	1.5	1.0	2.1	2.2
1.1. EEN + JCS								
1.2. GWB	0.62 ***							
1.3. CAW	0.67 ***	0.498 ***						
1.4. HWI	0.60 ***	0.538 ***	0.434 ***					
1.5. SAW	0.38 ***	0.393 ***	0.226 **	0.534 ***				
1.6. WCS	0.70 ***	0.554 ***	0.517 **	0.647 ***	-0.423 ***			
2.1. Social performance	0.35 ***	0.200 **	0.301 ***	0.237 ***	-0.116 **	0.300 ***		
2.2. Economic performance	0.17 ***	0.126 **	0.171 ***	0.100 *	-0.021	0.185 ***	0.591 ***	

Note: *p < 0.05; **p < 0.01; ***p < 0.001; General Well-Being (GWB); Employee Engagement (EEN) + Job and Career Satisfaction (JCS); Home–Work Interface (HWI); Stress at Work (SAW); Working Conditions (WCS); Control at Work (CAW).

5. Discussion

In this study, we started by establishing two research goals. Firstly, we pursued adapting the WRQoL-2 Scale for the Portuguese workers, and secondly, we aimed to verify if WRQoL-2 dimensions were significantly associated with the perception of social and economic organizational performance.

Regarding the first goal, we started by following the translation recommendations, using the back translation method proposed by the WRQoL website, and in line with Hill and Hill [48].

We then collected data comprising a sample of 635 Portuguese working participants. Exploratory and four confirmatory factor analyses were carried out to verify the factor structure of the proposed scale. The exploratory factor analysis suggested a structure of six factors, which differs from the one proposed by Easton and Van Laar [13], as the WRQoL-2 Scale comprises seven factors. According to the results obtained in this study, the items in the Job and Career Satisfaction dimension are united in a single dimension with the items in the organizational engagement dimension. A KMO of 0.95 was obtained, which can be considered very good [40]. Three items were removed because they had low factor weights. The remaining items had factor weights equal to or greater than 0.50. The total variance explained was 66.59%, much higher than the minimum acceptable value of 50%. Except for the Control at Work dimension, which has a Cronbach's alpha of 0.71, all the other dimensions presented Cronbach's alphas higher than 0.80, which indicates good internal consistency.

Concerning the sensitivity of the items, the results suggested that they discriminate between subjects since all the items have answers at all points, and no item has a median close to one of the extremes. Their absolute values of asymmetry and kurtosis are less than 2 and 7, respectively [54]. The CFA confirmed the existence of the six factors suggested by the EFA. The factor weights of each item are higher than 0.50. All the dimensions have good construct reliability, ranging from 0.70 (Control at Work) to 0.92 (General Well-Being). As for convergent validity, only the Control at Work and Stress at Work dimensions had an AVE

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value of less than 0.50, the minimum acceptable value for good convergent validity [52]. According to Hair et al. [53], because these dimensions have a Cronbach's alpha value greater than 0.70, they can be considered as having good convergent validity. The existence of discriminant validity was also confirmed since the square root of the AVE values is higher than the correlation values between the factors. Two invariance models were tested according to the gender of the participant (female and male) and according to the sector of activity (public, private, and public/private). The invariance of the factor models, both according to gender and sector of activity, was demonstrated, and it was also proven that we are dealing with two models of strong invariance.

The factorial structure obtained did not align with the authors' proposal for the WRQoL-2 Scale as Job and Career Satisfaction and Employee Engagement are integrated in the same dimension. By doing that, we have reached a structure like the first version of WRQoL. Theoretically, both dimensions (i.e., Job and Career Satisfaction and Employee Engagement) have similarities as both focus on employees' attitudes and beliefs regarding their jobs. Empirically, the seventh dimension added to the WRQoL-2 Scale was Employee Engagement, which is in line with the commitment variable added in the Fontinha et al. [14] work, which was the precursor of the Employee Engagement dimension of the WRQoL-2 Scale. Looking at the correlations between Job and Career Satisfaction and Employee Engagement in Fontinha et al.'s [14] study, values are medium-high, 0.78 for permanent employees and 0.64 for temporary workers.

It is also important to note that the present study's final structure is not aligned with the work of Gomes et al. [16], who adjusted the first version of WRQoL for Portuguese. The authors' results suggested a four-factor structure comprising the following dimensions—Well-Being/Satisfaction at Work; Home–Work Interface; Control at Work; and Stress at Work. Thus, the results found in the present work are more in line with the original structure of the WRQoL Scale.

Highlighting those results also suggests that Control at Work is the most problematic dimension, as psychometric results are within the recommended values' limits. Control at Work is connected to the individuals' perceptions of being in control of their own decisions. More studies are needed to understand if the results regarding this dimension are similar.

After the analysis regarding the factorial structure obtained, descriptive statistics for the six dimensions of the WRQoL-2 Scale and the two dimensions of organizational performance were obtained. The results suggest that all dimensions scored above the central point except for Stress at Work, which scored below the central point. Even though these results suggest high levels of QWL as the positive dimensions are high and the negative ones are low, the results also indicate changes according to each dimension. Stress at Work is the dimension with a lower mean, suggesting that employees do not perceive high stress levels. Control at Work, General Well-Being, and Job and Career Satisfaction with Employee Engagement are slightly above the central point, which may indicate that participants have neutral opinions regarding their ability to control their decisions, their feeling of happiness and life satisfaction, and their bond with their work. Higher results are presented for the Home-Work Interface as employees evaluate this dimension more positively. Finally, the dimension that presents the highest scores is the Working Conditions which indicates that participants positively evaluate their physical working environment. Regarding the perceived organizational performance, descriptive results indicate that participants evaluate their organizations as being worse/same as others operating in the same sector, as social performance seems to be better evaluated than economic performance.

Finally, the association between the WRQoL-2 and organizational performance dimensions was studied. As was previously established, although QWL is positively associated with organizational performance [18,21,23–25], studies on the association between WRQoL dimensions and perceived organizational performance are scarce. Even though the general results of the present study reinforce these links, a more in-depth analysis is needed. Stress at Work is not significantly associated with both social and economic organizational performance. The other five dimensions of the WRQoL-2 Scale are significantly and positively

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associated with social and economic organizational performance. However, the associations' intensity is low, mainly for the economic organizational performance, which seems to suggest that the individuals' evaluation regarding the different facets of their work does not have a strong relationship with their perception of their employers in terms of more economic and social criteria.

5.1. Limitations and Future Work

The present study has limitations. First, although we used self-report measures, which may foster common method bias concerns [49], we followed the methodological recommendations stated in the Materials and Methods Section. Future research, for instance, using objective organizational performance indicators and/or additional objective measures related to QWL, could bring robustness to the analysis. Secondly, our data were obtained based on a cross-sectional design, which may invalidate the ability to establish causality. Thus, longitudinal data could add value to our analysis. Additionally, we used a convenience sample as future studies could use a stratified sample, which will allow for some results to be generalized. In the future, more studies using a representative sample or performed in specific contexts and sectors, such as the health or the education sector, should increase value regarding a better understanding of WRQoL in Portugal. By doing so we would be following the international pattern of studies using WRQoL Scales.

In addition, the main goal of our work was to adapt the WRQoL-2 Scale to the Portuguese workers. This goal was reached as we propose that studies relating the different dimensions of WRQoL, similar to Fontinha et al. [14], could help us understand how these different subscales interact with each other.

Finally, the QWL construct has been studied using different models and measures. Although WRQoL-2 is one of the most used, it does not cover all QWL dimensions, such as job security or meaningfulness. Future studies could address which and how other dimensions of this comprehensive construct relate to each other. Moreover, further investigations could also verify the effects of QWL dimensions that are not covered by the WRQoL Scale's perceived organizational performance.

5.2. Study Implications

This study provides a set of implications.

First, we provide an adaptation for the Portuguese workers of the WRQoL-2 Scale. Although we already have an adaptation of the first version for Portugal [16], we followed the tendency to continue translating and adapting the newest version for different languages. By doing so, we are creating the conditions to increase studies on this topic in different working settings in Portugal. Another implication of our work is related to the fact that the original factorial structure of the revised version, WRQoL-2, was not obtained. Thus, because we merged the Job and Career Satisfaction with the Employee Engagement dimensions, the results of the WRQoL-2 are similar to the first version, which comprised six factors. By testing the invariance analysis, we are increasing the value of our work. Latif [60] proposed and validated a measurement for university social responsibility, as the author stated in the limitations and future work paths there is a need to perform invariant analysis in this validation/adaptation studies. Although the present work is not related to Latif's work, based on the findings of Sinval and colleagues [57] and Wang and colleagues [58] on the lack of invariant analysis on QWL studies, by performing it we are contributing to a better understanding of the differences between sub-samples from our data set.

Finally, we also added value by testing the association between QWL dimensions and organizational performance dimensions. By doing so, we strengthened the significant associations (except for Stress at Work), but we are also alerted by its low intensity which needs further attention. Therefore, although more studies on the specific relationships between the dimensions of the WRQoL-2 Scale and the organizational performance scale are needed, we draw attention to the fact that, when experiencing a low quality of work

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life, there may be a tendency to evaluate the organizational performance lower. This fact is more evident for social performance rather than for economic performance.

Regarding the implications for organizations, as the WRQoL Scale has been widely used by practitioners and consultants, this new version, which presents improved psychometric robustness, may be useful to assess and intervene in different Portuguese organizational settings.

6. Conclusions

This study aimed to adapt a quality of work life assessment scale for Portuguese workers. After conducting statistical analyses, it was possible to conclude that this instrument has good psychometric qualities and that its factor structure is based on six distinct dimensions.

Furthermore, since another purpose of the study was to understand the relationship between the WRQoL dimensions and perceived organizational performance, it was possible to verify that, although most of the dimensions are significantly associated, the results suggest a low correlation intensity. This evidence suggests that, although there appears to be a relationship between quality of life at work and perceived organizational performance, particularly in the social and economic domains, the strength of this relationship is not very robust, and there may be other individual or contextual factors that play an important role in determining these results. Therefore, this study reinforces the need for further research on this subject, particularly concerning the nature and intensity of the links between these constructs.

However, it is nonetheless a relevant contribution as a tool for more targeted assessment and intervention, intending to promote workplaces that foster satisfaction, well-being, safety, and, above all, people's quality of life.

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