

Impact of Psychological Capital and Job Crafting on Work Engagement

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Abstract

The objective of this study is to assess the impact of psychological capital and job crafting on work engagement. The Work Engagement, Psychological Capital and Job Crafting scales were used. Seven hundred and forty-nine workers participated, four hundred and eighty-nine females (65.3%), between 26 and 35 years old (34.8%, mean 32 years old, $SD = 10$), 48.5% single, and 49.5% with postgraduate degrees. Data was analyzed using descriptive statistics and structural equations. Psychological capital was the only work engagement predictor. The results showed that the model gave good fit indices ($\chi^2 = 2469.55$, $\chi^2 / df = 2.77$, CFI = 0.91, GFI = 0.90, TLI = 0.90, RMSR = 0.50, RMSEA = 0.04, 95% confidence interval = 0.04 to 0.05) and explained 66% of the engagement variance. Personal resources had a positive impact on engagement, when compared to structural and social resources, and challenging work demands.

Keywords: work engagement, psychological capital, job crafting.

Impacto do Capital Psicológico e do Comportamento de Redesenho no Trabalho sobre Engajamento no Trabalho

Resumo

Esse estudo teve como objetivo testar o impacto do capital psicológico e do comportamento de redesenho no trabalho sobre o engajamento. As escalas de Engajamento no Trabalho, Capital Psicológico e Comportamentos de Redesenho no Trabalho foram utilizadas. Participaram 749 trabalhadores, 489 do sexo feminino (65,3%), entre 26 e 35 anos (34,8%, média de 32 anos, $DP = 10$), 48,5% solteiros, 49,5% de pós-graduados. Os dados foram analisados por meio de estatísticas descritivas e equações estruturais. O único preditor de engajamento no trabalho foi capital psicológico. O modelo revelou bons índices de ajustamento ($\chi^2 = 2469,55$, $\chi^2 / df = 2,77$, CFI = 0,91, GFI = 0,90, TLI = 0,90, RMSR = 0,50, RMSEA = 0,04, intervalo de confiança de 95% = 0,04 a 0,05) e explicou 66% da variância de engajamento. Recursos pessoais tiveram impacto positivo sobre o engajamento, quando comparados aos recursos estruturais, sociais e às demandas desafiadoras no trabalho.

Palavras-chave: engajamento no trabalho, capital psicológico, comportamento de redesenho no trabalho.

Impacto del Capital Psicológico y del comportamiento del Rediseño del Trabajo sobre el Compromiso en el Trabajo

Resumen

Este estudio tuvo como objetivo probar el impacto del capital psicológico y el comportamiento de rediseño en el trabajo sobre el compromiso. Las escalas de Compromiso en el Trabajo, Capital Psicológico y Comportamientos de Rediseño del Trabajo fueron usadas. Participaron 749 trabajadores, 489 sexo femenino (65,3%), entre 26 y 35 años (34,8%, media 32 años, $DT = 10$), 48,5% solteros, 49,5% posgraduados. Los datos fueron analizados por medio de estadística descriptiva y ecuaciones estructurales. El único predictor del compromiso en el trabajo fue el capital psicológico. El modelo mostró buenos índices de ajuste ($\chi^2 = 2469.55$, $\chi^2 / df = 2.77$, CFI = 0.91, GFI = 0.90, TLI = 0.90, RMSR = 0.50, RMSEA = 0.04, intervalo de confianza del 95% = 0.04 a 0.05) y explicó el 66% de la varianza. Recursos personales tuvieron un impacto positivo en el compromiso, en comparación con los recursos sociales estructurales y las demandas desafiantes en el trabajo.

Palabras clave: compromiso en el trabajo, capital psicologico, comportamientos de Rediseño del Trabajo.

Fast paced changes have contributed to the process of globalization, high competitiveness, and innovation in information technologies in the organizational field. Engaging employees has become the focus of attention in strategic human resources management (Knigh et al., 2017; Mesurado & Laudadio, 2019; Slåtten et al., 2022). The interest is justified by the positive impacts of engagement on important organizational results (Björk et al., 2021; Mercali & Costa, 2019; Pollak et al., 2017; Tomietto et al., 2019) and on well-being, health and quality of life indicators (Kahur, 2017; Kulikowski, 2017; Oliveira & Rocha, 2017).

Studies on work engagement have been enhanced by Positive Psychology (Seligman & Csikszentmihalyi, 2000) and by growing scientific interest in human capital and in positive psychological states of behavior (Schaufeli, 2014). Kahn (1990) introduced the concept of work engagement as a state of mind in which individuals, in terms of performing their roles, make better use of their physical, cognitive and emotional resources. Different concepts of the construct were proposed. Bakker (2015) approached engagement as a stable emotional state that, according to Calderon-Mafud and Pando-Moreno (2018), is influenced by contexts and culture.

The definition of engagement as a motivational construct was proposed by Schaufeli, et al. (2002), and is characterized as an affective-cognitive, positive mental state of accomplishment, work-related wellbeing and connection to work through three factors: vigor, dedication and absorption. Vigor is understood as high energy and resilience levels in the workplace, through efforts to accomplish tasks and persistence in the face of difficulties. Dedication is characterized as a state of high degree of involvement and identification with an activity. And absorption refers to a high level of concentration in the work.

The theoretical model of Job Demands - Resources - JD-R filled a gap in the literature, providing important contributions to the understanding of work engagement (Bakker & Demerouti, 2007, 2014, 2017; Tims & Bakker, 2010). Personal resources are defined in the JD-R as aspects of the self that are related to intrapsychic capacity and egoic resources, which can have a positive effect on important organizational indicators and work engagement. Work resources refer to work-related aspects that initiate a motivational process that favor engagement and, consequently, high performance (Schaufeli, 2013). Job demands (challenges and obstacles) consist of physical, social and/or organizational aspects that require the employees' skills, competencies and physical and/or psychological efforts (Xanthopoulou et al., 2007).

Engagement is related to a dynamic balancing between the job demands of activities performed and personal and job resources (Bailey et al., 2017; Hu, Schaufeli, & Taris, 2017; Tims & Bakker, 2010). Associating job demands with adequate job resources causes people to challenge themselves to engage in professional activities. On the other hand, the greater the demands and the scarcer the resources, the greater the chance of employee illness and burnout (Schaufeli et al., 2002).

Different studies have analyzed which resources and demands have a positive effect on work engagement. The following personal resources stand out: self-efficacy (Buric & Kim, 2020; Skaalvik, 2020; Sulisty & Suhartini, 2019; Tian et al., 2019), psychological capital (Tashima-Cid, 2018), authentic experience (Chinelato, 2016), emergence of positive worker emotions (Young et al., 2018) and emotional intelligence (Mérida-López et al., 2020).

Empirical evidence has shown the relationship between engagement and important organizational results such as

high levels of employee performance (Bailey et al., 2017), increased job satisfaction (Andrade, 2020), improved effective communication (Paiva et al., 2017), organizational citizenship behavior (Lovakov et al., 2017), fewer absences from work and lower turnover (Mérida-López et al., 2020); low levels of burnout (Hu et al., 2017) and occupational stress (Santos et al., 2021).

Although engagement construct is an important topic, the literature points out difficulties in definition conceptual and methodological aspects, as well as obstacles in understanding the antecedent, mediating, moderating and consequent variables of work engagement (Kaur, 2017; Kulikowski, 2017). Studies are still inconsistent and predominantly cross-sectional (Rudolph et al., 2017), emphasizing the importance of other models with engagement variables that are still poorly studied. In this sense, the present study analyses two important variables in explanatory models of work engagement: Psychological capital and Job crafting behavior.

Proposed by Luthans and Youssef (2004), psychological capital (PsyCap) is considered one of the most important constructs in the field of Positive Organizational Behavior (Burhanuddin et al., 2019; Castillo & Lopez-Zafra, 2022; Lupşa et al., 2019; Yang et al., 2021) and has been an important predictor of work engagement (Costantini et al., 2017; Mesurado & Laudadio, 2019; Niswaty et al., 2021; Tashima-Cid, 2018).

The construct consists of four dimensions that form the PsyCap: (1) self-efficacy: belief in one's ability to maintain and invest the necessary efforts to succeed in challenging tasks; (2) optimism: making positive attributions about present and future events; (3) hope: persevering towards goals and, when necessary, redirecting the ways to achieve them in order to succeed; and (4) resilience: overcoming difficulties and bounce back in the face of problems and adversities. These four dimensions operate synergistically and jointly, becoming a single and integrated component in the pursuit of expected organizational results (Luthans & Youssef, 2004).

The other variable analyzed is job crafting behavior, in other words job crafting (Chinelato et al., 2015). It has been considered an important construct for organizations to promote employee engagement (Bakker & Demerouti, 2017; Pimenta de Devotto, 2021; Pimenta de Devotto et al., 2020; Rudolph et al., 2017). Introduced by Wrzesniewski and Dutton (2001), the variable was defined as autonomous and proactive changes made by individuals to customize their task and consequently make their work more meaningful, according to their interests, skills, needs, values and demands of the organization.

Job crafting behavior is a creative process that covers psychological, social and physical actions that requires a continuous effort of the worker (job crafters) through three combined strategies: task adjustments (physical changes to change form, scope, time or demand); cognitive adjustments (cognitive changes made by the individual to reformulate their perceptions of work, giving it meaning, significance and purpose) and relational adjustments (changes in work relationships, in the frequency, duration and intensity of social interaction with clients, colleagues and suppliers) (Wrzesniewski et al., 2013).

According to the JD-R model, job crafting behavior changes job demands and resources and can predict work engagement by increasing job structural resources, job social resources, job demands challenges and, concomitantly, reduce the work demands considered as obstacles or impediments by the individual (Petrou et al., 2015; Tims et al., 2012).

The literature indicates positive impacts between

psychological capital and engagement (Carmona-Halty et al., 2021; Cavalcante et al., 2014; Costantini et al., 2017; Mesurado & Laudadio, 2019; Tashima-Cid, 2018; Vermooten et al., 2021; Vogt et al., 2016), as well as between job crafting behavior and engagement (Bakker & Demerouti, 2017; Tims et al. 2012; Chinelato, 2016; Frederick & VanderWeele, 2020; Nogueira, 2018; Pimenta de Devotto, 2021; Pimenta de Devotto et al., 2020; Tadić-Vujčić, 2019; Tashima-Cid, 2018; Rudolph et al., 2017). Job crafting increased job complexity and work engagement. It also increased workload, as well as burnout over time (Tims et al., 2022).

The above positive impacts consolidated the interest in studying work engagement, in which the formulation of the following research problem is a fundamental part of this process: What is the impact of psychological capital and job crafting behavior on work engagement? The objective of this study is to test an explanatory model of work engagement, based on the impact of psychological capital and job crafting behavior to cover part of the gaps pointed out in the literature.

Method

Participants

749 workers participated in the study. Most were female (65.3%, $n = 489$); aged between 26 and 35 years (34.8%, $M = 32$, $SD = 10$), single marital status (48.5%) and with postgraduate studies (49.5%). Of these, 68.4% resided in the Southeast region of Brazil, worked with formal work (94.5%), and with a formal jobs (48.7%). They worked in large (54%), and private (57.4%) companies, service providers (37.5%). They have worked 1 to 5 years of work in the same company (43.8%) and administrative services (13.9%); 36.3% held leadership positions.

Instruments

Utrecht Work Engagement Scale (UWES - 9; Schaufeli et al., 2006, adapted for the Brazilian context by Ferreira et al., 2016).

It is a unidimensional scale that measures engagement at work using three factors: *vigor*, *dedication* and *absorption*. It consists of 9 items answered through a frequency scale, ranging from never (0) to always (6).

Empirical studies revealed that the one-factor version obtained greater empirical support than the three-factor version (Ferreira et al., 2016; Kulikowski, 2017; Vazquez et al., 2015). In the Brazilian adaptation, the UWES-9 presented evidence of validity and good reliability indicators (Ferreira et al., 2016). Example items: 'At my work, I feel full of energy'. In the present study, the scale presented adequate adjustment indices: ($\chi^2 = 100.56$, $\chi^2/df = 4.19$, CFI = 0.98, GFI = 0.97, TLI = 0.97, SRMR = 0.24 and RMSEA = 0.06, IC = 95% ~ 0.052 to 0.079), with factor loadings between 0.56 and 0.87. The results of Cronbach's alpha index (0.93) and the composite reliability index (0.92) indicated high consistency and reliability of the measurement instrument in its unifactorial version (Tashima-Cid, 2018).

Psychological Capital Scale (Psychological Capital Questionnaire, PCQ-24; by Luthans et al., 2007, adapted by Fidelis, 2016).

The instrument measures *self-efficacy*, *hope*, *optimism* and *resilience*. It consists of 24 items answered on a six-point Likert response scale (1 = strongly disagree; 6 = strongly agree). Example items: 'I feel I can help set goals for my work area'. In the adaptation study for Brazil, the PCQ-24 presented evidence of validity and good reliability indicators (Fidelis, 2016). In the present study, the scale showed adequate adjustment indices: ($\chi^2 = 724.10$, $\chi^2/df = 4.01$, CFI = 0.91, TLI = 0.90, GFI = 0.90, RMSR = 0.55, RMSEA = 0.06 IC = 95% ~ 0.59 to 0.68). The results of Cronbach's alpha were satisfactory for the second-order model ($\alpha = 0.92$) and for all factors (self-efficacy $\alpha = 0.85$; hope $\alpha = 0.82$; resilience $\alpha = 0.75$ and optimism $\alpha = 0.78$), and composite reliability of 0.95 for the full scale (self-efficacy = 0.86; hope=0.82; resilience $\alpha = 0.77$ and optimism $\alpha=0.79$) (Tashima-Cid, 2018; Tashima-Cid et al., 2020).

Job Crafting Scale (JCS; by Tims et al., 2012, adapted by Chinelato et al., 2015).

This instrument was proposed to evaluate the construct by increasing work resources, challenging work demands, and decreasing obstacle work demands. In the adaptation study for Brazil, the scale showed validity evidence and good reliability indicators (Chinelato et al., 2015). The JCS has 14 items answered on a 5-point Likert scale (1 – Never to 5 – Always). Example item: 'I try to learn new things.' In this study, the factors indicated good adjustment indices ($\chi^2 = 372.59$, $\chi^2/df = 5.00$, CFI = 0.93, TLI = 0.91, GFI = 0.96, RMSR = 0.48, RMSEA = 0.07 CI = 95% ~ 0.66 to 0.81). Cronbach's alpha indices were satisfactory for the total scale ($\alpha = 0.86$) and for all factors (increase in structural resources $\alpha = 0.84$; increase in social resources $\alpha = 0.80$ and increase in challenging demands $\alpha = 0.81$). The composite reliability indices also indicated satisfactory values for the total scale ($\alpha = 0.93$) and for all factors (increase in structural resources $\alpha = 0.84$; increase in social resources $\alpha = 0.81$ and increase in challenging demands $\alpha = 0.81$) (Tashima-Cid, 2018).

Data Collection Procedures and Ethical Concern

The Research Ethics Committee approved the present study (Consubstantiated Opinion No. 1,799,857) - CNS Resolutions 466/12 and 510/16. The participants were invited through emails and social media. The questionnaires were answered on a SaaS (Software as a Service) digital data platform, together with a Free and Informed Consent Term (ICF). Response time averaged 25 minutes.

Data Analysis Procedures

Data analysis was performed using SPSS (v. 22, IBM, 2013) and AMOS (v. 22, IBM, 2013) software. Firstly, preliminary analyses were performed to clean the database, missing values and extreme cases, uni and multivariate (outliers). The Mahalanobis distance was verified to detect the presence of multivariate outliers. The presence of multicollinearity was evaluated by the variance inflation factor (Variance Inflation Factor – VIF) and by statistical tolerance, as described by Marôco (2014) and Tabachnick and Fidell (2019). Equation analyses by structural modeling were used to test the validity

of the theoretical model, with parameter estimation by the maximum likelihood (ML) method.

The values of the χ^2/df indicators lower than 5 were adopted as criteria for satisfactory adjustment; the CFI, GFI and TLI adherence indices with values greater than 0.90; SRMR less than 0.08 with confidence interval (upper limit) < 0.10 and RMSEA close to or less than 0.08. Measurement reliability was measured using Cronbach's alpha and composite reliability (Brown, 2015; Hair et al., 2010; Marôco, 2014).

Results

After cleaning the database, all assumptions to use the ML method were analyzed. Measurements of the distribution shape (asymmetry and kurtosis) were used to assess whether the data have univariate and multivariate normality. The asymmetry coefficients ranged from -1.77 to -0.22; those with univariate kurtosis ranged from -0.95 to 3.87 and the coefficient of multivariate kurtosis was 472.60 (critical value 101.65).

Most of the results presented showed values lower than the estimates proposed by Kline (2016). Absolute asymmetry values greater than 3 and univariate and multivariate kurtosis greater than 10 would signal a serious violation of normality assumptions and the inadequacy of ML methods for model estimation.

There was a correlation between psychological capital and job crafting ($r = 0.84$), suggesting an overlap and multicollinearity between the two factors. However, these hypotheses were discarded because all variables had VIF values lower than 10 and tolerance values higher than 0.1, indicating the absence of multicollinearity (Hair et al., 2010).

After evaluating the assumptions, the evaluation phase of the model's goodness of fit began in order to verify whether it is capable of reproducing the correlational structure of the study variables. It was observed that the χ^2 value found is 2469.56 ($p < 0.05$), indicating that the test is significant.

In the structural equation analysis, the model created by the variables predictor (PsyCap and job crafting) and work engagement, adjusted to a sample of workers, revealed good adjustment and adequacy indices (Table 1). The suggested modification indices were analyzed but they didn't improve statistical adjustments (Brown, 2015; Mâroco, 2014).

In the structural equation analysis, the model created by the variables predictor (PsyCap and job crafting) and work engagement, adjusted to a sample of workers, revealed good adjustment and adequacy indices (Table 1).

The structural model was analyzed after assuring the quality of the measurement model. The structural model showed satisfactory fit indices, revealing a significant relationship ($p < 0.05$). The regression coefficient of psychological capital for work engagement was $\beta = 0.90$, while the regression coefficient of job crafting behavior showed an index of $\beta = -0.11$. The covariance between the predictors is statistically significant. The model adjusted with the predictors psychological capital

(self-efficacy, optimism, hope and resilience) and job crafting (structural resources, social resources and challenging demands) explained 66% of the observed variance in work engagement ($R^2 = 0.66$).

Figure 1 represents the Structural Model tested with the standardized estimates. The indices shown in Figure 1 reveal that the only statistically significant predictor of work engagement presented in this study was psychological capital ($\beta = 0.90$, $p < 0.01$). Thus, the regression coefficient of job crafting behavior ($\beta = -0.11$, $p > 0.05$) was not able to explain the work engagement variation.

Discussion

The data indicates that personal resources, although highly related to job crafting behaviors, are the only ones that affect engagement in an expressive and significant way. These findings are different from previous studies that have shown that work resources are the most important predictors of engagement (Pimenta de Devotto et al., 2020) and that only the demands of obstacles at work would have a negative impact on engagement (Petrou et al., 2012; Tims et al., 2013). However, most studies were restricted to work characteristics and, consequently, that employees who engage in job crafting increase their psychological capital and their work engagement (Pimenta de Devotto et al., 2020; Tadić Vujčić, 2019; Tashima-Cid, 2018; Xanthopoulou et al., 2007).

The results presented were different from the study by Vogt et al. (2016) who analyzed the relationship between job crafting, psychological capital, and work engagement, showing that job crafting is an important predictor variable, increasing their psychological capital and their work engagement. In a three-wave design, the authors found a predictive relationship between job crafting and psychological capital from the first to the second wave and from this to the third. In this sense, the results of the study reported here corroborate this part of the results by Vogt et al. They concluded that when individuals proactively build a work environment with adequate resources and challenging demands, it can lead to positive outcomes with important health and engagement effects.

According to Xanthopoulou et al. (2009), the relationship between the variables can be reciprocal in a spiral process of gain and feedback, affecting work engagement and psychological capital. Conversely, work engagement and high psychological capital can affect job crafting behavior, balancing resources and work demands.

An organizational environment that favors the balance between job demands and job resources can also affect personal resources and how employees perceive and react to the organizational context (Judge et al., 2000).

Engagement can expand depending on the nature of personal resources, the work resources that employees have at their disposal, and the demands (challenges or hurdles) that are required of them. However, even if employees work with

Table 1

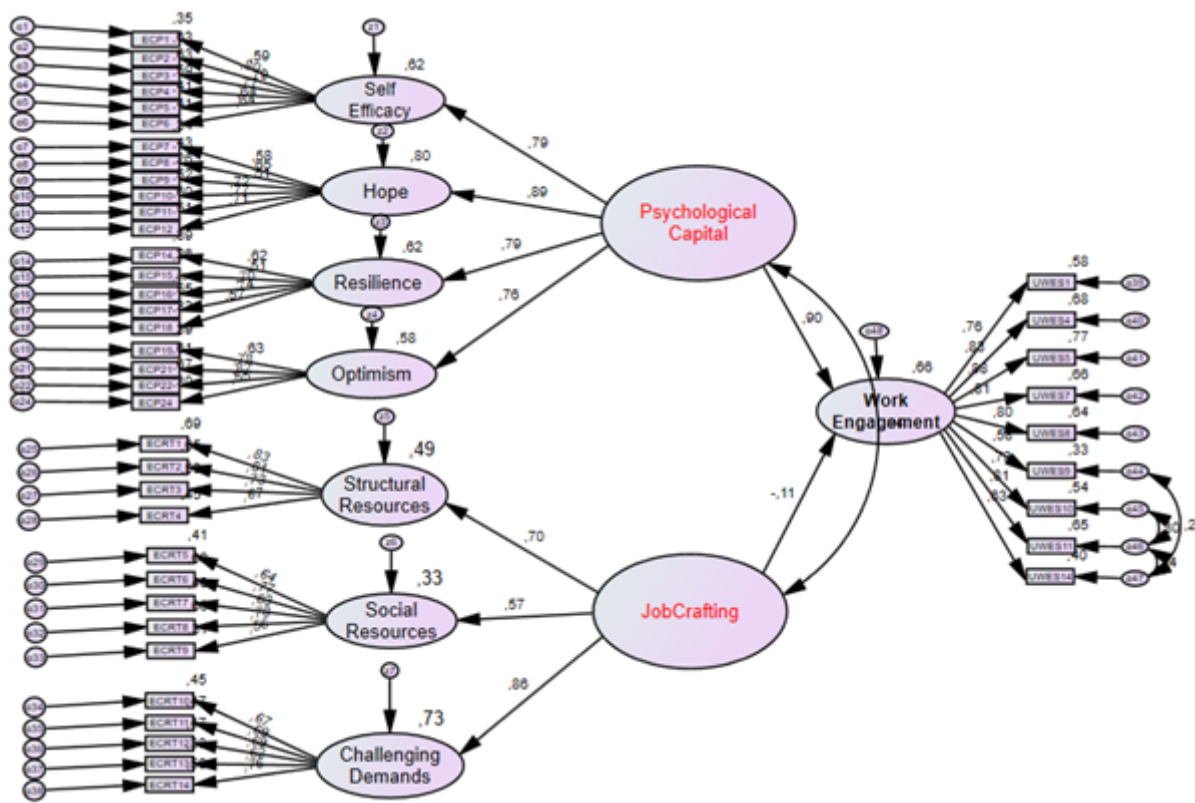
Goodness of fit indices of the tested model

| Model | χ^2 | p | df | χ^2/df | CFI | GFI | TLI | SRMR | RMSEA (90%CI) |
|-------|----------|-------|------|-------------|------|------|------|------|------------------|
| Model | 2469,55 | 0,000 | 889 | 2,77 | 0,91 | 0,90 | 0,90 | 0,05 | 0,04 (0,04/0,05) |

Note. χ^2 = chi-square; p = p -value; df = degrees-of-freedom; CFI = Comparative Fit Index; GFI = Goodness of Fit Index; TLI = Tucker-Lewis index; SRMR = Standardized Root mean square residual; RMSEA = Root mean square error of approximation; CI = confidence interval.

Figure 1

Structural Model tested with standardized estimates



unfavorable resources at work, they can mobilize their personal resources and experience work engagement by proactively interacting with their work environment (Tadic Vujcic, 2019).

The results found indicate that psychological capital predicts work engagement ($\beta = 0.90$). Employees who have adequate personal resources are confident about their abilities, skills and competences and are optimistic about their future when engaging at work (Tashima-Cid, 2018). Workers with high levels of optimism, self-efficacy, resilience and self-esteem are able to mobilize their work resources and are more engaged (Xanthopoulou et al., 2007). Moreover, Cavalcante et al. (2014) revealed that individuals who present vigor and absorption have emphasized levels of optimism, resilience, hope and effectiveness, with positive and significant correlations between work engagement, psychological capital and well-being at work.

Individuals with high psychological capital are more motivated to achieve challenging goals, persevere in the face of potential problems and have vigor for achieving goals, tolerating more stressful situations and negative setbacks than other workers (Avey et al, 2010; Luthans & Youssef, 2004; Tim et al., 2012).

Considering that personal and social resources at work are mutually related, Luthans et al. (2006) pointed out that work resources promote the employees' psychological capital and self-esteem, positively impacting the ability to control their work environment, bringing important psychological (low levels of exhaustion) and organizational results, focusing more on work resources and challenging demands than on obstacles (Luthans et al., 2006).

In the first meta-analysis developed on psychological capital, Avey et al. (2010) warned about the reduced number of studies dedicated to investigating the antecedent and consequent variables of the construct. This fact hinders the theoretical foundation in confirmatory models that use psychological

capital as an investigation variable. Unlike the present study, most studies that evaluated the relationship between the factors underlying psychological capital and work engagement were unable to identify the existence of a latent state of PsyCap and prove the second-order factor structure of the theoretical framework of Luthans. et al. (2007)As a result, psychological capital within models is generally verified separately with the four specific factors (Xanthopoulou et al., 2009).

On the other hand, the results refute the hypothesis that job crafting is an important predictor of work engagement (Petrou et al., 2012; Pimenta de Devotto, 2021; Pimenta de Devotto et al., 2020; Rudolph et al., 2017; Tims et al., 2012; Tims et al., 2013). Increasing structural resources, social resources, and challenging demands presented positive correlations with work engagement, positive psychological capital, positive affect, and intra-role work performance in the study conducted by Chinellato et al. (2015). The study by Tims et al. (2012) found positive correlations between increasing challenging job demands, increasing social resources, and increasing structural job resources, and work engagement and performance.

Although self-report instruments (questionnaires, inventories and scales) are widely used, there are many criticisms regarding their use due to the implications regarding data endogeneity and reliability. The participants' responses partially depend on the context, on their emotional state during measurement, on social desirability, and the participant may not fully understand the items that constitute the instrument used, which result in different meanings. This is an important consideration because this study used self-report instruments, which may have produced bias in the results.

Another possible explanation for the non-significant results of job crafting behavior on engagement can be found in the study developed by Chinellato (2016), who analyzed individual variations in work engagement using a research design in the form of a diary and found intra-individual variations throughout

the days of the week, bringing an important theoretical contribution to conceptualize engagement as a psychological state. Thus, studies with cross-sectional designs and self-report instruments can limit the evaluation of changes in job crafting behaviors for work engagement every day, over time because they don't consider the evolutions and changes of phenomena across the time.

It should be emphasized that the adaptation study of the job crafting scale did not maintain the dimension related to the obstacle demands, considering only the challenging demands, which would be the effectively positive ones those in the JD-R model (Chinelato et al., 2015). The authors indicated that in their study only 20% of the participants had complete higher education or a postgraduate degree, which may have limited the perception of such demands as in this study.

Thus, the findings found in the present study do not demonstrate that workers achieve better engagement when inserted in a work environment that favors the increase of structural, social resources and challenging demands (job crafting behavior), placing work as an important connection mechanism by relating characteristics of the work environment to the work results. Job crafting behavior was expected to significantly affect work engagement. This issue should be addressed in more detail in future studies, preferably using other research designs. The fact that this is a cross-sectional study limits the results, as it does not allow to better understand the dynamics and direction of relationships. In addition, it follows the tendency of studies to use self-report instruments, which create problems related to perception bias.

New job crafting models (Lazazzara et al., 2020; Tims et al., 2022; Zhang & Parker, 2019) have emerged to explain and clarify relationships between this and other constructs. The Lazazzara et al. (2020) model process explains the motives for job crafting and how the specific context might influence it. The model also reveals how personal factors connect job crafting to the consequences of experienced redesign. This model allows for a better understanding of the conditions under which job crafting can generate positive or negative experiences.

Another recent model is of the Zhang and Parker (2019). These authors identify a "hierarchical structure with three levels of crafting constructs that together define eight types of job crafting that relate with each other" (Zhang & Parker, 2019, p. 3). The levels are job crafting orientation, job crafting form, and job crafting content. Tims et al. (2022) organized the literature in three focuses according to current studies: individual, team or social perspective. They claim that crafting has been linked to positive outcomes, such as work engagement, job performance, and well-being.

But the studies on this subject are relatively recent and although some investigations have shown that job crafting behavior has positive effects on individuals and organizations, its antecedents and consequences are still not well understood as shown by the most recent studies referenced in this text (Bakker & Demerouti, 2017; Lazazzara et al., 2020; Tims et al., 2012; Tims et al., 2022; Zhang & Parker, 2019).

Conclusion

The present study assessed an explanatory model of work engagement. The results indicated that personal resources (self-efficacy, optimism, resilience, and hope) were predictors of work engagement when compared to the three dimensions of job crafting, that is, structural resources, social resources and challenging demands at work. The research offers relevant

data that provide a set of systematized information around the theme, exploring the insufficiently researched relationships between variables in the Brazilian context and which have shown important results in the area. Despite the results are interesting, no causality can be inferred.

Even though the research contains theoretical, methodological and practical developments, the interpretation of the obtained results must take into account some limitations: a) the sample consisted predominantly of participants residing in the Southeast region (67%) that has different socioeconomic characteristics from other regions. It is more industrialized, and therefore, richer; b) the sample choice in the study was for convenience and not probabilistic; c) data collection was performed at a single moment in time. Although the constructs studied are relatively stable over time, there are significant limitations in some cross-sectional studies. Thus, the main consequence is that it can be difficult to understand some of the differences; d) the study was based on self-report measurement instruments. It is noteworthy that such limitations do not detract from the merit and relevance of the theoretical advance provided by this study.

Additional studies that contribute to expanding the debate on work engagement are suggested. The research limitations on work engagement are related to the methodology used, mainly characterized by studies with quantitative designs, cross-sectional and that use self-report instruments that disregard aspects related to context and other relationships between variables.

New studies with sample amplitude, in different cultures, using a combination of investigation methods, with other data collection and analysis techniques, with longitudinal designs, focused on different personal and work resources, challenging demands and demands of obstacles at work are needed are essential to understand work engagement from the perspective of the JD-R model.

The empirical findings provoke reflection on the challenges of articulating theory and professional practice. There are many challenges in Organizational Psychology and reconsidering it is a constant, arduous, and complex exercise. There are many existing obstacles, and it is particularly important to reflect on the role of psychologists and their various forms of action in contemporary society. Periodic and constant reassessment of academic and professional practice prevents intervention and research from being regarded as dichotomous areas. Therefore, it is essential to produce interrelated knowledge with forms of action that are more consistent with the context in which the subject is inserted, so that we are not just consumers and adapters of theoretical and/or empirical knowledge generated by countries with cutting-edge technology.

The findings of this study also indicate the need to reflect on the psychologist's ethical commitment to society and, above all, to the human being, thus contributing to develop forms of professional action aimed at a pluralistic, critical, and transformative practice. We should bear in mind that the responsibility for a healthy environment involves organizations and their leaders more than the workers' personal resources. It is hoped that this study, in addition to the knowledge produced, and the possibilities of application pointed out, can provide reflections that facilitate human resources management policy with ethically guided actions that can carry out work engagement interventions in work resources to promote wellbeing and human development in the workplace.

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