

Individual job performance: Propositions for a personalized measurement and a comprehensive diagnosis

Desempenho individual no trabalho: Proposições para uma mensuração personalizada e um diagnóstico abrangente

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Abstract

Purpose: Individual job performance is an important phenomenon for organizations but is difficult to measure and often with restricted diagnoses. The aim of this study was to present a set of general indicators of individual performance at work that contemplate different dimensions of this construct to support a personalized measurement and a comprehensive diagnosis.

Originality/value: It presents a set of items, composed of eight behavioral categories, that allows for a comprehensive approach to work performance and a personalized way of measuring it in different professional areas and roles.

Design/methodology/approach: This work followed a theoretical stage and an empirical one. In the former one, the theoretical model was chosen, the construct was operationalized, and job performance scales' items were selected. In the empirical stage, the items were classified, selected, and adapted according to the dimensions of the chosen theoretical model, based on judges' analyses ($n = 16$), expert panel ($n = 6$), and semantic validation by professionals ($n = 9$).

Findings: The study generated 56 items for measuring job performance, divided into eight dimensions, according to the theoretical model adopted. Its use will allow a careful measurement of performance, with comprehensive diagnostics on the topic. Additionally, the findings allow academics and managers to raise the level of the debate about the construct to favor theoretical and methodological advances in the area.

Keywords: job performance, work performance, indicators, performance appraisal, human resources

Resumo

Objetivo: O desempenho individual no trabalho é um fenômeno importante para as organizações, mas de difícil mensuração e muitas vezes com diagnósticos restritos. O objetivo deste estudo foi apresentar um conjunto de indicadores gerais de desempenho individual no trabalho que contemplasse diferentes dimensões desse construto, de forma a subsidiar uma mensuração personalizada e um diagnóstico abrangente.

Originalidade/valor: Apresenta um conjunto de itens que permite uma abordagem compreensiva do desempenho do trabalho composta de oito classes comportamentais e uma forma personalizada de realizar sua mensuração em diferentes áreas de atuação e funções laborais.

Design/metodologia/abordagem: O trabalho seguiu uma etapa teórica e outra empírica. Na primeira, efetuaram-se a definição do modelo teórico, a operacionalização do construto e o levantamento de itens de escalas de desempenho. Na segunda, realizaram-se a classificação, seleção e adaptação dos itens segundo as dimensões do modelo teórico adotado por meio de uma análise de juízes ($n = 16$), de um painel de especialistas ($n = 6$) e de uma validação semântica com profissionais ($n = 9$).

Resultados: O trabalho realizado gerou 56 itens para mensuração do desempenho profissional, distribuídos em oito dimensões. O seu uso permite uma mensuração criteriosa do desempenho, com a construção de diagnósticos amplos sobre o tema. Adicionalmente, os achados contribuiu para que acadêmicos e gestores elevem o nível do debate acerca do construto, favorecendo avanços teóricos e metodológicos na área.

Palavras-chave: desempenho no trabalho, desempenho profissional, indicadores, avaliação de desempenho, recursos humanos

INTRODUCTION

Individual job performance (IJP) is a phenomenon of interest to managers and scholars of behavior within organizations. Indicators of productivity, competitiveness, and well-being at work are directly associated with performance. In addition, the performance of teams and organizations also depends on the contribution of each employee (Abualoush et al., 2018). The quality and impact of this contribution vary according to contextual and individual components, which, altogether, may result in varied success. Therefore, producing accurate diagnostics and improving the IJP constitute survival issues for contemporary organizations (Sonnetag & Frese, 2002).

The challenge of creating conditions to keep workers efficient depends on the proper measurement of IJP, which is not simple (Andrade et al., 2020; Obeidat et al., 2016). DeNisi and Murphy (2017) reviewed 100 years of research on performance evaluation and performance management and discussed trends in different areas, such as scale formats for the criteria to evaluate performance ratings and the purpose of such classification. They concluded that the most significant advance achieved in research on the topic concerns the crucial influence of the context in which the performance evaluation is carried out, which would affect its process and its results. The authors highlighted that the format of the classification scale adopted is not the most important attribute in evaluation systems and that traditional error measures are not the best way to evaluate such systems. They also argue that cognitive evaluation processes is related to evaluative judgment decisions, but it is possible to empower people to make better evaluations.

In this sense, it is essential that the multidimensional nature of the IJP be considered in performance evaluation (Koopmans et al., 2014) as a phenomenon that comprises individual and contextual aspects. This perspective makes it incompatible with measuring IJP using tools of a restricted dimensional range, which would not be able to cover the full extent of the phenomenon (Motowidlo & Kell, 2012). According to Pawirosumarto et al. (2017), performance is the product of a worker's capacity, multiplied by support and effort, and the reduction of one of these components would limit performance, making it necessary to consider all dimensions in the study of the phenomenon. Therefore, the measurement of the construct should rest on a multidimensional theoretical model.

Different explanatory models (Frese, 2008; Griffin et al., 2007; Motowidlo & Kell, 2012) have proposed measurement instruments under the premise that performance differs from work outcomes, consisting of multiple dimen-

sions of behaviors that would contribute to the achievement of the organization's objectives. These models are similar but differ in how the dimensions of the construct are proposed. The theoretical model proposed by Campbell (1990, revised in 2012) is the most comprehensive model that seeks to explain job performance (Koopmans et al., 2011). This model had the merit of establishing IJP as a behavioral construct operated under individual control. By emphasizing dimensionality through eight dimensions, the author ratifies the complex conception that connects all of a worker's activities. In summary, Campbell's (2012) model differs in three aspects: 1. performance constitutes what people actually do at work in order to contribute to the organization achieving its goals; 2. the proposition of eight dimensions for IJP is supported by more than 30 years of applied research and experience; 3. differences in IJP are affected by determinants such as the ability to perform the tasks demanded or resources provided (Griffin et al., 2007; Russell et al., 2017). Considering these particularities of Campbell's model, we chose to adopt it as the central theoretical framework of this study. Situated in a connecting network, in addition to determinants and results (e.g., effectiveness and productivity), this model points out a set of behavioral categories that make up IJP. Thus, according to Campbell (2012), the dimensions that make up IJP are technical performance; communication; initiative, persistence, and effort; counterproductive behavior at work; leadership of subordinates; management of subordinates; leadership of peers, and management of peers.

The technical dimension includes core work behaviors directly related to the purpose of the worker's function. This dimension produces the most characteristic outcomes of each work and is the most frequently addressed in performance evaluations (Andrade et al., 2020; Obeidat et al., 2016; Warr & Nielsen, 2018).

The communication dimension comprises the direct or indirect transmission of information through verbal or written means. Studies on the importance of communication for adequate IJP are common in healthcare (MacLean et al., 2017; Vogel et al., 2018), although such skills are fundamental in virtually all areas. An example would be the research by Altinay et al. (2018), which indicates impairment in the performance of school managers due to failures in communication with teachers.

The initiative, persistence, and effort dimension, in turn, includes behaviors that show additional commitment, sometimes called extra-role performance. Workers efforts are, therefore, recognized as an element of their performance. Some components in this dimension concern voluntarily

working overtime, the assumption of tasks beyond one's job description, and the willingness to work under extreme or adverse conditions. Behaviors of innovation, creativity, job crafting, and emotional labor would fit into this dimension (Gordon et al., 2018; Harari et al., 2016).

The counterproductive behavior at work dimension includes intentional behaviors that would reduce the chances of organizational goals being achieved. This dimension does not correspond to a negative hub of the others, as the behaviors are intentionally harmful and coexist with positive behaviors belonging to the other dimensions (Campbell, 2012). Counterproductive behaviors are also called deviant or antisocial behavior and their most frequently encountered forms are sabotage, retaliation, and avoidance (Ferreira & Nascimento, 2016).

The leadership of subordinates and leadership of peers dimensions include behaviors that favorably influence other people's actions toward the organizational goals, including encouragement, direct orientation, and acknowledgment. These two dimensions comprise similar behaviors but differ in their objects, either in a hierarchical framework (leadership of subordinates) or a team framework (leadership of peers). Pawirosumarto et al. (2017) and Mourão (2018) argue that the support received from managers is essential for the performance and professional development of the subordinates.

Finally, the dimensions of management of subordinates and management of peers comprise behaviors that favor the use of the organization's resources. In line with the leadership dimensions, the behaviors described in the two management dimensions are similar, varying according to who is affected, that is, subordinates or peers. They involve setting goals, monitoring resource consumption, anticipating problems, and monitoring work progress (Campbell, 2012).

Considering the set of the eight dimensions, Campbell's (2012) model managed to present a broad perspective of IJP differing from most of the theoretical models that explain the construct, which focus on one or two behavioral categories. The importance of contemplating more dimensions refers to an inclusive understanding of the phenomenon, as someone who presents a good technical performance may present problems in other behavioral dimensions. Therefore, accuracy in measurement necessarily depends on the comprehensiveness of the approach to IJP.

This comprehensive view of the construct can contribute to research and organizational practices (Gordon et al., 2018; Holman & Axtell, 2016; Müller et al., 2016; van Wingerden et al., 2017), as well as to performance self-management actions (Alferaih, 2017). Thus, an adequate diagnosis of

the performance is essential for the worker to maintain the initiative and intentionality of improvement (Magnier-Watanabe et al., 2017) and for organizations to be able to achieve their goals and promote effectiveness and productivity (Abualoush et al., 2018).

In this sense, we conducted a literature search in the area, in order to identify how IJP is being measured. The results indicate the production of partial diagnoses because studies that contemplate the complexity of professional performance are rare. We believe that this restrictive way of measuring the phenomenon also affects organizations, resulting in reductionist diagnoses of the construct. The analysis of the literature on the subject also allowed us to identify that performance was often measured based on theories with a lesser conceptual range (Koopmans et al., 2014; Queiroga et al., 2015). As a result, we observed a lack of a measurement model that offers a comprehensive diagnosis of IJP in its various aspects.

Thus, in this study, we present a list of performance indicators based on attributes from the perspective of Campbell's (2012) model, considered the most comprehensive model for the phenomenon (Koopmans et al., 2011). Therefore, this study aimed to present a set of general indicators of IJP that covers different dimensions of this construct in order to support a customized measurement and a comprehensive diagnosis of the phenomenon.

METHOD

The survey and refining of attributes to be considered in the measurement of IJP followed two steps (Figure 1): literature survey and empirical research. This process included the definition of the theoretical model; operationalization of the construct; survey of IJP scales and items; classification, selection, and adaptation of items through analyses of judges; expert panel; and semantic validation.

Figure 1

Steps and substeps in the construction of the individual job performance indicator panel

Step 1			Step 2		
(a) Theoretical model selection	(b) Construct operationalization	(c) Performance scales search	(d) Judges' analyses	(e) Expert panel	(f) Semantic validation
		197 items	85 items	56 items	56 items

Source: Elaborated by the authors.

Step 1: Definition of the theoretical model, operationalization of the construct, and survey of individual job performance scales

The definition of the theoretical model and operation of the construct was described in the previous section, and Campbell's (2012) model was adopted. Next, we surveyed the attributes measured through the relationship of the items included in the IJP scales. This bibliographic research had an exploratory and non-systematic design. In this research, we analyze empirical studies published in the last 15 years that considered general measures of IJP or constructed analogues to specific dimensions of Campbell's (2012) model.

In Table 1, we briefly list the IJP measures found in this survey. For each, we indicate the concept adopted, dimensions considered, number of items, and format of the response scale. The mean number of dimensions was 3.3 (median = 3), with 16.4 being the mean number of items per scale (median = 19), with standard deviations of 9.1 and 2.5, respectively. The type of response scale ranged between concordance (n = 5), frequency (n = 4), and intensity (n = 3).

Table 1
Measures of individual job performance

Authors and measures	Concept adopted	Type	D/I
Babin and Boles (1998) <i>Performance at work</i>	Employee productivity level compared to peers in terms of job behaviors and outcomes.	C	1/7
Goodman and Svyantek (1999) <i>Contextual performance</i>	Activities that complete the assigned tasks are not formally part of the work.	C	3/25
Griffin et al. (2007) <i>Role performance</i>	(not explicit)	F	9/27
Janssen and Van Yperen (2004) <i>Job performance</i>	Behaviors specified in the job description, evaluated and rewarded by the employer organization, and innovative behaviors.	C	6/14
Koopmans et al. (2014) <i>Individual job performance (IJP)</i>	Behaviors relevant to the organization's goals: task performance, contextual performance, adaptive performance, and counterproductive behavior.	F	3/18
Queiroga et al. (2015) <i>Work performance</i>	Employee behaviors related to organizational goals.	F	2/20

(continue)

Table 1 (conclusion)**Measures of individual job performance**

Authors and measures	Concept adopted	Type	D/I
Silva et al. (2007) <i>Managerial performance</i>	Set of behaviors of people in managerial jobs.	C	4/30
Skarlicki et al. (2008) <i>Consumer-oriented sabotage</i>	Counterproductive behaviors that aim to delay or harm customers in retaliation for perceived injustices or aggression.	F	1/5
Walumbwa et al. (2008) <i>Task performance</i>	(not explicit)	I	1/4
Wayne et al. (1997) <i>Performance</i>	(not explicit)	I	1/6
Welbourne et al. (1998) <i>Role-based performance</i>	(not explicit)	I	5/20
Williams and Anderson (1991) <i>Organizational and role citizenship behaviors</i>	Unrecognized behaviors in the evaluation system that contribute to the effectiveness of the organization and behaviors of the evaluation system.	C	3/21

Source: Elaborated by the authors.

Note. Column "D/I" contains, respectively, the number of dimensions and items of the scales. Type refers to the response scale: C = concordance; F = frequency; I = intensity

Step 2: Judges' analyses, experts' panel, and semantic validation

The critical analysis of the list of indicators surveyed included 16 judges and nine professionals. The judges were master and doctorate graduates, and graduate students in management and organizational psychology. The professionals came from different activity and education areas, in order to evaluate how workers of diverse profiles understood the attributes.

As the research involved these individuals' participation, it was submitted to a Research Ethics Committee, and the Brazilian Certificate of Presentation of Ethical Appreciation (*Certificado de Apresentação de Apreciação Ética* – CAAE) under no. 36444820.4.0000.5289 was obtained. The due ethical precepts, including confidentiality of information, voluntary participation, and right to cease participation, were respected. The participants authorized the data collection through the Free and Informed Consent Form.

To allow for the development of attributes that comprised different functions, we created a battery of preliminary questions in which the participants presented descriptive elements of their work context. In all steps, judges and professionals developed their analyses using forms specially developed for such activities. These forms contained open and closed questions, in addition to requiring critical analysis and better writing of the items.

The task consisted of the classification of the items in the dimensions of the model and the evaluation of the relevance and clarity of the items. Methodologically, the work included an online stage, in which the 16 judges answered the forms mentioned, followed by face-to-face meetings in the format of an expert panel. This panel included fewer participants ($n = 6$), selecting the experts who were more familiar with the topic. Two meetings were held with this group, totaling eight hours of discussion. The definition of the measurement attributes of IJP, in this stage, was carried out as it is done with “psychological evaluation instruments, when their evaluation is usually taken as a final professional opinion, validation” (Pineiro et al., 2013, p. 186).

The expert panel worked with the performance evaluation items as a group and individually, using the theoretical framework of Campbell (2012) as a guide, which was previously presented to the group for greater equalization of judgments. The attribute analysis during the panel aimed to point out items that would offer an adequate measurement of the IJP. It was clarified to the specialists that the purpose was to achieve greater accuracy in organizational diagnoses and provide workers with a tool for performance self-management.

The expert panel complemented the judges’ analyses with arguments that enriched the decisions on the measurement attributes of the construct. During the panels, the judges’ ratings and considerations were presented, and the proposed changes were collectively discussed. The protocol for this step established a range of six to eight items per dimension in order to avoid an excessively long measurement and imbalance in the number of items per dimension. The wording of the items was also refined.

To evaluate the items, the judges and professionals were asked to report how frequently they presented each behavior in relation to the opportunities they had to present them in situations experienced in the three months prior to data collection. Thus, all of them were placed in the role of scale users, which contributed to the improvement of the attributes, as well as to the interaction with the instrument. The behaviors listed were described as “activities a person can perform in everyday professional life”. The scale ranged from 1 (*none of the times*) to 5 (*every time*).

We also employed questions to adapt the items to the participants' specificities in relation to gender, role, and name of the organization where they worked. They were also asked to indicate terms they considered most appropriate to name bosses, subordinates, and peers. This choice was due to the fact that terms used in some organizational cultures can be considered pejorative in others. These initiatives to customize the measurement items of the IJP favored their understanding, as they offered examples of behaviors from the respondent's universe, besides increasing the participants' identification with the instrument. Based on these answers, 29 out of 56 items (52%) had their writing revised.

In addition, we included questions to check the examples of work activities that the participants provided. For each example, they evaluated whether it was an activity 1. carried out under the control of the worker, 2. quantifiable, and 3. with verifiable effects. These criteria were aimed at characterizing the activity as a performance behavior, that is, targeting the achievement of the organization's goals. When the participant considered one or more of these requirements not applicable, they were asked to adjust the activities according to the indicated criteria.

The purpose of this verification was to keep the items in line with the operational definition of IJP in order to develop an adequate measurement strategy. This is important because performance measurement is not always done considering the dimensional range of the construct, nor the behavioral nature of the phenomenon (Motowidlo & Kell, 2012; Queiroga et al., 2015) or the context of the worker's performance (DeNisi & Murphy, 2017).

RESULTS AND DISCUSSION

The evolution in the number of attributes per dimension is shown in Table 2. The bibliographic survey of studies on IJP that listed the measures, presented in Table 1, offered the initial 197 items, for example: "Adequately completes the assigned tasks" and "Helps colleagues with heavy workloads". These items were analyzed individually and preliminarily classified so that we could associate their content with the dimensions of the model. Items not classified or with inconsistent classification among the judges (50) were considered non-adherent to the dimensions, mainly because they were determinants or outcomes, that is, they differ from performance behaviors.

In the next step, the items were reduced to eliminate redundancies. We also adjusted the wording of the items to a relative frequency response scale.

This procedure permitted unifying the perspective adopted in the set of attributes to facilitate its response in future IJP measurement applications.

Table 2

Total items per dimension in each step of the refinement process

Dimension	Bibliographic survey	Resulting composition		
		Screen 1	Screen 2	Screen 3
Technique	17	10	8	8
Communication	1	11	7	7
Initiative, persistence, and effort	66	14	8	8
Counterproductive	19	11	8	8
Leadership of subordinates	6	10	6	6
Management of subordinates	13	9	6	6
Leadership of peers	8	10	7	7
Management of peers	8	10	6	6
Unclassified items	59			
Total	197	85	56	56
Participants		16	6	9

Source: Elaborated by the authors.

Note. Screen 1: analyses of the judges; screen 2: expert panel; screen 3: semantic validation.

The first validation by the judges (screen 1) started from 85 attributes, with two further stages of refining. During the expert panel (screen 2), the attributes were approved, adjusted, grounded, or eliminated, and new attributes were created based on the dimensions' concepts and the needs the evaluators had pointed out. Finally, the semantic validation (screen 3) involved nine professionals from different activity areas and levels of education in order to evaluate the understanding of the attributes. The adjustments in this step were limited to vocabulary changes so that the total number of attributes per dimension remained unchanged.

The fact that the judges' analyses started with a form in which they assessed IJP itself allowed for reflections on their activities and the consequent refinement of the items customized throughout the process. The resulting proposition after the expert panel step was composed of compo-

nent behaviors of the IJP, considering the eight dimensions described in Campbell's (2012) model.

In the semantic analysis, each participant answered about their own work activities. For example, participant 1 listed "preparing reports" and "filling out registrations in the internal system" as technical activities, while participant 2 listed "identifying fraud" and "verifying compliance of the financial closure of sales points". Likewise, these professionals presented behaviors with functional affinity, which were, at the same time, very diverse in terms of the nature of their work, namely: 1. counterproductive behaviors, such as failing to issue tickets for frontline employees and harassing women in subordinate positions, and 2. developing methods to facilitate peer work and follow up external supplies for behaviors of initiative, persistence, and effort.

Thus, the items presented in the questionnaire containing technical activities resulted in 1. "I completed, without need for correction, my main tasks as a commercial analyst (for example, preparing reports)" and "I satisfactorily performed the main activities of my commercial analyst work (for example, filling out registrations in the internal system)" for participant 1; 2. "I completed, without need for correction, my main tasks as an internal auditor (for example, identifying fraud)" and "I satisfactorily performed the main activities of my work as internal auditor (for example, checking the compliance of the financial results of the sale points)" for participant 2.

Items related to people leadership and management dimensions, involving both peers and subordinates, were also composed with specific examples. The tactics used were different, though: the respondents were asked to indicate behaviors they presented at work in the previous three months, based on a predefined list, disregarding the frequency of occurrence. This list was formulated based on the definitions of subfactors of each dimension, as postulated by Campbell (2012). Then, the respondents received a short list containing only the behaviors they said they had recently presented, organized into groups per dimension. About this reduced list, they were asked to indicate the alternatives that were practiced with greater ease and difficulty. Thus, the scale items were composed of real behaviors but not limited to those the respondents present more easily.

The results of the classification, selection, and adaptation of the items based on the judges' analyses, expert panel, and semantic validation gave rise to a set of 56 items distributed in the eight dimensions of Campbell's (2012) model. Next, the results obtained in each of these dimensions will be discussed. The custom data provided in the initial battery of questions are enclosed in square brackets.

Technical dimension

In total, the technical dimension contained seven items to measure each respondent's performance of tasks that are specific to their position, directly mentioning the completion of the main tasks expected of that worker and their execution without errors, based on the tasks they listed as being expected of their position. It also addressed "putting into practice" the technical knowledge to produce results, as this dimension turns to what is most characteristic of each work.

The items covered in this dimension were 1. "I performed specified tasks for those who work as [position] at [organization]"; 2. "I took actions that contributed to the objectives of the [organization]"; 3. "I completed, without making mistakes, my main tasks as [position] (for instance, [one example of technical behavior])"; 4. "I completed the main tasks that were expected of me (for instance, [one example of delivery])"; 5. "I performed administrative tasks that are directly under my responsibility"; 6. "I satisfactorily performed the main activities of my [position] (for instance, [two examples of technical behavior])"; 7. "I put into practice my technical knowledge to produce results (for instance, [two examples of delivery])".

The items that remained in the technical dimension included, therefore, central behaviors of the work that summarize what the person does. Thus, a measurement adapted to the purpose of the worker's position was maintained, relating essential elements for an effective performance (Andrade et al., 2020; Obeidat et al., 2016; Warr & Nielsen, 2018) and with several adaptations in the formulation of the items, in order to permit customization to the function and organizational culture of each one.

Communication dimension

The communication dimension included six items related to information transmission. The focus of these items went beyond bureaucratic aspects such as the means or whether the communication was direct or indirect. The evaluation of this dimension focused on the communication actions themselves, beyond their effectiveness, understanding that the channels are only the means to make the information arrive and not its central point (Vogel et al., 2018). Thus, the items qualified the information exchange process, assessing whether the workers were able to make themselves understood and verifying whether they understood the information received.

The six items that remained in this dimension were 1. "I made myself understood by talking to people in the [organization]"; 2. "I reviewed, before

sending, the work messages I wrote”; 3. “I passed clear information to others in the [organization]”; 4. “I checked if I correctly understood the information I received at work”; 5. “I communicated clearly with others at work”; 6. “I carefully read the work messages I received”.

This dimension can strongly contribute to performance assessment because communication skills are a relevant component for appropriate IJP (Altinay et al., 2018; MacLean et al., 2017; Vogel et al., 2018). The inclusion of this dimension is one of the distinctions of Campbell’s (2012) model, as most performance models do not address communication behaviors, which may play a decisive role in work effectiveness.

Initiative, persistence, and effort dimension

The initiative, persistence, and effort dimension, in turn, included behaviors that show additional commitment to the completion of work activities. The eight items of this dimension included activities called extra-role performance, which are behaviors that demonstrate a proactive attitude toward work, as well as a predisposition to “give the best of themselves”, whether in the assumption of voluntary activities, extension of the working day, or peer support, in a clear attempt to favor a satisfactory performance.

The remaining items for this dimension were 1. “I researched news about the market [organization] operates in”; 2. “I gave suggestions to improve the service to the customers of [organization]”; 3. “I organized my tasks to complete them within the agreed deadlines”; 4. “I carried out activities complementary to the [position] function (for instance, [one example of initiative, persistence, or effort behavior])”; 5. “I voluntarily took on additional activities at work” (for instance, [two examples of initiative, persistence, or effort behavior])”; 6. “I sought ways to improve the efficiency of my work in practice”; 7. “I invested in my professional development to act as [position]”; 8. “I helped my peers when they needed it”.

Thus, the initiative, persistence, and effort dimension included a set of behaviors that revealed a deliberate decision of the worker to commit beyond what was expected in the search for positive outcomes for their work. Actions aimed at improving the workers’ efficiency and professional development were also present as central elements of this dimension (Campbell, 2012; Harari et al., 2016).

Counterproductive behavior in the work dimension

The counterproductive dimension included eight items focused on intentional behaviors that reduce the chances of the organization achieving

its goals. Some of these behaviors are directed at the organization, such as ignoring parts of the work to be done or using organizational resources (including working hours) for private activities. Other behaviors turn against members of the organization, such as being aggressive in the work environment or neglecting actions carried out by others, which may be harmful to the organization.

The eight items that remained in this dimension were 1. “I intentionally ignored parts of my work that should have been done”; 2. “I used my work time to perform other kinds of activities”; 3. “I spent part of my working hours on activities unrelated to my assignments”; 4. “I pretended not to see the inappropriate behaviors of my peers (for instance, [one example of counterproductive behavior])”; 5. “I was aggressive with people at work”; 6. “I made mistakes (for instance, [two examples of counterproductive behavior])”; 7. “I used [organization] resources to my own benefit, even though I knew it might not be appropriate”; 8. “I did things even though I knew they would affect my productivity at work (e.g., sleep deprivation or alcohol abuse)”.

Therefore, the counterproductive dimension comprised deviant actions in the workplace, including items that represent antisocial behavior, sabotage, retaliation, and avoidance (Ferreira & Nascimento, 2016). Such elements can have a deflator effect on IJP and, therefore, they need to be considered when one wants to adequately measure workers’ performance.

The leadership of subordinates dimension

The leadership of subordinates dimension-maintained items on behaviors that favorably influence the action of people in positions of lower hierarchical levels. In this sense, the six items of this dimension are specific to respondents in a formal leadership position. The items included content involving encouragement, direct guidance, personal support, and feedback. Customizations were included to enable the respondents to think of support elements directly related to their context.

In this dimension, the items for measuring IJP would be as follows: 1. “I sought [example of subordinate leadership behavior that the respondent indicated they found difficult to perform]”; 2. “I praised the positive results of my subordinates”; 3. “I developed my subordinates so that they had greater autonomy when performing their tasks”; 4. “I encouraged my subordinates in their work”; 5. “I acted toward [example of subordinate leadership behavior the respondent indicated they found easy to perform]”; 6. “I

guided my subordinates when the outcome of their work could be better than that obtained”.

The literature is rich in showing the importance of subordinate leadership in the process of improving the performance of others (Mourão, 2018; Pawirosumarto et al., 2017). This dimension, however, does not focus on the effect on the other’s performance, but on the leader’s behaviors to support, advise, and encourage the subordinators’ development and professional activities. Therefore, the use of this IJP dimension focuses on work situations that comprise functional hierarchies.

Management of subordinates dimension

The management of subordinates dimension included behaviors that favorably influence subordinates to use the organization’s resources. Thus, the measurement of this dimension included six items that focused on formal processes of supervision and monitoring of subordinates, including both managerial activities that the managers found easier and more difficult to perform. Unlike leadership, in this dimension, there is a formal characteristic of advice on the management of organizational resources within a leadership framework. The customization of the items of this dimension allowed managers to evaluate their performance, considering not only what would be easier for them to act.

The items incorporated in the management of subordinates dimension were as follows: 1. “I searched for [example of subordinates management behavior that the respondent found easy to perform]”; 2. “I supervised the evolution of the work of my subordinates”; 3. “I worked for [example of subordinates management behavior that the respondent found difficult to perform]”; 4. “I warned my subordinates about obstacles they could face”; 5. “I actively followed the progress of my subordinates”; 6. “I provided adequate working conditions to my subordinates”.

The leadership of peers dimension

The leadership of peers dimension included behaviors that favorably influence the performance of peers toward the organization’s goals, such as encouragement, direct guidance, and recognition. Unlike the dimensions that involved subordinates, peer leadership does not demand hierarchical relationships, the only requirement is that workers act with other people in the work environment.

The seven items covered in this dimension were 1. “I helped my peers develop greater autonomy in their activities”; 2. “I encouraged my peers that were facing challenges at work”; 3. “I gave feedback to my peers about the work they performed”; 4. “I expressed recognition for the successful results of my peers”; 5. “I performed the activity [example of peer leadership behavior that the respondent found difficult to perform]”; 6. “I encouraged my peers to implement improvements in their work”; 7. “I led people by doing activities (for instance, [example of peer leadership behavior that the respondent found easy to perform])”.

As predicted by Campbell (2012), peer leadership turns to behaviors that positively influence the performance of other people toward the organization’s goals. In this sense, this dimension leads to an action in which the favorable performance of an individual has a positive effect on the performance of others.

Management of peers dimension

Finally, the management of peers dimension included behaviors that favorably influence the use of the organization’s resources by other people. Similarly to the management of subordinates, the behaviors of this dimension differ from those within the scope of leadership in the sense of involving resources, working conditions, work planning, and monitoring – in this case, aimed at peers. The items to measure peer management also included the customization of the easiest and most difficult behaviors to perform, allowing for a complete diagnosis of IJP in this dimension.

The resulting items in this dimension were 1. “I sought to provide suitable working conditions for my peers”; 2. “I monitored peers’ activities”; 3. “I planned activities to be performed by my peers”; 4. “I looked for [example of peer management behavior that the respondent indicated was easy to perform]”; 5. “I warned my peers about difficulties they might encounter”; 6. “I looked for [example of peer management behavior that the respondent indicated was difficult to perform]”.

The behaviors described in this dimension measure the performance of peer management as somewhat innovative, as Campbell (2012) discussed management tools, such as goal setting, monitoring resource consumption, anticipating potential problems, and monitoring work progress, but targeting peers. This peer management approach can be especially useful in measuring the performance of self-managed teams (Alferaih, 2017).

FINAL CONSIDERATIONS

This study aimed to present a set of general indicators of IJP that covered different dimensions of this construct in order to support a customized measurement and a comprehensive diagnosis of the phenomenon. Overall, the 56 items divided into the eight dimensions of Campbell's (2012) model were able to present a comprehensive measurement perspective of the IJP. The key contribution of this study is precisely in offering a set of items that underwent a definition of the theoretical model, operationalization of the construct, and survey of existing scales, in addition to a rigorous classification, selection, and adaptation of items based on the judges' analyses, expert panel, and semantic validation.

In its comprehensive approach, some of the dimensions of Campbell's (2012) model, such as the technical dimension, are more concentrated on the productivity deriving from individual production, apart from the team. Indicators of the technical dimension include behaviors related to completing tasks and achieving goals. In turn, indicators in the communication dimension complement the technical dimension by ratifying the effectiveness of dialogued communication, both in the role of the sender and that of the receiver. Another set of indicators in this block falls into the initiative, persistence, and effort dimension, which concern behaviors not previously established for the worker's role, exceeding expectations in relation to the expected performance.

Another block of dimensions was aimed at social interactions in which performance takes form through results produced by peers or subordinates. One of them involves leadership behaviors with a direct effect on the behavior of others. The other concerns people management behaviors, targeting how the subordinates use organizational resources. Leadership behaviors focus on forms of encouragement and direct guidance, while management behaviors focus on providing adequate working conditions and resources management.

Finally, the indicators of the counterproductive behavior at work dimension can focus on both blocks, depending on the object of these behaviors. In this dimension, the logic is inverse – lower scores are more desirable –, as it encompasses behaviors that organizations seek to reduce – for example, misuse of resources and freeloading.

The performance measurement proposal presented here, therefore, allows for the development of organizational diagnoses of IJP. Professionals can also adopt the measurement as a tool for performance self-management. In both cases, the differential lies in offering a set of items that allows for a

comprehensive approach to work performance because, as seen in the presented analysis of the literature, most research in the area is limited to one or two behavioral categories of performance.

As next steps, we recommend the verification of validity evidence and reliability indices of this list of indicators in order to obtain a measure of performance evaluation and its dimensions. In addition to confirming the structure of the measure in the established theoretical dimensions, we suggest the use of external variables in order to point out other evidence of validity (e.g., convergent, concurrent, discriminant, and predictive validity). It would also be useful to test the invariance of the measure for workers in leadership positions or not, as well as for the gender variable, in order to compare the performance based on different sample groups.

Thus, the expectation is that the work carried out will allow academics and managers to map the components of IJP, guiding them to address the phenomenon in a comprehensive and, at the same time, customized way. The use of variable data in the items, based on initial questions about the work situation and the context of each participant, is also an important innovation in the treatment of performance measurement. In addition, the results obtained contribute to raising the debate about the construct, in order to favor theoretical advance in the area and instigate methodological advance.

Despite these contributions, one limitation of this study is the exploratory nature of the literature review. Future studies can adopt systematic reviews, covering a protocol with study inclusion (time period, keywords/search terms, databases consulted) and exclusion criteria. In addition, the semantic validation was performed with a limited number of workers, despite their diverse functions, levels of education, and activity areas. Therefore, a broader test of the measure is recommended with a view to its large-scale use.

Although future studies may contribute to remedying these limitations, the results of this study encourage managers, professionals, and researchers to use these 56 items in performance evaluation processes. The use of these dimensions can be evaluated according to the users' different working situations. In this sense, those who do not work in a hierarchical structure may not need the dimensions of management and leadership of subordinates, while those who develop autonomous work may also not have to contemplate the leadership and management of peers dimensions.

After conducting future studies that present validity evidence for these 56 items, it will be possible to establish a general and comprehensive scale

of IJP, as well as subscales based on the theoretical dimensions, which will be confirmed in the extraction of factors. Thus, the measure can be applied in organizational contexts, choosing some dimensions that meet the interest of the research or intervention. For example, if an organization intends to map specific training needs for the technical and communication dimensions, it can, at that time, exclusively investigate those variables. Another possibility is a serial evaluation of IJP to measure performance in its scope and complexity, but without strenuous data collection, which may impair the quality of the answers obtained.

In cases in which the 56 items are used, it is recommended that the research be carried out based on a careful data collection process as, in addition to the items themselves, there are the initial questions that map the performances of the individual in order to customize the items that will be used in the performance diagnosis. If such care is taken, we believe that it is possible to achieve an adequate measurement of the IJP, with relevant contributions to the performance and career management of the workers involved in the process.

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