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Development and validation of the Post-Vacation Work Adjustment Scale (P-VWAS): Study of a Portuguese sample

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ABSTRACT. L'obiettivo di questa ricerca è quello di sviluppare una scala di adeguamento al lavoro post-ferie e di testarne la struttura fattoriale e le proprietà psicometriche. Attraverso i risultati di due studi (*n* = 232 e *n* = 332), è possibile ottenere una scala composta da 19 item e due dimensioni (Adattamento organizzativo ed Equilibrio lavoro-vita). La scala ha mostrato dei buoni valori per la coerenza interna e valori accettabili per gli indici di adeguamento. La scala ha mostrato validità predittiva del livello di produttività e del grado di concentrazione durante il primo giorno di rientro al lavoro dopo le ferie. Studi aggiuntivi sono richiesti per rafforzare e adeguare la scala, che fornisce un contributo nella comprensione del processo di adeguamento al lavoro dopo le ferie. Il riconoscimento del grado di adeguamento del dipendente permetterà la definizione di una serie di misure e strategie per la sua ottimizzazione nel contesto lavorativo delle organizzazioni.

SUMMARY. The objective of this research is to develop a scale of post-vacation work adjustment and test its factorial structure and psychometric properties. By carrying out two studies (n = 232 and n = 332), the results allow to obtain a scale composed of 19 items and two dimensions (Organizational adjustment and Work-life balance). The scale showed good values of internal consistency and acceptable adjustment indexes. The scale showed predictive validity on the productivity level and concentration degree on the first day of return to work after vacations. The scale proved to be invariant between genders and in relation to the time of return from vacation. Additional studies are needed to reinforce and adjust the scale, which is a contribution to understanding the process of adjusting to work after vacations. The identification of the employee's adjustment degree will allow the definition of a set of measures and strategies for their optimization in the organizations' work contexts.

Keywords: *Work adjustment, Post-vacations, Scale, Validation, Factor analysis*

INTRODUCTION

Vacations, defined as a cessation of work, or a time when a person is not actively participating in his/her work (Lounsbury & Hoopes, 1986), are identified in the literature as an essential and significant period for the recovery of workers (Blomm et al., 2010; Fritz & Sonnentag, 2006).

Work, a significant sphere of life, requires individuals to use cognitive, physical, emotional and psychological resources on a daily basis; not only for the job performance, but also in the continuous and persistent confrontation with countless factors that enhance wear, which in extreme situations can lead to fatigue and exhaustion, with negative consequences for the health and performance of employees (Kinnunen & Feldt, 2013), making it essential to provide periods for their recovery.

Korpela and Kinnunen (2011) point to recovery as a necessary and determining process for individuals who, faced with the perception of fatigue, need to break with their daily work obligations, restoring their internal resources. Undertaking low effort activities outside working hours (e.g., watching television, reading a book), physical activity (where despite the effort spent, internal resources other than work are mobilized) or socializing with family and friends, promotes the recovery of resources and increases the perception of well-being (Blasche, Arlinghaus & Dorner, 2014; Tucker, Dahlgren, Akerstedt & Waterhouse, 2008; Zijlstra & Sonnentag, 2006). The weekend, the post-work periods and vacations are pointed out by the researchers as relevant for this purpose, since they allow individuals to disconnect or reduce the confrontation with the demands of work, greater relaxation and the performance of leisure activities (Blasche et al., 2014; Binnewies, Sonnentag & Mojza, 2009; Koerber, Rouse, Stanyar & Pelletier, 2018), promoting health and well-being benefits for employees (Bloom, Geurts & Kompier, 2012; Mitas & Kroesen, 2019).

Numerous studies based on the understanding of this issue, confirm the effectiveness of the vacation for workers in the recovery of physical and psychological resources (Bloom et al., 2011; Kühnel & Sonnentag, 2011; Sonnentag, 2018). These studies have shown that during and after vacations, workers demonstrate greater satisfaction with life (Kawakubo & Oguchi, 2019; Lounsbury & Hoopes, 1986; Mitas & Kroesen, 2019), better sleep quality (Strauss-Blasche et al., 2005) and humor (Nawijn, Marchand, Veenhoven & Vingerhoets, 2010; Strauss-Blasche, Ekmekcioglu & Marktl, 2000).

Its repercussions extend to work contexts, since, in general, after vacations, the workers present better performance, greater involvement in the work (Fritz & Sonnentang, 2006; Kühnel & Sonnentag, 2011) and reduced levels of stress and burnout (Etzion, 2003; Kuhnel & Sonnentag, 2011).

Thus, even though the vacations represent an effective cost for organizations (which are temporarily deprived of their human resources), the gains also become evident, since more satisfied employees and with better performance levels, contribute to improving organizational results.

However, the process of adapting to work after a vacation is still a little explored topic. The return to work will consequently imply a new readjustment, the return to daily routines, to the experience and the articulation that results from the inherent performance of different roles (work, family, social), where the allocation of individual resources is important, but also of organizational strategies that facilitate this process (Sousa & Gonçalves, 2019). In this regard, Sousa and Gonçalves (2019) grouped the difficulties associated with returning to work in 4 dimensions: work-related difficulties, difficulties at the social level, general difficulties related to the reconciliation of the professional and family spheres and a lack of identification with both their colleagues and organization. This is because, during the absence from the workplace, there was an interruption of the shared history and collective unconsciousness (Sousa & Gonçalves, 2019), which can lead to what Pryzbylski and colleagues (Pryzbylski, Murayama, Dehaan & Gladwell, 2013) called fear of missing out (FoMO), that is, fear of losing opportunities, experiences, building professional relationships, obtaining valuable information and contributing to the main organizational decisions and projects (Budnick, Rogers & Barber, 2020; Pryzbylski et al., 2013).

In summary, it is possible to observe that back to work after vacations is a process that implies initial difficulties, and an effort of readjustment and adaptation, which allows to return to the professional routine.

Inspired by the work of Sousa and Gonçalves (2019), who identified the main difficulties associated with this process, calling it a tune-up day, we tried to develop a scale that allows measuring the adjustment to work after vacations. Developing a measurement instrument that makes it possible to accurately assess the determinants of the work adjustment process and the degree of that adjustment, within an organization, based on the current social and organizational context, proves to be an issue of important relevance. In this sense, this study aims

to develop and validate the *Post-Vacation Work Adjustment Scale* (*P-VWAS*), as well as the analysis of its psychometric properties: exploratory factor analysis (EFA), confirmatory factor analysis (CFA), analysis of internal consistency and predictive validity on the productivity level, concentration degree and the difficulty in getting back to the pace of work on the first day after the vacation. It is also objective to observe the metric invariance of the scale with regard to gender and time of return from vacation. As a determining factor for the increase in productivity, the capacity to adjust to work by the human capital of organizations, this research aims to be a contribution to the understanding of this process, therefore constituting itself as a facilitating platform for the definition of a set of measures and strategies for its optimization in the organizations' work contexts, within the scope of good human resource management practices.

STUDY 1

Study 1 aims to construct and analyze the psychometric properties of P-VWAS through EFA, CFA, internal consistency and predictive validity.

Study 1: Method

Construction of the Post-Vacation Work Adjustment Scale. For the construction and validation of the *Post-Vacation Work Adjustment Scale*, we tried to be faithful to the recommendations proposed by Furr (2010). According to the author, there are four steps that must be respected when building a new scale: 1) articulation between the construct and the context; 2) choice of response format and construction of the set of initial items; 3) data collection; and 4) examination of the psychometric properties and quality of the scale.

Preliminary construction of the Post-Vacation Work Adjustment Scale. Since the literature on the topic is relatively scarce and recent, an attempt was made to articulate existing constructs, which can be adjusted to the theme in question. Thus, and considering that adjustment to work can be understood as a kind of socialization/integration in the company, this instrument was inspired by the contents and descriptions of problems reported in the study by Sousa and Gonçalves (2019) and in the *Newcomer Socialization Questionnaire* (*NSQ*) developed by Haueter and colleagues (Haueter, Macan & Winter, 2003). The NSQ is a questionnaire composed of 35 items distributed over 3 dimensions: organizational socialization, socialization with the group and socialization with tasks, assessed on a 7-point Likert scale (1 = I totally disagree to 7 = I totally agree). Of the 35 items on the original scale, 29 were used, which were adapted and modified for the present study, according to the evaluation carried out by the panel of experts. The remaining 6 items were excluded since they did not fit the objective of our study (example of excluded items: "I understand the expertise - e.g., skill, knowledge - each member brings to my particular work group" and "I know who my customers - internal and external - are").

Instrument pre-test. After the construction of the instrument, a group of 5 experts in the field of Organizational Psychology was asked to review the proposed items in order to increasing the content validity (DeVellis, 2016). They were given an assessment protocol, consisting of two parts: the first part was intended to request a global assessment of the general characteristics of the questionnaire; and the second part intended to evaluate the operationalization of the concept of adjustment to work after an interruption of work. Thus, at first they were asked to evaluate: 1) the presentation of the questionnaire and 2) response instructions (1 = Not suitable to 5 = Very suitable); 3) the degree of difficulty in answering the questionnaire (1 = Very difficult to answer to 5 = Very easy to answer); 4) the dimensions for knowing the difficulties of adjusting to work after vacations (1 = Nothing relevant to 5 = Very pertinent); 5) the order of the questions (1 = Not at all appropriate to 5 = Very adequate); 6) extension/amplitude of the instrument (1 = Very short to 5 = Very long). In the second part, regarding the specific aspects of the question groups, the group of experts was asked to evaluate (from 1 = Strongly disagree to 5 = Strongly agree) both instruments, regarding:1) relevance of the questions to the objective to be measured; 2) writing the questions and conditioning the answer; 3) clarity of the questions; 4) use of comprehensible terms for respondents; and 5) inclusion of all possible alternatives in the contemplated responses. Suggestions/ comments regarding the instrument were also requested. The evaluations obtained in both parts of the evaluation protocol were positive (M = 4.6). According to the group of experts' suggestions, the wording of some items of the questionnaire was revised, and items related to adapting

to schedules, and those in relation to the work-family interface/personal life were added, totaling 32 items.

Subsequently, a group of participants (n = 20) with heterogeneous demographic characteristics (i.e., with different educational qualifications, area of training and professional activity) were asked to answer the questionnaire, in order to identify possible semantic or comprehension difficulties. This pretest showed a Cronbach's alpha greater than .70. These participants were not included in the final sample.

Study 1: Sample

The application of the work instrument resulted in a sample of 232 respondents, of which 65.9% are female (n = 153) and 34.1% male (n = 79), aged between 20 and 73 years (M = 41.35; SD = 10.45). With regard to marital status, the majority of the sample, 56.5% (n = 131) is married or living in common law; 27.2% (n = 63) reported being single and 16.4% (n = 38) divorced/widowed. All respondents are Portuguese nationals, and the majority of the sample has higher education, 64.7% (n = 150); 25.9% (n = 60) secondary education and 9.5% (n = 22) completed basic education. The vast majority of participants work in full time, 95.3% (n = 221). Regarding professional activity, data analysis shows that there is no response from 31 of the sample elements (13.4%), as well as different areas of activity, with a greater distribution to the administrative area (19.4%, n = 45) and senior technicians (17.2%, n = 40). About 55% work in the public sector.

Regarding vacations and when respondents were asked to report to the last vacation period with 15 days or more of absence from work, it was found that for the vast majority of the sample, the extended vacation period had been taken 3 or more weeks ago (n = 185; 79.7%), 7.3% (n = 17) had returned to work just 2 weeks ago, and 12.5% (n = 29) had their vacation ended in the week before completing the questionnaire. Regarding the variable's concentration degree and productivity level on the first day after vacations, there is a greater representativeness of the sample in the third quartile and a distribution without very significant differences in the second and last quartiles (see Figure 1), which puts the most respondents in the upper half of the graph, with a medium to high concentration degree and the productivity level on the first day immediately after vacations.

Study 1: Instruments

Post-Vacation Work Adjustment Scale. After the evaluation carried out by the experts and the necessary changes and corrections were made, the work adjustment scale resulted in an initial instrument composed of 32 questions, assessed using a Likert scale from 1 = None difficulty to 7 = Very difficult. In the questionnaire instructions, respondents were asked to indicate the degree of difficulty in readjusting in relation to the need to adjust to work, routines and colleagues again [e.g., item 7: "... to the goals of my work team and their contribution to the goals of the organization"; item 14: "... to the way I operate the tools I use in my work (e.g., email, software, programs, machines, thermometer)"; item 16: "... how to execute forms / paperwork (e.g., timesheets, expense reports, reports) in the course of doing my job"].

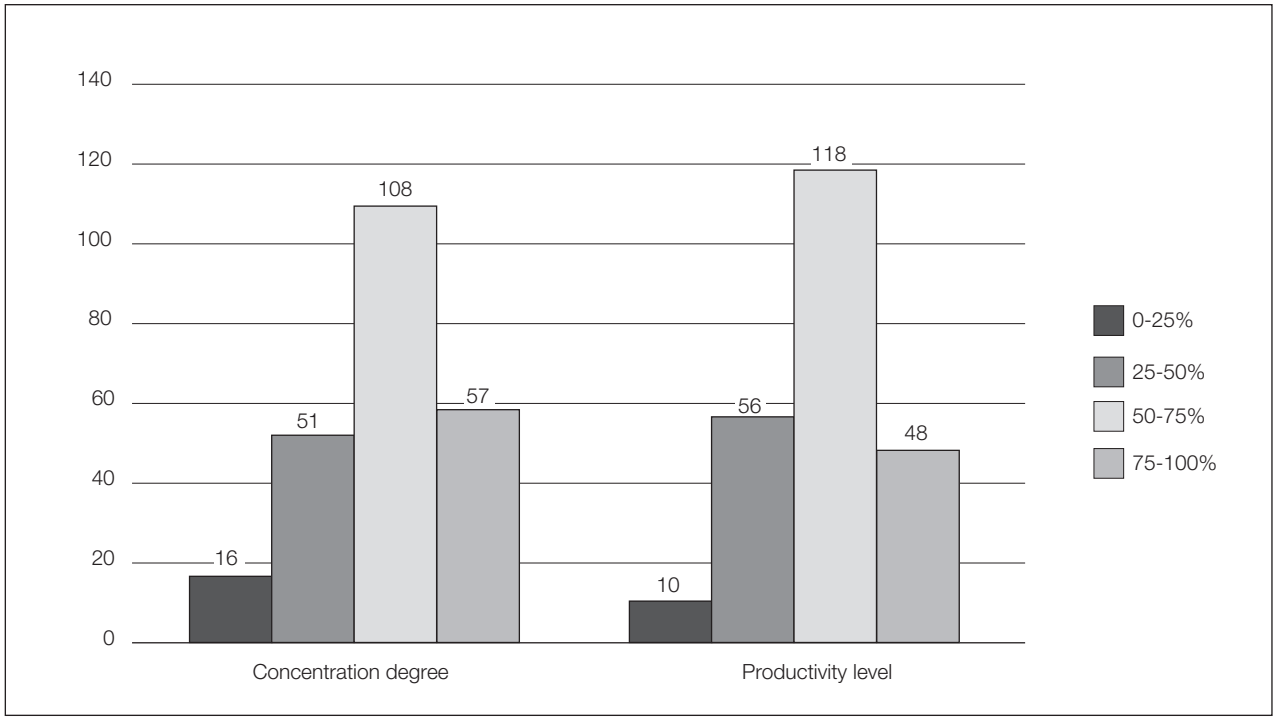
Another questions. In addition to the scale participants were asked about the return to work, in particular the concentration degree, productivity level and pace of work on the first working day after vacations, assessed on a 4-option response scale: a) 0-25%; b) 25-50%; c) 50-75%; and d) 75-100%. Participants were also asked about when they returned from their last vacation (1 week; 2 weeks; 3 or more weeks).

Sociodemographic data. In order to characterize the sample, questions about the participants' sociodemographic data, namely, gender, age, marital status, nationality, educational qualifications, and how long ago they returned from vacation were asked.

Study 1: Procedures

The questionnaire was applied both online and in person, in public places, universities, commercial facilities and companies. It was considered as an inclusion criterion to be professionally active (employed). The exclusion criteria were being under 18 years old and unemployed or retired. Approximately 15 minutes were estimated for filling. This study was approved by the Scientific Committee (protocol number UID/PSI/04345/2020). Participants were assured of the anonymity of their responses through fulfilment of ethical guidelines for administration questionnaires. Participation in the survey was voluntary, and participants did not receive any reward for their participation. The administration period was between August and September 2019.

Figure 1 – Number of respondents by concentration degree and productivity level on the first day of work after vacations



Study 1: Data analysis

Data analysis was performed using the SPSS (v.26) and SPSS AMOS (v.21) software. The psychometric properties of the work adjustment scale were assessed through exploratory factor analysis, confirmatory factor analysis and internal consistency.

In confirmatory factor analysis, the following criteria were considered (Byrne, 2001): χ^2, which represents a test of the significance of the minimized discrepancy function during model adjustment and the lower its value, the better the adjustment (Marôco, 2011); CMIN/*df*, corresponds to the probability of adjustment of the data to the theoretical model and its values should vary between 2 and 5; Comparative Fit Index (CFI) and Goodness of Fit Index (GFI) vary between 0 and 1, assuming .90 as a good adjustment value (Bentler & Bonett, 1980); Root Mean Square Error of Approximation (RMSEA) whose ideal value is between .05 and .08, accepting values up to .10. Internal consistency was assessed using Cronbach's alpha, which can vary on a scale from 0 to 1, with acceptable values starting from .70 (Nunnally, 1978).

Study 1: Results

Exploratory factorial analysis. In order to understand the structure of the P-VWAS, an exploratory analysis was carried out. The KMO index had a value of .912, and there was also a correlation between the items under study (Bartlett's sphericity test = 4478.889; $df = 496$; $p \leq .001$). The analysis of the main components, considering the criterion of variance extracted by factor and total extracted variance, using Promax rotation, allowed us to observe 4 factors, which

explain 71.40% of the variance of the results obtained. Items with a saturation value of less than .50 were then removed, as well as items that saturated in two or more factors, for a total of 12 items.

A new analysis was performed, which resulted in a two-dimensional structure. The KMO index showed a value of .930, with the existence of a correlation between the items under study (Bartlett's sphericity test = 3830.383; *df* = 171; $p \leq .001$). The analysis of the main components, considering the criterion of eigenvalues greater than 1 for the determination of the factors to be retained, allowed us to observe 2 factors (see Figure 2), which explain 65.97% of the variance of the results obtained and with factor weights ranging from .60 (item 9) to .96 (item 4) (see Table 1).

The means of the items ranged from 1.89 (item 2) to 3.07 (item 19). In terms of corrected item-total correlation, all items are above .30 (Nunnally & Bernstein, 1994), and are statistically acceptable. Asymmetry and kurtosis measurements show that the distribution of the 19 items is normal (symmetry values between .56 and 1.42 and kurtosis values between –.78 and 2.25), since the values are between 2 and 7, respectively (Bentler & Wu, 2002; Finney & DiStefano, 2006) (see Table 2).

Confirmatory Factorial Analysis. The 19 items of P-VWAS were subjected to a confirmatory factor analysis using the maximum likelihood estimator (ML). The adjustment values obtained were: $\chi^2_{(152)}$ = 885.002 which translates into a CMIN/*df* of 5.82, which is an acceptable value (Byrne, 2001).

Figure 2 – Screeplot of P-VWAS items

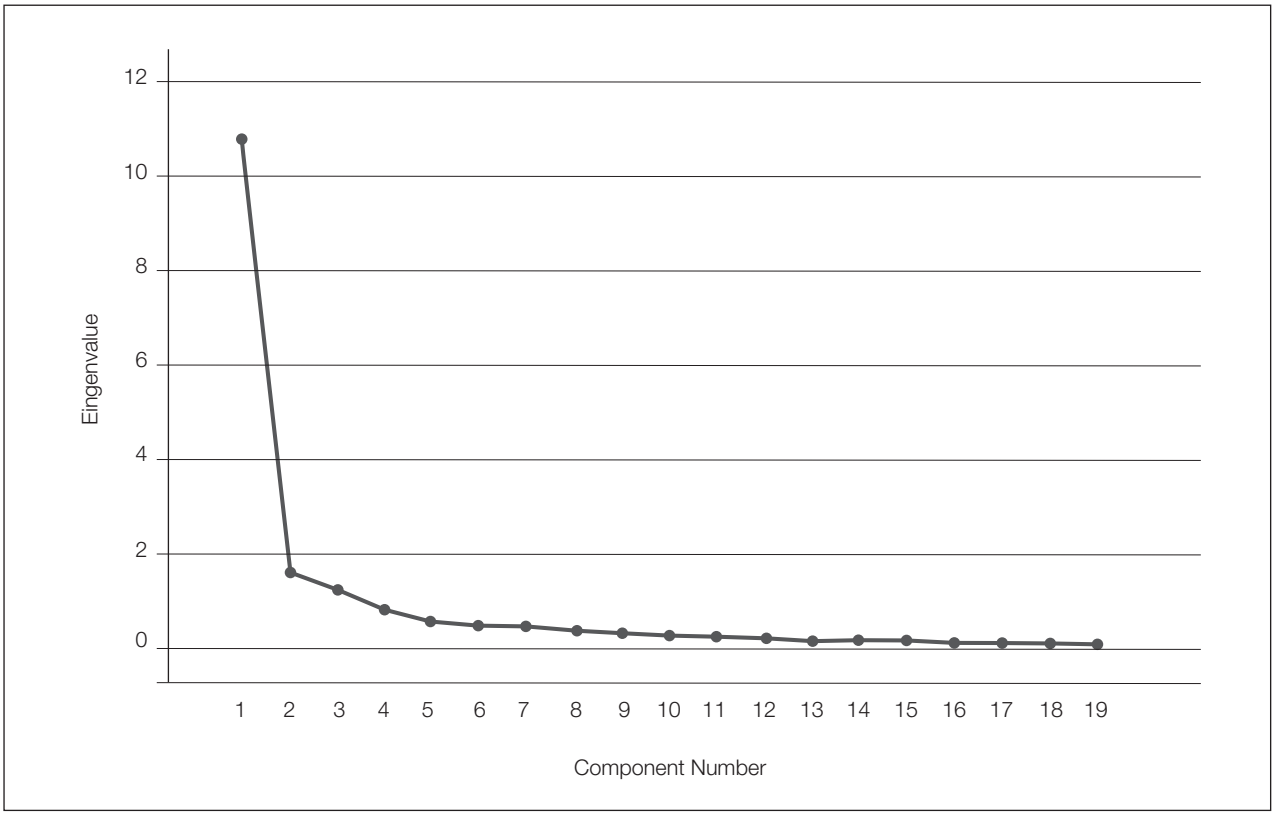


Table 1 – Components extracted from P-VWAS (factorial weights and communalities)

	Factor 1	Factor 2	Communalities
Item 1	.76		.48
Item 2	.92		.67
Item 3	.89		.68
Item 4	.96		.76
Item 5	.80		.66
Item 6	.75		.66
Item 7	.76		.71
Item 8	.67		.60
Item 9	.60		.65
Item 10	.65		.63
Item 11	.74		.73
Item 12	.78		.74
Item 13	.75		.57
Item 14	.72		.51
Item 15	.77		.58
Item 16	.66		.48
Item 17		.89	.72
Item 18		.93	.80
Item 19		.91	.81

Table 2 – Descriptive statistics of the items (n = 232)

Item	*M*	*SD*	Correlation corrected item-total	Cronbach's alpha (α) if item deleted	Asymmetry *SE* = .16	Kurtosis *SE* = .32
1	1.94	1.12	.61	.95	1.21	.95
2	1.89	1.06	.71	.95	1.37	1.42
3	1.94	1.13	.76	.95	1.35	1.65
4	1.97	1.11	.78	.95	1.42	2.25
5	2.31	1.41	.74	.95	1.15	.97
6	2.38	1.48	.79	.95	1.12	.69
7	2.12	1.28	.81	.95	1.20	.89
8	2.17	1.31	.73	.95	1.17	.98
9	2.27	1.38	.77	.95	1.06	.78
10	2.06	1.28	.75	.95	1.40	1.66
11	2.03	1.19	.82	.95	1.30	1.56
12	2.02	1.15	.83	.95	1.32	2.09
13	2.05	1.28	.69	.95	1.32	1.41
14	2.10	1.26	.66	.95	1.08	.47
15	1.99	1.17	.71	.95	1.22	1.19
16	2.16	1.35	.64	.95	1.26	1.23
17	2.61	1.76	.51	.95	.98	−.04
18	2.92	1.74	.56	.95	.59	−.68
19	3.07	1.79	.60	.95	.56	−.78

The values of CFI (.81), NFI (.78) and TLI (.76) are close to the value 1, which reveals a good adjustment (Marôco, 2011). The RMSEA (.10) is above the desirable value (Ullman, 2006).

Internal consistency. The scale presented a Cronbach's alpha of .95, and the two dimensions an alpha of .96 (*Organizational adjustment*) and .88 (*Work-life balance*) (see Table 3).

Descriptive statistics. Table 3 shows the means, standard deviations and Cronbach alphas of the scale, as well as the correlation values between their dimensions. It is possible to observe that the adjustment to work has a mean of 2.22 (*SD* = 1.00), with the dimension of *Work-life balance* being the one with the highest mean (*M* = 2.85; *SD* = 1.57) and the dimension of *Organizational adjustment* a lower mean (*M* = 2.12; *SD* = 1.01).

Predictive validity. In order to observe the predictive power of P-VWAS on issues related to return and job performance, regression analyzes were performed. P-VWAS showed a predictive power of about 4.9% on the productivity level on the first day of work after the vacation (β = −.222; p = .001) and 4.6% on the concentration degree in work activities, on the first day of work after the vacation (β = −.215; p = .001). The scale also explains 9% of the difficulty in getting back to work on the first day after vacation (β = .298; p = .001).

STUDY 2

Study 2 aims to assess the invariance of the scale with respect to gender and time of return from vacation.

Study 2: Sample

The sample consists of 332 participants, 220 of whom are female (66.3%) and 112 are male (33.7%) and aged between 19 and 73 years old (*M* = 38.86, *SD* = 11.39). Regarding marital status, 142 (42.8%) are married or living in common law, 118 are single (35.5%) and only 72 of the participants are divorced or widowed. Most participants have higher education (74.4%).

Table 3 – Means, standard deviations and Cronbach alphas - P-VWAS and correlation

	M	*SD*	α	1	1.1
1. Work adjustment	2.22	1.00	.95	–	
1.1. Organizational adjustment	2.12	1.01	.96	.982**	–
1.2. Work-life balance	2.85	1.57	.88	.668**	.514**

In relation to professional activity, this is spread over several areas, the most representative are: senior technicians (25.2%), health sector (17%), administrative (13.7%) and commerce sector (7.6%). About 48% of the sample works in the public sector.

Study 2: Instruments

The participants in this sample responded to the version of the P-VWAS scale obtained in Study 1, consisting of 19 items and 2 dimensions. The scale presented a Cronbach's alpha of .954, the dimension *Organizational adjustment* (16 items) an alpha of .951 and the dimension *Work-life balance* (3 items) obtained an internal consistency value of .900.

In addition to the P-VWAS scale, questions were also asked about the time the participants returned from vacation and sociodemographic questions to characterize the sample.

Study 2: Procedures

The procedures were the same as in Study 1. The questionnaire was applied both online and in person, in public places, universities, commercial facilities and companies. The same inclusion and exclusion criteria used in Study 1 were considered. Participants took about 15 minutes to complete a self-reported questionnaire. Freedom of participation and data confidentiality were previously guaranteed, in accordance with the ethical principles of the protocol mentioned in the previous study. The administration period was between November and December 2019.

Study 2: Data analysis

To analyse the measurement invariance across gender and period of return from vacations we used a multi-group confirmatory factor analysis adopting the maximum likelihood estimator (ML). As suggested by Chen (2007) the following criteria were used to determine acceptable model fit: $\Delta CFI \leq -.01$, $\Delta RMSEA \leq .015$, for tests of metric and scalar invariance. The period from return from vacations variable was operationalized in two groups: group 1 - individuals who returned from vacation 2 or less weeks ago ($n = 75$); group 2 - individuals who returned from vacation more than 3 weeks ago ($n = 257$).

Study 2: Measurement invariance across gender and across period of return from vacations

Analysis of measurement invariance of the P-VWAS scale across gender and period of return from vacations was conducted using multigroup confirmatory factorial analysis (MGCFA) with the 19 items two-factor model as the baseline model. As shown in Table 4, the configural invariance model across gender appeared to provide an acceptable fit to the data, although RMSEA is slightly above what is considered acceptable. Next, the comparison of the configural model with the metric model showed that ΔCFI and ΔRMSEA were all within the recommended ranges (e.g., Chen, 2007) and there was adequate statistical support for metric invariance across gender groups. After establishing metric invariance, the scalar invariance model was fitted to the data provided empirical support for scalar invariance across gender groups. Regarding the vacations return period, the configural invariance model provide an acceptable fit to the data. Similar to the indices previously obtained, the RMSEA value is considered high, compared to the values recommended as acceptable. The values obtained (ΔCFI and ΔRMSEA) allow to verify empirical support for scalar and metric invariance.

DISCUSSION

The main objective of our research was the development and initial validation of an adjustment scale to work after vacations in a Portuguese sample. Duo to the little existing literature on the subject, an attempt was made to articulate existing constructs, namely socialization/integration in organization. Thus, from the study by Sousa and Gonçalves (2019) and the adaptation and modification of the *Newcomer Socialization Questionnaire* of Haueter and colleagues (2003) and according to the evaluation carried out by the panel of experts, the results obtained through EFA and CFA allowed us to observe a two-dimensional structure of 19 items, which presented good values of internal consistency and reasonable adjustment indexes. The predictive validity of the scale was observed with regard to the productivity level and the concentration degree on the first day of work after vacations. The second study aimed to observe the extent to which the scale configuration and parameters are invariant (equivalent) for different groups. The MGCFA carried out confirmed the

Table 4 – Measurement invariance test across gender and across period of return from vacations

Model	χ^2	*df*	$\Delta\chi^2$	Δdf	CFI	RMSEA [90% CI]	AIC	ΔCFI	ΔRMSEA
Gender Invariance									
Configural	1293.07	302			.809	.10 [.094-.105]	1525.07		
Metric	1319.20	319	26.13	17	.807	.097 [.092-.103]	1517.20	−.002	−.003
Scalar	1334.94	338	15.74	19	.808	.095 [.089-.100]	1494.94	.001	−.002
Return from vacations									
Configural	1251.57	302			.817	.098 [.092-.103]	1483.57		
Metric	1322.62	319	71.05	17	.807	.098 [.092-.103]	1520.62	−.01	0
Scalar	1352.65	338	30.03	19	.805	.096 [.090-.101]	1512.65	−.002	−.002

Legenda. df = degree of freedom; CFI = *Comparative Fit Index*; RMSEA = *Root Mean Square Error of Approximation*; AIC = *Akaike Information Criterion*.

scale's invariance both between genders and in relation to the period of return from vacation. This result reinforces the possible generalization of the scale to different populations.

The final version of the scale (see Appendix) consists of the *Organizational adjustment* dimension (16 items) and the Work-life balance dimension (3 items). The first dimension is associated with work-related factors, namely adjustment to the processes and practices inherent to the function (e.g., culture, values, norms, team objectives, task execution, etc.). The *Work-life balance* dimension (3 items) refers to the adaptation to working hours, the management of the family-work interface and the management of personal commitments (e.g., leisure, hobbies, socializing with friends, etc.).

Despite the important contributions of this study, several limitations suggest avenues for future research. First, the adjustment indices obtained, namely the RMSEA, are not entirely satisfactory. The recommendations for the RMSEA cut-off points have been reduced considerably in recent years, since until the early 1990s, an RMSEA between .05 to .10 was considered an indication of fair adjustment and values above .10 indicated an inadequate adjustment (Hooper et al., 2008; MacCallum et al., 1996). Currently an RMSEA≤.08 is considered acceptable. However, according to Kenny and colleagues (Kenny, Kaniskan & McCoach, 2015) there is a greater sampling error for models with few degrees of freedom and small samples, which can lead to artificially large values of the RMSEA. Thus, further testing of the scale with a more representative sample should be considered in the future. Another of the limitations resulting from this study is related to the period of application of the scale to

participants. Participants were asked to report their last vacation with 15 days or more of absence from work. For the vast majority, this period had already occurred more than 3 weeks ago. This is a possible justification for the means of adjustment to work after vacations to present low values, that is, the participants in general, did not present a high degree of adjustment difficulty to work. To overcome this problem, it is suggested that in future investigations the instrument be applied immediately after returning to work. Further analysis must be carried out to test this initial validation of P-VWAS, for example, the convergent validity of the scale. This analysis can be performed with the cognitive and/or emotional demands of the job (e.g., Wach, Stephan, Weinberger & Wegge, 2020), considered as stressors challenges, since they are work demands that involve the possibility of future gains and personal growth (Crawford, Lepine & Rich, 2010). Other analysis for possible items reduction (e.g., Item Response Theory), test-retest and cross-cultural validation should also be considered. The application of the scale to other populations, such as teleworkers or businessmen/entrepreneurs, will also allow better testing of the instrument.

CONCLUSION

Adjusting to work after vacations is an extremely relevant topic for organizations, as it has implications for the productivity, performance and well-being of employees. This study focused on returning after vacations, but we believe that this scale can be adjusted to other situations that imply a prolonged absence (i.e., 10 to 15 days) from the workplace. For example, maternity leave, sick leave, or even returning home after an expatriation process. Considering the current global situation, a consequence of the COVID-19 pandemic, which forced many employees to be away from their work for at least 2 months, the application of this scale would be an asset for organizations to understand the main difficulties of adjusting to work by part of its employees. The identification of the degree of adjustment to work after a period of absence, will allow the outline of organizational strategies aimed at facilitating the return and respective adjustment to routines. Namely, intervention strategies that enhance a policy of reintegration and reduction of labor requirements after the return from vacation. For example, performing a return to work debriefing, with the objective of assessing the level of preparation for the return, defining an action plan for better adjusting the employee to work and updating the employees about the events that occurred during their absence (Sousa & Gonçalves, 2019). Or, adjust the workload, in the first two weeks, in order to facilitate the transition to resume the reconciliation of personal and professional life (Sousa & Gonçalves, 2019). It would be important to understand the adjustment strategies that people make, but also that individual variables (e.g., psychological capital, self-efficacy) or attitudes towards work are facilitators of the new readjustment. In short, an organization that adopts measures that facilitate the readaptation and readjustment of employees, will contribute to the creation of positive work environments, a greater commitment on the part of employees, a greater perception of organizational support, which will certainly translate into better performance and greater job satisfaction.

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APPENDIX

Final version of the Post-Vacations Work Adjustment Scale (P-VWAS)

Regarding the need to adjust to work, routines and colleagues (etc.), to what extent do you find it difficult to readjust to…:
1. ... the specific names of products and services produced or supplied by the organization.
2. ... the organization's culture (e.g., values, rituals).
3. ... the structure of the organization (e.g., organization chart, departments).
4. ... the organization's operations (e.g., who does what).
5. ... the organization's internal policy (e.g., chain of command, who is influential, what needs to be done to move forward).
6. ... the management style of the organization.
7. ... the goals of my work team and their contribution to the organization goals.
8. ... what the supervisor expects from the work team.
9. ... the management style of the team supervisors.
10. ... the performing tasks according to team standards.
11. ... the rules and procedures of my work team.
12. ... the team policy (e.g., who is influential, what needs to be done to move forward).
13. ... the responsibilities, tasks and projects for which I was hired.
14. ... the way of operating the tools I use in my work (e.g., email, software, programs, machines, thermometer).
15. ... the way and the people to whom I must go to acquire the necessary resources to perform my work (e.g., equipment, facilities).
16. ... how to execute forms/paperwork (e.g., timesheets, expense reports, etc.) in the course of doing my job.
17. ... the work schedules.
18. ... the family-work interface management.
19. ... the management of my personal commitments (e.g., leisure, hobbies, socializing with friends, etc.).

Note. Dimensions: *Organizational adjustment* (items 1 to 16); *Work-life balance* (items 17 to 19).