Quality of telework life, job crafting, and work well-being of public school teachers in the Federal District

Qualidade de vida no teletrabalho, redesenho do trabalho e bem-estar no trabalho de professores de ensino público no Distrito Federal

Calidad de vida en el teletrabajo, rediseño del trabajo y bienestar en el trabajo de profesores de la enseñanza pública del Distrito Federal

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ABSTRACT

This study tested the impacts of perceptions of quality of telework life and job crafting on public school teachers' work well-being. The sample was composed of 184 teachers who answered a questionnaire with scales previously validated in Brazil. Confirmatory factor analysis and structural equation modeling were performed. Perceptions of quality of telework life and job crafting actions predicted work well-being and contributed to investigating gaps in the organizational and work literature. This study offers a diagnosis of teachers' experiences during remote work and highlights the relations between those variables in a changing work context transformation, fostered by Covid-19 pandemia.
Keywords: affect at work; job crafting; COVID-19; quality of work-life; remote work.

RESUMO

Esta pesquisa testou os impactos de percepções de qualidade de vida no teletrabalho e do redesenho do trabalho no bem-estar no trabalho de professores da rede pública de ensino. Uma amostra de 184 professores respondeu ao questionário com escalas validadas no Brasil. Análise fatorial confirmatória e modelagem por equações estruturais foram conduzidas. Tanto a percepção de qualidade de vida no teletrabalho quanto as ações de redesenho explicaram o bem-estar e contribuíram para a investigação de lacunas da literatura organizacional e do trabalho. O diagnóstico traçado avança ao caracterizar o perfil das vivências de professores em trabalho remoto, evidenciando as relações entre as variáveis abordadas em um contexto de trabalho em transformação que se acelerou durante a pandemia da Covid-19.
Palavras-chave: afeto no trabalho; comportamentos de redesenho do trabalho; COVID-19; qualidade de vida no trabalho; trabalho remoto.

RESUMEN

Este estudio testó los impactos de las percepciones de la calidad de vida en el teletrabajo y del rediseño del trabajo en el bienestar laboral de profesores públicos. Una muestra de 184 profesores contestó un cuestionario con escalas previamente validadas em Brasil. Análisis factoriales confirmatorias y modelaje por ecuaciones estructurales se han llevado a cabo. Las percepciones de la calidad de vida en el teletrabajo y del rediseño del trabajo predijeron el bienestar y contribuyeron a la investigación de brechas en la literatura organizacional y del trabajo. El diagnóstico demuestra las vivencias de profesores en trabajo remoto y evidencia las relaciones entre las variables abarcadas en un contexto de trabajo en transformación estimulado por la pandemia de la COVID-19.
Palabras clave: afectos en el trabajo; rediseño del trabajo; COVID-19; calidad de vida en el trabajo; trabajo remoto.

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1 INTRODUCTION

In times of significant and rapid change, the study and application of practices capable of sustaining and promoting the well-being of workers is a major and urgent responsibility of current people managers (Kowalski & Loretto, 2017). If, on the one hand, organizations can be responsible for the generation of stress and occupational burnout (International Labour Organization [ILO], 2016; Tetrick & Winslow, 2015), on the other, they can also create an environment for the experience and expression of positive emotions and personal fulfillment (Paschoal & Tamayo, 2008; Tetrick & Winslow, 2015). These experiences, directly and indirectly, impact the workers' health, their organizational results, and performance, thus establishing a foundation for excellence and governance in organizations (Kowalski & Loretto, 2017; Nangov & Indrianti, 2018; Organização Internacional do Trabalho [ILO], 2016). The current historical context carries a world crisis, which largely transcends health and has relevant repercussions on corporate organizations, generating harmful consequences for their protagonists. Therefore, it is essential to promote well-being in the workplace in order to mitigate or eliminate the harmful effects that are being produced and, above all, to promote quality of work life (QWL) with a sustainable bias.

If the phenomenon of quality of work life had already been receiving substantial attention from researchers and managers, its importance increased during the COVID-19 pandemic. Ferreira and Falcão (2020) highlight that the pandemic affected several professional occupations, with consequences on the quality of work life (QWL). According to the authors, the productive confrontation of such crises implies that work activities simultaneously encompass the individual experiences of the worker and the dynamics inherent in workers' routines considering their workgroup and professional genres, such as physicians, police officers, and teachers.

With regard to teachers, the school environment started being feared and considered a dangerous space for the transmission of COVID-19, which led many countries to adopt actions for remote education as an emergency (Arruda, 2020; Xiao & Liu, 2020). Surveys on the emergency response of the educational system indicate a few challenges primarily related to the characteristics of students, such as socioeconomic profile, access to the internet and other facilities, and the ability of schools to adapt to different demands and realities of their target audience (Arruda, 2020; Xiao & Liu, 2020).

There are several outcomes and repercussions stemming from the educational context, which extrapolate data from students and schools. The implementation of telework, for example, gained momentum and proved to be an alternative to circumvent the need for distance and social Isolation imposed in different countries around the world (Carnevale & Hatak, 2020). Teachers were not excluded from the emergency remote work. In Brazil, more specifically in the Federal District, private schools were the first to adopt telework, followed by public schools. A few guidelines were established for remote activities through an ordinance (no. 133) issued by the government of the Federal District on June 3, 2020.

Considering such context, it is paramount to know the distinct work realities and experiences in which teachers are immersed in order to reduce possible harmful effects of the demands faced and the risks inherent in them and promote quality of life (Ferreira & Falcão, 2020). The present study has approached three variables related to experiences faced by teachers pertaining to the Federal District Department of Education (abbreviated as the SEEDF) during the telework experience imposed due to the COVID-19 pandemic: the quality of telework life (QTWL), job crafting, and well-being at work. The aim of this study is to empirically test the impacts of QTWL and job crafting on well-being at work. We present herein a field study of explanatory nature, in which the cross-sectional analysis and quantitative approach were adopted.

From a social and applied perspective, this study provides a brief diagnosis of the psychosocial indicators of the teachers. It may support future reflections and discussions on the continuity and improvement of teleworking in schools. From an academic perspective, our research approaches the quality of telework life, a recently introduced and operationalized concept in the organizational field. In addition, this paper provides evidence on the validity of QTWL measures, job crafting, and well-being at work based on a sample of teachers, which indicates the possibility of using the diagnosis in future research and managerial practices in the educational sphere. Finally, this study tests a structural model among still unexplored variables in literature, establishing the strength and direction of the relationship among different factors.

2 THEORETICAL FRAMEWORK

The present study is based on three variables analyzed at the individual level, which originated the explanatory model tested. This section will approach concepts, models, and previous empirical studies that support the hypotheses, methodology, and discussion of main findings.

2.1 Quality of Telework Life (QTWL)

In order to understand QTWL, it is necessary to consider the intersection of two different concepts: QWL and telework. Regarding QTWL, there is no consensus on the best definition and operationalization of the phenomenon (Almarshad, 2015; Ferreira, 2017; Martel & Dupuis, 2006; Rethinam & Ismail, 2008), even though there is a certain agreement regarding the importance of organizational context variables and their relationship with well-being and productivity indicators.

In conceptual terms, QWL can be defined based on two complementary perspectives: organizational and

workers. Considering organizations, QWL is expressed by a set of practices that aim to promote individual and collective well-being, the personal development of workers, and the exercise of organizational citizenship behavior in the work environment. The workers' perspective is expressed through global representations about the work context in which these individuals are inserted, indicating well-being experiences at the workplace, institutional and collective recognition, the possibility of professional growth, and respect for individual characteristics (Ferreira, 2017).

And what are the central and indispensable dimensions of the work context according to the QWL approach? Thus, when considering the QWL perspective, the work context must comprise working conditions, work organization, socio-professional relationships, professional acknowledgment and growth, and the use of information technology (Ferreira, 2017). The quality of information technology in an organizational context is a relevant facet of QWL, mainly when associated with the growing use of information and communication technologies at work. Researchers such as Rethinam and Ismail (2008) have already warned that the concept and manifestation of QWL have specific characteristics that must be deepened when the work and organizational context of technology information professionals are considered.

Moreover, Andrade (2020) carried out a literature review on QWL and teleworking and emphasized that remote work implies different working conditions for individuals, thus imposing different perspectives on the quality of work life. Teleworking can be defined as a form of work organization through which activities can be partially or entirely developed outside the company using telecommunication tools and services (Filarde et al., 2020; Konradt et al., 2000). The work-home-family-neighborhood cohabitation is an unusual and singular fact, especially considering its dimensions during the pandemic.

According to Andrade (2020), QTWL consists in producing – with quality – positive emotions while work is being carried out physically outside the organization and with the aid of communication and information technologies, thus enabling satisfaction and professional and personal fulfillment. As it is a current concept and consistent with the conceptual framework that inspired the present research, the definition of QTWL provided by Andrade (2020) was adopted in this study.

Operationally, QTWL is organized around five dimensions: self-management of work (i.e., worker's attitudes when performing telework); the context of telework (organizational support received and management of activities); telework infrastructure (physical working conditions); technological structure (computers, hardware, and software); and work overload (effort expended in carrying out teleworking activities).

2.2 Job Crafting

Job crafting refers to proactive actions carried out by an individual to rearrange work to align personal values and interests; it represents a bottom-up approach of crafting (Devotto, & Machado, 2017; Lazazzara & Gennaro, 2020; Wang et al., 2016). From such perspective, bottom-up and proactive adjustments are considered instead of focusing on organizational and managerial actions that alter tasks and work relationships (Devotto & Machado, 2017). In addition to individual characteristics, such as personality traits and self-efficacy, managerial actions, organizational practices, and work characteristics can enhance proactive crafting behaviors (Wang et al., 2016).

The relationship between job crafting and well-being or correlated variables have been consistently described in the literature (Demerouti, 2014; Devotto & Wechsler, 2019; Devotto et al., 2017; Lazazzara et al., 2020; Tim et al., 2013; van Wingerden et al., 2017; Wang et al., 2016; Wrzesniewski & Dutton, 2001; Wrzesniewski et al., 2013). A literature review carried out by Wang et al. (2016) indicates a few immediate impacts of job crafting, such as engagement at work, work satisfaction, and performance, and long-term effects, such as the meaning of work and identification with work.

This research considered three job crafting dimensions (Devotto & Machado, 2020; Wrzesniewski & Dutton, 2001). The first – task crafting actions – refers to physical changes to modify tasks' shape, scope, or demand, in addition to their time limits. The second dimension – cognitive crafting actions – modifies the cognitive limits that attribute meaning and purpose to tasks and relationships at work. Finally, the third dimension – relational crafting – comprises changes in work relationships regarding their nature and the extent of these relationships (colleagues, superiors, clients, suppliers).

2.3 Work Well-Being

Work well-being is a central phenomenon when approaching QWL (Almarshad, 2015; Ferreira 2017). Hence, the definition and operationalization of well-being at work comprise several dimensions, cognitive and affective. First, affections (emotions and moods) stand out, identified in several studies, and considered key to understanding well-being in organizations (Demo & Paschoal, 2016; Paschoal & Tamayo, 2008; Slemp et al., 2015; Warr, 2013; Warr, 2007). How do I feel at work? Such question immediately leads the individual to think about and describe emotions and moods experienced in the organizational context.

Second, studies demonstrate the theoretical and operational importance of achievement, growth, and personal expression experiences for an adequate and more complete understanding of the phenomenon (Demo & Paschoal, 2016; Warr, 2013; Waterman et al., 2010). Thus, studies focused on well-being at work must include positive affect and cognitive experiences. It is known that well-being in the workplace is greater when positive affect prevails over negative affect and there are experiences indicating the development of individual potential and personal achievement (Demo & Paschoal, 2016; Paschoal &

Tamayo, 2008). Therefore, positive affect, negative affect, and personal achievement at work were the dimensions considered in this study and correspond to the dependent variables. The hypotheses of the present research were delineated based on these three dimensions.

About antecedents, it is possible to name a few individual and contextual variables. In the first case, we highlight variables related to personality traits (Carnevale et al., 2020). Regarding contextual variables, there are some consistent data on the moderate or strong relationship between policies and people management practices, change management practices, performance management practices, acknowledgment/development practices, autonomy at work, and workload with affect at work (Ferreira, 2017; Hauff et al., 2020; Horta et al., 2012; Neiva et al., 2020; Paschoal et al., 2010; Schaufeli, 2012; Slemp et al., 2015; Traldi & Demo, 2012). Hence, affective and cognitive dimensions of well-being are moderated or strongly affected by elements of the context. What about teachers' emergency remote work? What is the impact of QTWL and job crafting on well-being dimensions? These questions still need to be clarified.

From an affective point of view, positive affect is expected to be influenced by the perceptions of QTWL and job crafting.

Hypothesis 1: The more positive the perceptions of quality of telework life and job crafting, the greater the positive affect.

According to a few empirical studies in specialized literature and theoretical models, the negative affect presents a few particularities in relation to positive affect. In this case, negative affect tends to be strongly explained by the so-called work demands, expressed by variables such as work overload and lack of work resources. Other aspects must be highlighted, such as the lack of personal resources to deal with the demands that emerge from this context. These are obstacles to the proper execution of work (Paschoal et al., 2013; Schaufeli, 2012). Thus, the negative affect is expected to be influenced by contextual variables expressed by QTWL and the behaviors involved in job crafting.

Hypothesis 2: The more positive the perceptions of quality of telework life and job crafting, the less the negative affect.

From a cognitive perspective, the literature indicates that the achievement dimension is quite sensitive to the contextual variables known as resources, which precisely involve performance management practices and feedback, recognition practices, and autonomy and control of one's own activities and tasks. At the individual level, this could be associated with variables related to self-determination and independence of thoughts and actions (Paschoal et al., 2013; Schaufeli, 2012). Considering the antecedents, this dimension is usually associated with the positive affect (Paschoal et al., 2013). Positive affect and achievement express the positive experiences of the professionals in their work context. The models tested in this research approached not only a variable related to the teleworking context, which comprises potential resources and context demands (even if assessed at the individual level through teachers' perceptions – QTWL), but also a personal variable associated with proactive behaviors at work (job crafting).

Therefore, the achievement is also expected to be influenced by context variables expressed by QTWL and by job crafting.

Hypothesis 3: The more positive the perceptions of quality of telework life and job crafting, the greater the achievement.

3 METHODOLOGY

The present study presents a survey research with a cross-sectional and quantitative approach. The data were collected though a questionnaire; we resorted to a non-probability sampling method herein. Further details on the methodology will be presented over the following sections.

3.1 Participants

Public school teachers in the Federal District, including those from kindergarten, elementary and high school, form the target audience of the research. We used the G-Power software, version 3.1, to calculate the appropriate number of observations in the sample. Considering the significance (α) equal to 0.05, the mean effect of population size equal to 0.15, and a 95% confidence level, a minimum sample of 160 respondents was delimited (Cohen, 1992). A total of 208 teachers answered the questionnaire; after processing the data, a few questionnaires had to be eliminated, indicating a total of 184 valid questionnaires (final sample).

3.2 Instrument

Three instruments that had already been tested in Brazil were used. The Well-Being at Work Scale (Paschoal & Tamayo, 2008) is composed of 30 items and three factors: positive affect (α = 0.952), negative affect (α = 0.948), and achievement (α = 0.922). The Job crafting Scale (Devotto & Machado, 2020) has 15 items distributed across three factors: task crafting (α = 0.808), cognitive crafting (α = 0.887), and relational crafting (α = 0.807). Finally, the Quality of Telework Life Scale (Andrade, 2020) has 27 items distributed across five factors: work self-management (α = 0.919), telework context (α = 0.869), telework infrastructure (α = 0.888), technological structure (α = 0.859), and work overload (α = 0.819). At the end of the questionnaire, items on sociodemographic information were added for sample characterization.

3.3 Procedure

The data collection procedure, conducted with the support of the Google Forms platform, began on July 8, 2020, and ended on August 5, 2020. The researchers contacted the schools in the Federal District, which forwarded the invitation to participate in the research to the

teachers' email addresses. In addition, we made use of the so-called snowball sampling technique (Salganik & Heckathorn, 2004), through which researchers invited the teachers they had access to, who then invited other teachers.

It is noteworthy that, according to the Sole Paragraph of Article 1 of Resolution no. 510/16 of the National Health Council (abbreviated as the CNS), public opinion research whose samples are composed of unidentified subjects, as is the case with the present research, are exempt from ethical analysis by Research Ethics Committees (abbreviated as the CEP) and by the National Committee of Ethics in Research (abbreviated as the CONEP).

Every care was taken to avoid the identification of respondents and to ensure the voluntary nature of participation in the survey, in addition to the possibility to interrupt filling out of the questionnaire at any time. Moreover, we disclosed the contact information of all researchers involved in the survey.

3.4 Data Analysis

Following Tabachnick and Fidell's (2019) orientations, multivariate outliers were identified using the Mahalanobis distance. Thus nine answered questionnaires were removed from the sample. The total sample comprised, then, 184 observations. All singularity, multicollinearity, linearity, homoscedasticity, and normality criteria were met. In order to evaluate the adjustment of the measurement models for the variables job crafting, QTWL and well-being at work, confirmatory factor analysis was performed. Subsequently, a path analysis through structural equation modeling (SEM) with maximum likelihood estimation was carried out to specify and estimate the models of linear relationships between the variables of the structural model. We sought to, therefore, investigate the fit between the proposed theoretical structure and the data collected. Descriptive statistical analyses were also conducted in this research.

4 ANALYSIS AND DISCUSSION OF RESULTS

Concerning the participants, the descriptive results show that their average age is 40 years; women represent 86.4% of the sample; 57.1% are married, and 61.4% have children living at home. Of those who affirmed to have children, the average age of the youngest child was seven years. 28.8% of participants live with elderly people. We have also verified that most respondents (66.8%) had no previous experience with remote teaching. 78.8% of participants work 30 to 40 hours a week, and 59.8% work in elementary school.

4.1 Confirmatory Validation and Construct Validity Analysis of the Measurement Models

Confirmatory factor analysis (CFA) was applied using structural equation modeling and maximum likelihood estimation (Hair et al., 2009). In order to verify the fit of the

model, two absolute indices were assessed: the normalized χ^2 value, also known as NC or as CMIN/df, where CMIN represents the chi-square fit statistics and df the degrees of freedom, and RMSEA (root mean square error of approximation). In addition, another incremental index was used: the CFI (comparative fit index).

It is important to highlight, as pointed out by Hair et al. (2009), that one of the greatest advantages of applying confirmatory factor analysis with structural equation modeling lies in the possibility of assessing the construct validity of a proposed measurement theory. We clarify that construct validity is the degree to which a set of measured items reflects the latent theoretical construct that those items should measure. In this way, the evidence of construct validity assures that measurements taken from a sample represent the real score in the population (Hair et al., 2009). The fit indices tell you whether the model is plausible or not.

4.1.1 Confirmatory Validation of the Well-Being at Work Scale (WBWS)

Regarding the factor loadings of the items of the confirmatory validation, the values ranged from 0.50 to 0.85, indicating good quality and internal validity of the scale (Comrey & Lee, 1992; Hair et al., 2009). The multifactorial model was tested to verify the dimensions of the scale. The indices can be considered satisfactory in the sample analyzed according to Kline (2015) (NC=2.12; CFI=0.90; RMSEA=0.08), indicating a good fit.

In descriptive terms, the achievement factor had a mean score of 3.26 (DP = 0.75); the negative affect had a mean score of 2.69 (DP = 0.99), and positive affect 2.39 (DP = 0.76).

4.1.2 Confirmatory Validation of the Job crafting Scale (WRS)

The factor loadings of the items, ranging from 0.53 and 0.86, indicate good quality and validity of the scale (Hair et al., 2009). Only Item 5 ("You prefer work tasks that suit your skills or preferences") presented a factor loading below 0.5; this is the reason why this item was removed from the model. The multifactorial model presented satisfactory fit indices: NC=2.93, CFI=0.88, RMSEA=0.08 (Kline, 2015).

Considering the descriptive results, the cognitive crafting factor had a mean score of 3.96 (DP = 0.84); task crafting had a mean score of 3.80 (DP = 0.81), and relational crafting a mean score of 3.20 (DP = 0.92)

4.1.3 Confirmatory Validation of the QTWL Scale

After analyzing the factor loadings of the items of the QTWL scale, values ranging from 0.51 and 0.92 were found, which indicate good quality and internal validity of the scale (Hair et al., 2009). However, two items had to be removed (11 and 17) for presenting factor loadings below 0.5, which indicates that such items do not contribute to the construct. The fit indices were satisfactory for the sample (NC=2.47; CFI=0.87; RMSEA=0.09).

As for the descriptive results, the factor work overload had the highest mean score – 3.86 (DP = 0.98). It is worth emphasizing that this is a factor that expresses the negative affect of work demands; in other words, the higher the score, the higher the overload. Telework context had a mean score of 3.54 (DP = 1.02); telework infrastructure had a mean score of 3.17 (DP = 1.24); work self-management had 3.07 (DP = 1.01), and technological structure 2.96 (DP = 0.76).

4.2 Confirmatory validation of the prediction model

We have verified the fit of the structural prediction model encompassing the three variables investigated,

where job crafting and QTWL represent the independent variables. We also included sociodemographic variables as control variables.

Path analysis was applied to test the proposed relationships using maximum estimation. The first model tested considered the positive affect factor as dependent variable. As with confirmatory factor analysis models, the fit indices were also analyzed in this model, presenting very good values: NC=2.0, CFI=0.93, RMSEA=0.07. Figure 1 represents this model.
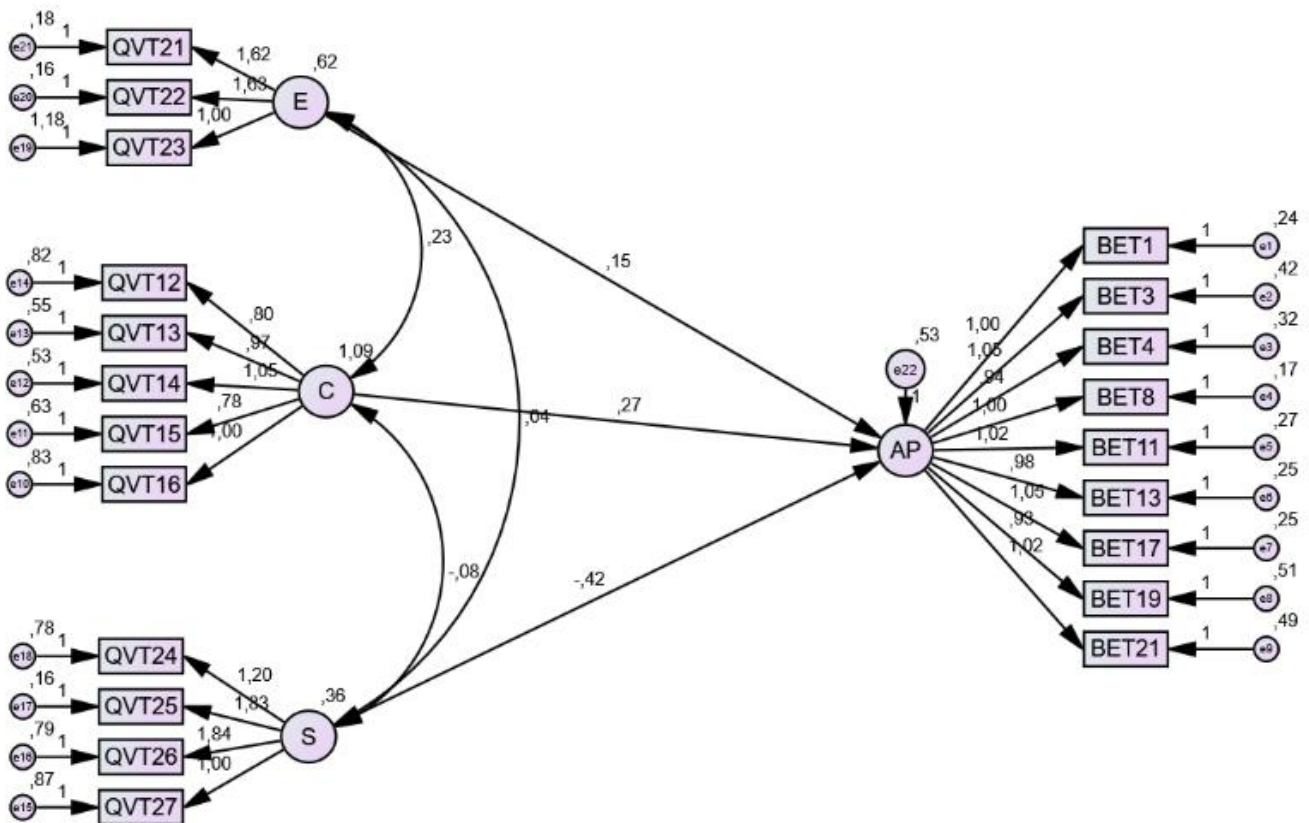
Figure 1. Positive affect model (WBWS)
Source: Elaborated by the authors.

The outcomes found in this model indicate that three QTWL factors – technological structure (β = 0.689), represented by the letter E, context (β = 0.159) represented by the letter C, and work overload (β = -0.112), represented by the letter S – are responsible for explaining 60% of the variance (R² = 0.604) of positive affect (AP). The influence of sociodemographic variables was irrelevant in this model. Thus, Hypothesis 1 was only partially supported, as the more positive perceptions of QTWL are, the greater the experience of positive affect at work.

The second model tested had negative affect as dependent variable. The fit indices were satisfactory and presented the following values: NC=2.13, CFI=0.84, RMSEA=0.08. This result indicates a good fit of the model, presented in Figure 2.

In this model, technological structure (β = -0.384), represented by letter E, work overload (β = 0.265),

represented by letter S, self-management (β = -0.203), represented by letter A, context (β = -0.106), represented by letter C, age (β = -0.181), educational level (β = 0.149), living with elderly people at home (β = -0.130), and marital status (β = -0,123) explained 53% of the variance (R² = 0.536) of the negative affect (AN). Thus, the better the perceptions of self-management and context, and the older one gets, the lower the perceptions of negative affect. For elementary school teachers, the experience of negative affect is greater. For married individuals who live with elderly people at home, negative affect is also lower. As in the case of positive affect, Hypothesis 2 found only partial empirical support, as the more positive the perceptions of QTWL, the lower the experience of negative affect at work.
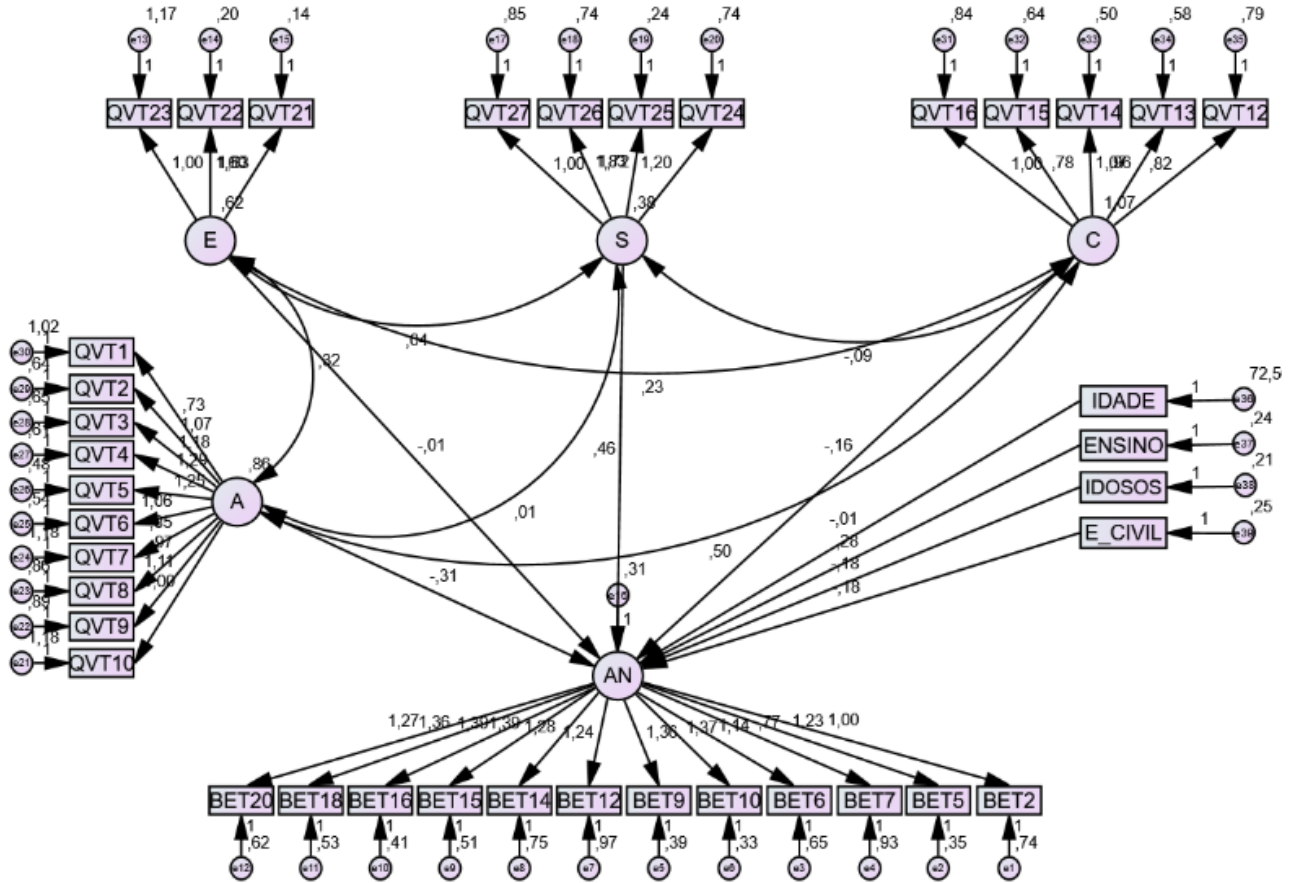
Figure 2. Negative affect model (WBWS)
Source: Elaborated by the authors.

In the last model analyzed, the factor achievement was the criterion variable and the fit indices found were also satisfactory, confirming to literature: NC=2.28, CFI=0.88, RMSEA=0.08. Figure 3 describes the model.
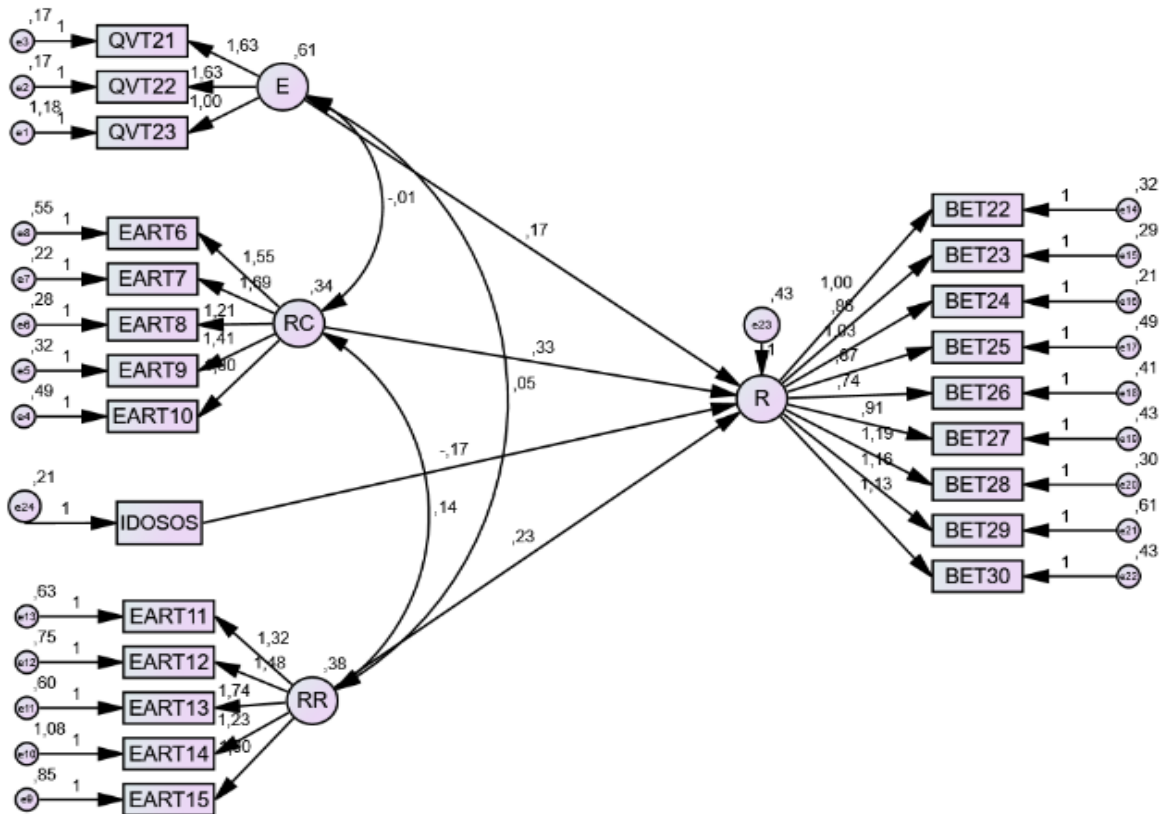

Figure 3. Achievement model (WBWS)
Source: Elaborated by the authors.

The technological structure of QTWL (β = 0.808), represented by letter E, the factor cognitive crafting (β = 0.106), represented by RC, the factor relational crafting (β = 0.091), represented by RR, and the sociodemographic variable referring to elderly people living at home (β = -0.085) were responsible for explaining 75% of the variance (R^2 = 0.750) of achievement (R). We highlight that the presence of elderly people at home reduces the perception of achievement at work. Hypothesis 3, therefore, was completely supported, as the more positive the perceptions of QTWL and job crafting, the greater the experience of positive affect at work.

The models tested proved to be consistent and capable of strongly predicting the dimensions of well-being at work – positive affect (60%), negative affect (56%), and accomplishment (75%) –, thus supporting the relevance of the independent variables chosen. The results support either partially or completely the hypotheses raised and corroborate the findings of previous research, in addition to bringing theoretical advances and new points of reflection.

First, according to the theoretical framework presented herein, well-being is an important QWL result, serving even to assess the impact of organizational programs (Almarshad, 2015; Ferreira 2017). The findings of the present research verified such relationship, especially considering QWL in the specific context of teleworking. All well-being factors were directly predicted by at least one factor of QTWL. Workers' behavior when performing telework, the organizational support received, the management of activities, information technology issues, software, hardware, and the effort spent to carry out telework activities played a central role in explaining the well-being of teachers in remote work. In the particular case of positive affect, the predictive model was composed exclusively of QTWL, expressed through the factors technological structure, context, and work overload.

The technological structure stood out as the most relevant predictor in all three predictive models, supporting previous findings on the importance of information and communication technologies in the organizational context and the singularities of QWL in the context of information technology and remote work (Andrade, 2020; Ferreira, 2017; Rethinam & Ismail, 2008). Nevertheless, this was the QTWL factor with the lowest mean score according to the teachers' assessment. Along with workload, which proved to be very present in teachers' experiences, the technological structure can be listed as one of the challenges faced by the educational sector in emergency scenarios (Arruda, 2020; Xiao & Liu, 2020), i.e., to get work done with a poor structure offered to teachers in remote work and with the evident work overload observed in current times.

Second, regarding job crafting, the results of this research corroborate the consistent findings of the impacts on well-being (Demerouti, 2014; Devotto & Wechsler, 2019; Devotto et al., 2017; Lazazzara et al., 2020; Tims et al., 2013; van Wingerden et al., 2017; Wang et al., 2016;

Wrzesniewski & Dutton, 2001; Wrzesniewski et al., 2013). Moving beyond the findings already identified in the literature, the present study revealed that, in a remote work context, work achievement is a dimension of well-being particularly sensitive to proactive behaviors of changing the work itself to align it to personal values and interests. Actions that change the cognitive limits that attribute meaning and purpose to tasks and that encompass changes in work relationships – both in their nature and in the breadth of such relationship with others (colleagues, superiors, customers) – positively and directly altered the perception of reach of personal goals, achievements, and expressions of individual potential of teachers in remote work. Therefore, even though job crafting may not predict affect at work, it significantly influences the achievement experiences. Thus, situations that stimulate and encourage job crafting should be the focus of managerial practices.

The results found herein reinforce the literature about the complexity of well-being at work and the importance of measuring its diverse dimensions, not only affective but also cognitive (Demo & Paschoal, 2016; Slemp et al., 2015; Paschoal & Tamayo, 2008; Warr, 2007). The explanatory models of positive affect, negative affect, and achievement are different, and, therefore, possible interventions in remote work should consider such peculiarities. Regarding context variables, previous studies have also found a strong relevance of such phenomena in the variance of well-being at work (Ferreira, 2017; Horta et al., 2012; Neiva et al., 2020; Slemp et al., 2015; Paschoal et al., 2010; Schaufeli, 2012; Traldi & Demo, 2012).

Sociodemographic variables have also entered the predictive models of negative affect and achievement. In the case of negative affect, the results regarding age and marital status are in accordance with other research on general well-being, indicating that married people tend to rely on more significant social and emotional support; older people also tend to reassess their beliefs and expectations in life, showing greater well-being (Argyle, 1999). As for educational level, it is possible to assume that elementary education imposes high demands on teachers due to students' age and instructional objectives, such as command of language and mathematical principles. The emergency switch to remote teaching, especially considering this group of teachers, can be associated with a greater experience of stress. Regarding the presence of elderly people at home, it is most likely that in the context of social isolation caused by the Covid-19 pandemic, living with these family members also provides additional emotional support for difficulties faced in other dimensions of life. Considering achievement, the presence of elderly people at home negatively influenced work achievement, probably due to conflicts in demands between the roles related to care and accomplishment of goals at work, which involves commitment, dedication, and energy to perform tasks. If, on the one hand, living together during a social isolation period represents additional emotional support, on the other, it can also require further dedication and care,

which conflict with professional activities and goals. However, such assumptions need to be further studied in the future.

The descriptive results provide a brief and general diagnosis of the experiences faced by teachers from the public educational system of the Federal District in a remote work situation. We have observed a moderate perception of achievement and a low to moderate positive and negative affect perception. The negative affect was prevalent in relation to the positive affect. The coexistence of positive and negative affect at work is a finding consistent with the literature (Demo & Paschoal, 2016; Paschoal & Tamayo, 2008; Slemp et al., 2015; Warr, 2007). Considering the assessment of well-being at work, one should verify how much experiences related to positive affect predominate over experiences of negative affect. Studies that have used the same instrument to assess well-being at work indicate that a prevalence of positive over negative affect is common in different samples of organizations and professionals (Demo & Paschoal, 2016; Paschoal et al., 2010; Slemp et al., 2015; Traldi & Demo, 2012).

The present research findings suggest that the health of these teachers may be at risk and alert to the need to discuss urgent strategies and interventions. The negative affect is closely related to stress at work, which may lead to job burnout when becoming chronic and high (Warr, 2013). Consequently, this question arises: What might be causing the prevalence of negative affect and lower scores of achievement and positive affect according to the teachers approached in this study compared to other surveys? The findings presented herein help answer this question and point to QTWL and job crafting factors as antecedents of affection and achievement. Precisely the experiences of QTWL and crafting help to understand well-being among teachers.

Finally, the present study brings advances in the field of organizational behavior and people management. We have demonstrated that the instruments used herein are valid and reliable for the delimited sample and can, therefore, be applied to kindergarten, elementary, and high school professionals, which would enable the use of the measurements of well-being at work, QTWL, and job crafting in surveys and assessments of educational programs, including remote work contexts. In addition, the results provide empirical support to the theoretical models related to well-being at work (Demo & Paschoal, 2016; Paschoal & Tamayo, 2008), QTWL (Andrade, 2020), and job crafting (Devotto & Machado, 2020).

5 CONCLUSIONS

Regarding practical implications, the results of this research can guide public managers and public policymakers in the educational field regarding the adoption of telework, which is a possibility, albeit partially, in educational institutions. Crises such as COVID-19 and even advancements and innovations in information and communication technologies require understanding the relationship between work activities and the dynamics related to the experience of professionals. The findings presented herein also emphasize the importance of the effective participation of workers in managerial decisions and the provision of organizational support as a strategic measure to prevent health problems and achieve organizational goals.

As limitations, we mention the cross-sectional nature of the study, which inhibits causal inferences. Furthermore, the fact that the dependent and independent variables were collected simultaneously implies variance bias. Another limitation concerns the impossibility of generalizing the results, as we resorted to a non-probability sampling method.

Considering the agenda for future studies, longitudinal studies are suggested so that this specific theme can be analyzed over time continuously. Furthermore, future studies may expand the sample by including private schools, focusing on collecting dependent and independent variables at different moments in time.

In the context of changing work, which accelerated during the COVID-19 pandemic, this study sought to empirically test the impacts of QTWL perceptions and job crafting on the work well-being of public school teachers in remote work. The proposed objective was achieved, and the diagnosis outlined brings contributions to the research issue by characterizing the profile of teachers' experiences in remote work, highlighting the relationships between the variables addressed.

REFERENCES

Almarshad, S. O. A. (2015). Measurement scale for evaluating quality of work life: conceptualization and empirical validation. *Trends in Applied Sciences Research*, 10(3), 143-156. https://doi.org/10.3923/tasr.2015.143.156

Andrade, L. L. S., Pantoja , M. J., & Figueira, T. G. (2020). Desenvolvimento de um instrumento de medida de qualidade de vida no teletrabalho. *XLIV Encontro da Anpad - EnANPAD*, Maringá, Brasil, 44. http://www.anpad.org.br/abrir_pdf.php?e=MjkxNDY=

Argyle, M. (1999). Causes and correlations of happiness. In D. Kahneman, E. Diener & N. Schwarz (Eds), *Well-being: The foundations of hedonic psychology* (pp. 353-373). New York: Russel Sage Foundations.

Arruda, E. P. (2020). Educação remota emergencial: Elementos para políticas públicas na educação brasileira em tempos de Covid-19. *Em Rede: Revista de Educação a Distância*, 7(1), 257-275. https://www.aunirede.org.br/revista/index.php/emrede/article/view/621/575

Carnevale J. B., & Hatak, I. (2020). Employee adjustment and well-being in the era of COVID-19: Implications for human resource management. *Journal of Business Research*, 116, 183-187. https://doi.org/10.1016/j.jbusres.2020.05.037

Cohen, J. (1992). A power primer. *Psychological Bulletin Journal*, 112(1), 155-159. https://www.researchgate.net/publication/49619430_A_Power_Primer

Comrey, A. L., & Lee, H. B. (1992). *A first course in factor analysis*. (2 ed.). Psychology Press.

Demerouti, E. (2014). Design your own job through job crafting. *European Psychologist*, 19(4), 237-247. https://doi.org/10.1027/1016-9040/a000188

Demo, G., & Paschoal, T. (2016). Well-Being at Work Scale: exploratory and confirmatory validation in the USA. *Paidéia*, 26(63), 35-43. https://doi.org/10.1590/1982-43272663201605

Devotto, R. P., & Wechsler, S. M. (2019). Job crafting interventions: systematic review. *Trends in Psychology*, 27(2), 371-383. https://doi.org/10.9788/tp2019.2-06

Devotto, R. P., & Machado, W. L. (2017). Job crafting: Uma revisão da produção científica internacional. *Psico-USF*, 22(3), 413-423. https://doi.org/10.1590/1413-82712017220303

Devotto, R. P. de., & Machado, W. L. (2020). Evidências de validade da Versão Brasileira do Job Crafting Questionnaire. *Psico-USF*, 25(1), 39-49. https://doi.org/10.1590/1413-82712020250104

Devotto, R. P., Freitas, C. P. P., & Wechler, S. M. (2020). O papel do redesenho do trabalho na promoção do flow e do bem-estar. *RAM. Revista de Administração Mackenzie*, 21(1). https://doi.org/10.1590/1678-6971/eramd200113

Ferreira, M. C. (2017). *Qualidade de vida no trabalho. Uma abordagem centrada no olhar dos trabalhadores.* (3 ed.). Brasília: Paralelo 15.

Ferreira, M. C., & Falcão, J. T. R. (2020). Work in the context of COVID-19 pandemic, mental health, and quality of work life: essential guidelines. In M. Moraes (Ed.). *The impacts of the pandemic on workers and their work relationship* (pp. 23-30). Porto Alegre: Artmed.

Field, A. (2009). *Descobrindo a estatística usando o SPSS.* (2 ed.) Porto Alegre: Artmed.

Filardi, F., Castro, R. M., & Zanini, M. T. F. (2020). Vantagens e desvantagens do teletrabalho na administração pública: Análise das experiências do Serpro e da Receita Federal. *Cadernos EBAPE.BR*, 18(1), 28-46. https://doi.org/10.1590/1679-395174605

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2009). *Análise multivariada de dados*. Porto Alegre: Bookman Editora.

Hauff, S., Guerci, M., & Gilardi, S. (2020). Well-being-oriented HRM configurations: diffusion, contingencies, and outcomes. *Evidence-based HRM,* 8(3), 253-271. https://doi.org/10.1108/EBHRM-09-2019-0080

Horta, P., Demo, G., & Roure, P. (2012). Políticas de gestão de pessoas, confiança e bem-estar: Estudo em uma multinacional. *Revista de Administração Contemporânea*, 16(4), 566-585. https://doi.org/10.1590/S1415-65552012000400005

Kline, R. B. (2015). *Principles and practice of structural equation modeling* (4 ed.) New York: Guilford publications.

Konradt, U., Schmook, R., & Malecke, M. (2000). Impacts of telework on individuals, organizations and families: A critical review. *International Review of Industrial and Organizational Psychology*, 15, 63-99.

Kowalski, T. H. P., & Loretto, W. (2017). Well-being and HRM in the changing workplace. *The International Journal of Human Resource Management*, 28(16), 2229-2255. https://doi.org/10.1080/09585192.2017.1345205

Lazazzara, A., Tims, M., & de Gennaro, D. (2020). The process of reinventing a job: A meta–synthesis of qualitative job crafting research. *Journal of Vocational Behavior,* 116(b). https://doi.org/10.1016/j.jvb.2019.01.001

Martel, J. P., & Dupuis, G. (2006). Quality of work life: Theoretical and methodological problems, and presentation of a new model and measuring instrument. *Social Indicators Research*, 77, 333-368. https://doi.org/10.1007/s11205-004-5368-4

Nangov, R., & Indrianti, S. Y. (2018). Psychological capital, work well-being, and job performance. *International Journal of Engineering & Technology*, 7(4.9), 63-65. https://doi.org/10.14419/ijet.v7i4.9.20617

Neiva, E. R., Macambira, M. O., & Ribeiro, E. M. B. A. (2020). Práticas de gestão, bem-estar e comportamento de apoio. *Revista de Administração Mackenzie*, 21(1). https://doi.org/10.1590/1678-6971/eramd200098

Organização Internacional do Trabalho. (2016) *Estrés en el traba-lho: Un recto colectivo.* https://www.ilo.org/public/libdoc/ilo/2016/490658.pdf

Paschoal, T., & Tamayo, A. (2008). Construção e validação da escala de bem-estar no trabalho. *Avaliação Psicológica*, 7(1), 11-22. http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1677-04712008000100004

Paschoal, T., Torres, C. V., & Porto, J. B. (2010). Felicidade no trabalho: Relações com suporte organizacional e suporte social. *Revista de Administração Contemporânea*, 14(6), 1054-1072. https://doi.org/10.1590/S1415-65552010000700005

Portaria n° 133, de 03 de junho de 2020. *Sistema Integrado de Normas Jurídicas do DF.* http://www.sinj.df.gov.br/sinj/Norma/d34d4d35166146009f3f852494ec2b94/Portaria_133_03_06_2020.html

Rethinam, G. S., & Ismael, M. (2008). Constructs of quality of work life: a perspective of information and technology professionals. *European Journal of Social Sciences*, 7(1), 58-70.

Salganik, M. J., & Heckathorn, D. D. (2004). Sampling and estimation in hidden populations using respondent-driven sampling. *Sociological Methodology*, 34(1), 193-240. https://doi.org/10.1111/j.0081-1750.2004.00152.x

Schaufeli, W. B. (2012). Work engagement: What do we know and where do we go? *Romanian Journal of Applied Psychology*, 14(1), 3-10. https://www.researchgate.net/publication/230580677_Work_Engagement_What_Do_We_Know_and_Where_Do_We_Go_Work_Engagement_in_Everyday_Life_Business_and_Academia

Slemp, G. R., Kern, M. L., & Vella-Brodrick, D. A. (2015). Workplace well-being: The role of job crafting and autonomy support. *Psychology of Well-Being Theory Research and Practice*, 5(1), 1-17. 10.1186/s13612-015-0034-y

Tabachnick, B. G., & Fidell, L. S. (2019). *Using multivariate statistics.* New York: Harper & Row Collins College Publishers.

Tetrick, L. E., & Winslow, C. J. (2015). Workplace stress management interventions and health promotion. *Annual Review of Organizational Psychology and Organizational Behavior*, 2, 583-603. https://doi.org/10.1146/annurev-orgpsych-032414-111341

Tims, M., Bakker, A. B., & Derks, D. (2013). The impact of job crafting on job demands, job resources, and well-being. *Journal of Occupational Health Psychology,* 18(2), 230-240. https://doi.org/10.1037/a0032141

Traldi, M. T. F., & Demo, G. (2012). Comprometimento, bem-estar e satisfação dos professores de administração de uma universidade federal. *Revista Eletrônica de Administração*, 18(2), 290-316. https://doi.org/10.1590/S1413-23112012000200001

van Wingerden, J., Bakker, A. B., & Derks, D. (2017). Fostering employee well-being via a job crafting intervention. *Journal of Vocational Behavior*, 100, 164-174. https://doi.org/10.1016/j.jvb.2017.03.008

Wang, H. J., Demerouti, E., & Bakker, A. B. (2016). A review of job crafting research: the role of leader behaviors in cultivating successful job crafters. In S. K. Parker & U. K. Bindl (Eds.),

Proactivity at work: Making things happen in organizations (pp. 77-104). London: Routledge.

Warr, P. (2007) *Work, happiness and unhappiness*. New Jersey: Lawrence Erlbaum Associates.

Warr, P. (2013). Fuentes de felicidad e infelicidad en el trabajo: una perspectiva combinada. *Revista de Psicología del Trabajo y de las Organizaciones*, 29(3), 99-106. https://doi.org/10.5093/tr2013a15

Waterman, A. S., Schwartz, S. J., Zamboanga, B. L., Ravert, R. D., Williams, M. K., Agocha, V. B., Kim, S. Y., & Donnellan, M. B. (2010). The questionnaire for eudaimonic well-being: Psychometric properties, demographic, comparisons, and evidence of validity. *The Journal of Positive Psychology*, 5(1), 41-61. https://doi.org/10.1080/17439760903435208

Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management*, 26(2), 179-201. https://doi.org/10.5465/amr.2001.4378011

Wrzesniewski, A., LoBuglio, N., Dutton, J. E., & Berg, J. M. (2013). Job crafting and cultivating positive meaning and identity in work. *Advances in Positive Organizational Psychology*, 1(1), 281-302. https://doi.org/10.1108/S2046-410X(2013)0000001015

Xiao, C., & Liu, Y. (2020). Analysis on the influence of epidemic on education in china. In V. Das, & N. Khan (Eds.), *Covid-19 and student focused concerns: threats and possibilities.* https://americanethnologist.org/features/collections/covid-19-and-student-focused-concerns-threats-and-possibilities/analysis-on-the-influence-of-epidemic-on-education-in-china