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Article

Evidence of Validity of the Job Crafting Behaviors Scale[1]

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Abstract: Job crafting behavior refers to the changes made by workers in their job context for adjusting their activities to their preferences. We sought to adapt and collect validity evidences of the Job Crafting Behaviors Scale for the Brazilian context, in a sample of 491 workers, with a mean age of 26.7 years. Factor analysis revealed that the final instrument consisted of three dimensions (increasing structural job resources, increasing social job resources, increasing challenging job demands), which showed good internal consistency indexes. These dimensions showed low or moderate correlations with work engagement, positive psychological capital, positive job affect, and in-role performance. The scale showed evidence of validity, the use of which is recommended for future research on the changes that people make in their jobs.

Keywords: statistical validity, positive psychology, organizational behavior

Evidências de Validade da Escala de Comportamentos de Redesenho do Trabalho

Resumo: Os comportamentos de redesenho do trabalho dizem respeito às mudanças efetuadas pelos trabalhadores em seu contexto laboral para ajustar suas atividades às suas preferências. Buscou-se adaptar e reunir evidências de validade da Escala de Comportamentos de Redesenho do Trabalho para o contexto brasileiro, em uma amostra de 491 trabalhadores, com idade média de 26,7 anos. As análises fatoriais confirmatórias revelaram que o instrumento final se compôs de três dimensões (aumento dos recursos estruturais, aumento dos recursos sociais, aumento das demandas desafiadoras), que apresentaram bons índices de consistência interna. Tais dimensões apresentaram correlações positivas moderadas ou baixas com o engajamento no trabalho, o capital psicológico positivo, os afetos positivos no trabalho e o desempenho intrapapéis de trabalho. Concluiu-se que a escala demonstrou evidências de validade, o que recomenda seu uso para futuras pesquisas sobre as mudanças que os indivíduos realizam em seu trabalho.

Palavras-chave: validade estatística, psicologia positiva, comportamento organizacional

Evidencias de Validez de la Escala de Conductas de Rediseño del Trabajo

Resumen: Comportamientos de rediseño se refieren a los cambios realizados por los trabajadores en su contexto de trabajo para ajustar sus actividades a sus preferencias. El estudio buscó adaptar y reunir evidencias de validez de la Escala de Comportamientos de Rediseño del Trabajo para el contexto brasileño, en una muestra de 491 trabajadores, con una edad media de 26,7 años. Los análisis factoriales confirmatorios demostraron que el instrumento final consistió en tres dimensiones (aumento de los recursos estructurales, aumento de los recursos sociales, aumento de las demandas desafiantes), que presentaron adecuados índices de consistencia interna. Estas dimensiones demostraron correlaciones bajas o moderadas con el engagement en el trabajo, el capital psicológico positivo, los afetos positivos en el trabajo y el desempeño in-rol. La conclusión es que la escala mostró evidencias de validez, que recomiendan su uso para investigaciones futuras sobre los cambios que las personas hacen en su trabajo.

Palabras clave: validación estadística, psicologia positiva, conducta organizacional

The emergence of Positive Organizational Psychology has increased the interest in the investigation of positive results related to work, to the extent that such a perspective attempts to give greater emphasis to the study of traits, states and manifest positive behaviors in the organizational context (Luthans & Youssef, 2007). One such phenomenon is job crafting *behaviors*, characterized by change of actions in which employees engage in order to adjust work activities to their preferences, motivations and passions (Wrzesniewski & Dutton, 2001).

Job crafting behaviors have been shown to be positively associated with performance, proactive personality, personal initiative, the degree of control over work, satisfaction, resilience and job demands (Tims & Bakker, 2010; Tims, Bakker, & Derks, 2012). Job crafting has also been studied as an independent variable (Tims et al., 2012), as well as a dependent variable explained by work engagement (Parker & Griffin, 2011).

The absence of a measuring instrument with evidence of validity for assessing the behavior of job redesign (Tims

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& Bakker, 2010) led to the recent development and search for evidence of the validity of the Job Crafting Scale (JCS) in Netherlands sample (Tims et al., 2012), in which the scale showed good psychometric characteristics. Scales focused on the assessment of this construct were not found in Brazil, which justified additional research on the validity of the scores interpretation of the JCS scale in the Brazilian context, providing a measure that contributes to the diagnosis of this phenomenon by Brazilian organizational researchers. In this sense, the present study aimed to adapt and gather initial evidence of the validity of the JCS in a sample of Brazilian workers.

Work design can be understood as a process in which the organization creates its workstations and seeks knowledge and skills in the individuals, specific to the execution of tasks and roles. These tasks and roles are structured, promulgated and modified, generating impacts on individuals, groups and organizations (Grant & Parker, 2009). Job redesign, in turn, consists of changing tasks or working roles by individuals (Tims & Bakker, 2010), based on the interactions integrated into the every day work life (Wrzesniewski & Dutton, 2001). Such changes appear especially in periods of greater job demands, through initiatives taken by the employees themselves, without the intervention of the organization (Tims & Bakker, 2010).

Job redesign has two dimensions: relational and proactive. Relational reflects the fact that working roles are aggregated into larger social systems, therefore being associated with existing relationships between co-workers and suppliers / customers. Proactive, in turn, emphasizes the individual dimension of the job redesign. It is concerned to the employee's initiative to anticipate and create changes in the manner in which the work is performed, based on increased uncertainty and dynamism. In this sense, when the work processes become unpredictable and the individuals are dynamic, they can take preventive action, creating changes in how tasks are executed (Demerouti & Bakker, 2014).

Thus, job crafting behaviors lead individuals to promote physical and cognitive changes in their tasks and labor relations. Physical changes are related to changes in the shape and the number of tasks or working relationships, while cognitive changes refer to alterations in how the individual performs his work (Bakker, Rodríguez-Muñoz, & Derks, 2012; Demerouti & Bakker, 2014). In summary, the main characteristics of job crafting behaviors is that individuals change their tasks or other aspects of the design of their work environment on their own initiative, which leads to changing the meaning and identity of work (Wrzesniewski & Dutton, 2001). In this sense they contribute to maintenance of high levels of employee motivation and well-being, which usually result in higher levels of productivity for the organization (Tims & Bakker, 2010).

The study of job crafting behavior is based on the theory of job demands and resources (JD-R), which classifies the working conditions in two broad categories: job demands and job resources. Job demands constitute an aspect of the work context that requires physical and / or psychological exertion by employees, and consequently generates physical and psychological costs (Bakker, Demerouti, & Sanz-Vergel, 2014). Such demands can be classified as challenges or hindrances (Crawford, Lepine, & Rich, 2010).

The hindrance demands are characterized as stress factors in the work environment that usually frustrates personal growth, learning and goals achievement. The challenge demands, on the other hand, are related to aspects of the work context that are stressful, but that have the potential to promote personal growth or future earnings. Thus, the decrease in hindrance demands and increase in challenge demands can lead to positive results for the employee (Crawford et al., 2010).

The resources of the work, in turn, refer to the aspects of the work context that are functional in terms of working goals, stimulating personal growth, learning and the development. Such resources are able to mitigate the negative effects of the demands leading to positive work results, even when the demands are high (Crawford et al., 2010). Supported by the JD-R theory, Tims et al. (2012) propose that job crafting behaviors refer to changes that employees make in their work demands and resources, according to their capacities and needs, in order to enhance the meaning of their work. According to the authors, these behaviors are structured in three dimensions: increasing job resources, increasing challenging job demands, and decreasing hindering job demands.

Based on this classification, Tims et al. (2012) developed and validated a scale for assessing that construct in three studies conducted in the Netherlands (N = 1,181). Initially, the authors constructed a pool of 42 items, reflecting the three job crafting dimensions.

The results of exploratory factor analysis led to the elimination of 21 items, adopting the criteria to retain only the items with factor loadings above .35 of the expected factor, and to delete the items with factor loadings above .35 in unexpected factors as well as factors with just one or two items. Thus, the final version of the scale included 21 items distributed in four factors, rather than the three factors originally designed. These factors were labeled as: increasing challenging job demands (five items, alpha = .75), decreasing hindering job demands (six items, alpha = .79), increasing structural job resources (variety of resources, opportunities for the development and autonomy, five items, alpha = .82), and increasing social job resources (social support, training and *feedback* received from supervising, five items, alpha = .77). The three factors model explained 54.2% of the variance of the items.

The validity of the construct of the scale was demonstrated by positive correlations between the four dimensions of job crafting behavior and proactive personality, assessed by the Proactive Personality Scale (Bateman & Crant, 1993), obtaining results equal to .46; .23; .55 and .17, respectively; and among the three dimensions of such behavior (increasing structural job resources, increasing social job resources, and increasing challenging job demands) and the personal initiative, assessed by the scale of Frese, Fay, Hilburger, Leng, and Tag (1997), in which results equal to .57, .37 and .61 were obtained, respectively. Likewise, negative correlations were observed between cynicisms, assessed by a subscale of the Maslach Burnout Inventory (Schaufeli, Leiter, Maslach & Jackson, 1996), and three dimensions of job crafting behavior (increasing

structural job resources, r = -.24; increasing social job resources, r = -.17; increasing challenging job demands, r = -.16), and decreasing hindering job demands was positively correlated with cynicism (r = .35).

In support of criterion validity, the results indicated that self-report of job crafting behaviors correlated positively with the classifications of co-workers on the engagement levels (estimated by Utrecht Work Engagement Scale, Schaufeli, Bakker, & Salanova, 2006); increasing structural job resources, r = .46; increasing social job resources, r = .31; increasing challenging job demands, r = .41; decreasing hindering job demands, r = -.19) and job performance (estimated by Williams and Anderson scale (1991), increasing structural job resources, r = .40; increased social job resources, r = .23; increasing challenging job demands, r = .37; decreasing hindering job demands, r = -.10) (Tims et al., 2012).

The aim of this study was to adapt and gather validity evidence of the Job Crafting Scale (JCS) in a sample of Brazilian workers. Validity evidences were studied by confirmatory factor analysis, as well as correlation among the JCS, positive (work engagement, in-role performance, positive affect at work, positive psychological capital at work and self-referential ratings) and negative (negative affect at work and neuroticism) attitudes towards job and life. Work engagement is a positive and work-related state, characterized by vigor, dedication and absorption (Demerouti, Mostert & Bakker 2010; Schaufeli & Bakker, 2010). The job crafting behaviors should present moderate positive correlations (above .30) with work engagement (Hypothesis 1). In-role performance refers to nonvoluntary but expected behaviors as part of the formal requirements of the organization (Anderson & Williams, 1991). Thus, job crafting behavior would show moderate positive correlations with in-role performance (Hypothesis 2).

Positive affects at work are related to emotions of pleasure, excitement and comfort (Warr, 2007). Thus, they would present moderate positive correlations with job crafting behavior (Hypothesis 3). The positive psychological capital, in turn, consists of an individual state associated with feelings of self-efficacy, optimism, hope and resilience (Luthans & Youssef, 2007). Thus, it would present moderate positive correlations with job crafting behavior (Hypothesis 4).

The negative affects are concerned with emotions of displeasure, anxiety and depression (Warr, 2007). Thus, moderate negative correlation would be expected between negative emotions at work and job crafting behavior (Hypothesis 5). Neuroticism is also associated with negative emotions such as depression and anxiety (Penley & Tomaka, 2002). Thus, moderate negative correlations between this personality factor and job crafting behaviors would exist (Hypothesis 6).

Method

Participants

A non-probabilistic sample, composed of 491 Brazilian workers of both sexes (54.2% females) was used in this study. The age of respondents ranged from 17 to 61 years old, average of 26.7 years (SD = 7.8). With regard to education, the majority of the sample (80.4%) had incomplete higher level education. The current working time of the respondents ranged from 1 to 29 years, average of 3.6 years (SD = 4.4). The total working time ranged from 1 to 38, with a mean of 8.8 years (SD = 7.7). The only inclusion criterion for the sample was to have been working for at least one year at the time of study initiation, since the aim of the research was to investigate the variability of feelings about the job.

Instruments

The *Job Crafting Scale (JCS)* (Tims et al., 2012) was used to assess the behavior of work redesign. The JCS consists of twenty-one items to be answered using a five point scale, ranging from one (never) to five (always). One example of an item is: "I try to develop my capabilities". In the original study, the four dimensions of the scale achieved reliability equal to: increasing challenging job demands (five items, alpha = .75); decreasing hindering job demands (six items, alpha = .79); increasing structural job resources (five items, alpha = .82); increasing social job resources (five items, alpha = .77). The scale was initially translated and adapted to Portuguese by three professionals and then back translated into English by a bilingual teacher, as recommended by Borsa, Damasio and Bandeira (2012). Subsequently, the equivalence between items was verified by two judges, with minor changes in some of the items for adjustment to the original scale.

The Brazilian version of the *Positive Psychological Capital Scale*, adapted from Luthans, Avolio, Avey and Norman (2007), was used to measure the psychological capital at the workplace. The instrument is composed of twenty-four items, which must be answered using a six point scale, ranging from one (*I strongly disagree*) to six (*I strongly agree*). One example of an item is: "I feel confident helping to set targets/goals in my work area". The internal consistency of the scale, measured by Cronbach's alpha, was equal to .82 in this study.

The measurement of positive and negative affects at work was performed using the short version of the *Work Affect Scale* (Ferreira, Silva, Fernandes, & Almeida, 2008). The instrument is composed of twenty items, that must be answered with a five-point scale, ranging from one (*never*) to five (*always*). One example of an item is: "I am able to face the problems at work". The internal consistency of both scales (positive and negative affects), calculated by Cronbach's alpha, and was equal to .70 in this study.

The short version of *Utrecht Work Engagement Scale (UWES-9)*, adapted from the instrument developed by Schaufeli et al. (2006), was used to measure work engagement. The instrument consists of nine items in a six-point response format, ranging from zero (*never*) to six (*always*). One example of an item is: "My job inspires me". The internal consistency of the scale, measured by Cronbach's alpha, was equal to .91 in the current investigation.

The *In-Role Work Performance Scale* (Williams & Anderson, 1991) was adopted in order to assess the work performance. It has seven items using a five point response

format, ranging from one (*I strongly disagree*) to five (*I strongly agree*). One example of an item is: "I perform tasks that are expected of me". The internal consistency of the scale, measured by Cronbach's alpha, was equal to .70 in this study.

As a measurement of neuroticism, one of the scales of the *Big Five Inventory* were used, written by John, Donahue and Kentle (1991) and adapted to Brazilian samples by Andrade (2008). The neuroticism subscale contains six items, with a five point response format, ranging from one (*I easily disagree*) to five (*I easily agree*). One example of an item is: "I see myself as someone who easily gets nervous". The internal consistency of the scale in the current research, measured by Cronbach's alpha, was .76. All the instruments, except the Work Role Performance Scale had previous evidence of validity within the Brazilian context, obtained by the authors who performed the translation and adaptation of these scales.

Procedure

Data collection. The applications of the instruments occurred in groups or individually, in the classroom or other locations on the campus of a private university in Minas Gerais, according to the inclusion criteria for the sample. The participants read the instructions prior to completing the data collection. Respondents were informed about the voluntary nature of the research, and the anonymity of their responses.

Data analysis. Collected data were tabulated using SPSS software (version 21). The confirmatory factor analyses were performed using the MPlus software (version 7.1). Whereas the data did not show a normal multivariate distribution, the *Weighted Least Squares Mean and Variance Adjusted* (WLSMV) parameters estimation method was used, setting the observed variables as categorical (ordinal). The goodness of fit indexes were evaluated in accordance with the recommendations of Hox and Bechger (1998): $\chi^2/gl < 5$; CFI > .95; TLI > .95; RMSEA < .05. For reliability assessment of each scale, the internal consistency indices were calculated using Cronbach's alpha. The investigation of relationships between the JCS scale and other constructs was performed by Pearson's correlation calculation.

Ethical Considerations

This project was approved by the Ethics Committee in Research with human beings of the Universidade Salgado de Oliveira (Protocol no. 465548). Ethical principles of voluntary participation and anonymity of responses were respected.

Results

Confirmatory Factor Analysis of the Job Crafting Scale

Adopting confirmatory factor analysis, a model with four first order factors and a general second order factor was initially tested. However this model did not fit the data (χ^2 (185) = 644.317; χ^2/gl = 3.48; TLI = .86; CFI = .87; RMSEA = .07 (.06-.08). In addition, the factor decreasing hindering job demands did not show satisfactory factor loadings.

An alternative model of three first order factors and a general second order factor was tested, in which the factor decreasing hindering job demands was deleted. This model obtained better goodness of fit indices: χ^2 (74) = 226.365; χ^2/df = 3; TLI = .94; CFI = .95; RMSEA = .06 (.05-.07). However, the item five of the increasing structural job resources factor presented R^2 = .001 (p > .05), and was excluded from the instrument. Non-standardized parameters of model two are presented in Table 1, in which it can be seen that, with a confidence interval of 95%, there is no zero value, as well as the fact that all critical ratio values are greater than 1.96, suggesting that the parameters are significantly different from zero and can be useful to the model. The standardized factor loadings are shown in Figure 1. The internal consistency indexes, calculated using Cronbach's alpha coefficient, were equal to 'increasing structural job resources' = .71; 'increasing social job resources'= .78; 'increasing challenging job demands' = .77. The composite reliability, in turn, is equal to: increasing structural job resources = .81; increasing social job resources = .81; increasing challenging job demands = .80.

Relationships With Other External Variables

Table 2 shows the means, standard deviations and correlation coefficients between the different scales used in the study. The data revealed that the three dimensions of job crafting behavior (increasing structural job resources, increasing social job resources, increasing challenging job demands) had low or moderate positive correlations with work engagement (r between .23, and .37; p < .01), in-role performance (r between .13, and .34; p < .01) positive affect in the work (r between .25, and .34; p < .01) and the positive psychological capital (r between .25, and .44; p < .01), which permitted the partial confirmation of the hypotheses 1 to 4, respectively. Furthermore, small negative correlation of increasing structural job resources were obtained with the negative affects in the work (r = -.13, p < .01) and neuroticism (r = -.09, p < .05) scales, which also showed a small negative correlation with increasing challenging job demands (r = -.13, p < .01). These results partially confirmed hypotheses 5 and 6.

Discussion

This study aimed to adapt the JCS to the Brazilian context and collect validity evidence of the scores, regarded to the internal structure and relationship with other external variables. The data collected were analyzed using confirmatory factor analysis and scale correlations with other constructs related to the job crafting behaviors.

The confirmatory factor analysis tested an initial model consisting of four first order factors, with a general second order factor. As this model did not meet the recommendations of fitting proposed by Hox and Bechger (1998), a second model was tested, which was composed of three first order factors with a general second order factor, in which the dimension *decreasing hindering job demands* was removed. In addition, one item of the dimension, *increasing structural*

Table 1
Non-Standardized Parameters of Confirmatory Factor Analysis

Non-standardized parameters						
Parameters			Coefficient	Standard error	Critical Ratio	95% CI
CB	→	IStrJR	.4	.05	7.75	[.30, .50]
CB	→	ISocJR	.35	.04	8.08	[.27, .43]
CB	→	ICJD	.55	.06	9.56	[.43, .66]
IStrJR	→	Item 01	1	-	-	-
IStrJR	→	Item 02	.92	.08	11.41	[.76, 1.07]
IStrJR	→	Item 03	.94	.08	12.2	[.78, 1.13]
IStrJR	→	Item 04	.88	.07	11.92	[.74, 1.02]
ISocJR	→	Item 12	1	-	-	-
ISocJR	→	Item 13	1.19	.06	17.91	[1.07, 1.30]
ISocJR	→	Item 14	1.05	.06	16.17	[.93, 1.17]
ISocJR	→	Item 15	1.17	.07	17.35	[1.03, 1.31]
ISocJR	→	Item 16	.8	.07	11.94	[.66, .94]
ICJD	→	Item 17	1	-	-	-
ICJD	→	Item 18	1.04	.07	14.43	[.90, 1.18]
ICJD	→	Item 19	1.07	.07	16	[.93, 1.21]
ICJD	→	Item 20	1.02	.08	13.23	[.86, 1.17]
ICJD	→	Item 21	1.15	.08	14.43	[.99, 1.30]

Note. CB = Crafting behavior; IStrJR = Increasing structural job resources; ISocJR = Increasing social job resources; ICJD = Increasing challenging job demands. χ^2(gl) = 226.365 (74); TLI = .94; CFI = .95; RMSEA (CI 90%) = .06 (.05-.07).

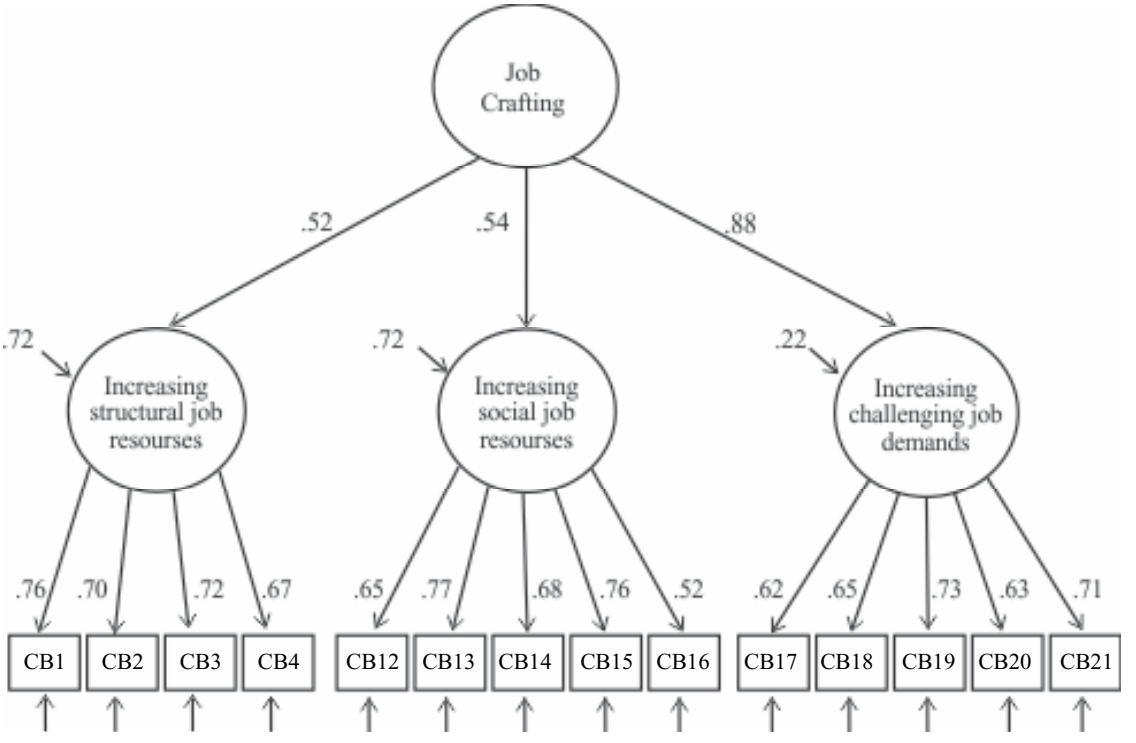

Figure 1. Second order model of the Job Crafting Behaviors Scale. CB = Item of Job Crafting Behavior.

Table 2
Mean, Standard Deviations, Cronbach's Alpha and Correlation Coefficients Among the Scales

	M	*SD*	α	1	2	3	4	5	6	7	8
IStrJR (1)	4.48	.50	.71								
ISocJR (2)	3.09	.92	.78	.20**							
ICJD (3)	3.41	.83	.77	.33**	.36**						
PPC (4)	4.50	.58	.82	.37**	.25**	.44**					
PA (5)	3.85	.71	.90	.33**	.25**	.34**	.59**				
NA (6)	2.63	.78	.90	-.13**	-.02	-.02	.27**	.45**			
WE (7)	3.79	1.23	.91	.23**	.28**	.37**	.58**	.73**	.30**		
I-RP (8)	4.23	.54	.70	.29**	.13**	.34**	.39**	.23**	.24**	.26**	
NEU (9)	2.53	.84	.76	-.09*	-.07	-.13**	-.35**	-.32**	.42**	-.27**	-.19**

Note: IStrJR = increasing structural job resources; ISocJR = increasing social job resources; ICJD = increasing challenging job demands; PPC = positive psychological capital; PA = positives affects; NA = negatives affects; WE = work engagement; I-RP = in-role performance; NEU = Neuroticism.

*$p < .05$, (two-tailed). **$p < .01$, (two-tailed).

job resources was also eliminated. This model resulted in the final scale version consisting of 14 items, which fitted well to the data. These results partially confirmed the findings of Tims et al. (2012). They also tested three different models and chosen the second order model with four primary factors.

The reliability indicators obtained in this sample (Cronbach's alpha) indicated, in general, that the estimated scores with the JCS scale are minimally precise (free from the measurement error due to lack of internal consistency). These results support the original study of Tims et al. (2012), which also found evidence of reliable scores.

In summary, the results associated with the instrument structure showed that the scores of the Brazilian version of the JCS presented evidence of internal structure validity as well as acceptable internal consistency reliability. However, evidence did not corroborate the four factors model of the original scale, consisting of 21 items, with four first order factors and a general second order factor. The Brazilian version was composed of fourteen items, with only three first order factors (increasing structural job resources, increasing social job resources, increasing challenging job demands) and one second order factor (job crafting behavior).

One explanation for the fact that the job demands reduction subscale was not replicated in the Brazilian sample may be that, according to Bakker and Demerouti (2007), different occupations show specific configurations of job demands and resources, which implies that their job crafting behavior may also differ. In this sense, Berg, Wrzesniewski and Dutton (2010) observed differences between the types of job crafting behavior demonstrated by more skilled and less skilled workers. Considering that most of the sample (80.4%) in this study had not yet completed higher level education, while, in the original study on scale development (Tims et al., 2012) the majority of the sample (about 70%) already had college degrees, these samples distinction also might be associated with occupational differences, which may have interfered with their perceptions of job demands that should be redesigned.

Cultural differences may also have interfered with the fact that subscale of decreasing job demands was not replicated in the Brazilian sample. Erez (2010) argues that cultural patterns influence job crafting behavior. Thus, the JCS was originally developed and tested in the Netherlands, a country characterized by working relationships that prioritize the system of autonomous groups, encourage flexibility and the use of one's own abilities (Erez, 2010). On the other hand, working relationships in Brazil are marked by great concentration of power and authority in the leaders' hands, which often hinders the development of autonomy and self-actualization of employees (Tanure, 2004). It is possible, therefore, that these cultural differences have exercised influence on the way the redesign of job demands have been performed in both countries.

The three dimensions of job crafting behaviors exhibited moderate or low positive correlations with work engagement and the in-role performance. These results are consistent in part with the study of Tims et al. (2012), which also obtained moderate positive correlations with increasing challenging job demands, increasing social job resources and increasing structural job resources with such constructs. However, the values of correlations obtained by those authors were slightly higher than the values obtained in this study, especially in the dimension of increasing structural job resources. Such differences may be due to the fact that in the study by Tims et al. (2012) the evaluation was performed by an employee colleague, whereas in this study the evaluation was performed through self-report.

Moderate or small positive correlations were found between increasing challenging job demands, increasing social job resources, and increasing structural job resources, with positive psychological capital and the positive affects in the work. Although the latter two constructs are not included in the study of Tims et al. (2012), they have conceptual similarities to work engagement, according as all factors consist of affective and emotional states that individuals experience in their job context, when the workplace

conditions are in favor of its demonstration. In this sense, the data obtained now extend the results previously obtained by Tims et al. (2012), about the fact that the job crafting behavior designated to increase resources or the challenging demands tends to produce positive job results.

The dimension of increasing structural job resources was negatively correlated with negative affect in the work, although this correlation was small. The dimensions of increasing structural job resources and increasing challenging job demands also had a negative correlation with neuroticism, but those results were also small. These results are consistent with the study of Tims et al. (2012), which also found a low negative correlation between the dimensions of increasing structural job resources, increasing social job resources, increased challenging job demands, and cynicism.

According to the JD-R model (Bakker et al., 2014), job well-being is associated with a motivational process triggered by job environments in which job resources and challenging demands are high, while job stress derives from a process prejudicial to health caused by job environments in which the hindering demands are high. Such differences in psychological processes can explain the different results between the crafting behaviors aimed to increase job resources and challenging demands, as well as the positive and negative affective states. Such model would expect, as occurred in almost all cases, moderate positive correlations between such crafting behavior and positive affect states, as they are subjacent to the same psychological process of a motivational nature. However, the correlation among resources, the challenging job demands and negative affect states w would be unlikely, which explain the small correlation observed among these constructs in this work.

With regard to the limitations of the study, the use of a convenience sample eventually restricts the diversity of subjects. Furthermore, the use of only one personality factor (neuroticism) reduced the assessment of the nomological construct, especially with regard to its relationship with other personality features. In addition, due the fact that some of the correlations between the JCS and certain constructs were small, although significant, it is recommended caution in the analyses of such results.

The results also support the conclusion that the JCS scores showed early evidence of validity and reliability in Brazilian samples. Therefore, the JCS can be used in the diagnosis of job crafting behaviors, as a way of supporting intervention actions related to the implementation or improvement of such behaviors within the job context.

Future research should be conducted in order to enhance validity evidence of the of the scale in Brazil. Further studies should investigate if the structure of three factors remains invariant in other cultures and in different professional activities. Studies could also verify the correlation of these factors with other personality features, such as, proactive personality, initiative capacity, and openness to experiences. Moreover, experimental research could investigate the cause and effect relations among crafting behavior, attitudes and organizational behaviors not covered in this study. These investigations might contribute to the raising of the nomological network of the job crafting construct.

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