

Empirical study of the meaning of work measurement scale

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ABSTRACT

The meaning of work is increasingly aimed at providing fulfillment, personal identity and pursuit of professional purpose through a convergence of individual values and the work environment. This chain of events leads to a direct effect in personal motivation and organizational productivity. Accordingly, this paper aims to analyze the conceptual framework of the meaning of work model using confirmatory factor analysis, starting from a locally developed measurement scale. An empirical test is applied to data collected through a survey with 200 participants employed by a company located in the State of São Paulo, Brazil. The statistical analysis reveals the existence of two main dimensions, the first referring to justice at work, and the second to wear and dehumanization. The research demonstrates the need to employ confirmatory methods in order to provide the necessary basis for measurement scale validation with respect to the extant theory. The evidence herein presented allows us to conclude that the IMST construct is still being developed; continuous efforts are needed in order to ensure that the scale is effective and valid – in particular, with regards to the interaction between the personal and the social dimensions related to the meaning of work.

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1. INTRODUCTION

Extant research shows that even with a comfortable financial situation, people choose to continue working, because this embodies a personal belief that goes beyond obtaining an income. To be sure, it is also regarded as a means of relating to other people – it is an integral part of social life for people, which provides a sense of purpose through a professional occupation (MORIN, 2001; 2003).

Various fields of knowledge continue to study the relationship between man and work, based on theories that seek to explain the manners we use to signify and provide meaning, as a result of our relationship with work (PEREIRA; TOLFO, 2016).

Scientific knowledge has provided a reflection on the motivation generated by work for the human being, which has become a driving force in the construction of identity and in the constitution of the collective culture (BENDASSOLLI; TADEO, 2017).

Along this line, Falguera *et al.* (2017) postulate that work is an essential element of peoples' lives. This implies that work satisfaction and motivation are very relevant aspects in our contemporary social context. As a recurring theme of research, the meaning of work plays a fundamental role, and is permeated by the compelling trait of a very significant aspect of human identity (NEVES *et al.*, 2018).

Considering these considerations that define the relationship between the man and work, the importance of providing effective organizational instruments becomes evident. It is thus critical to adequately measure the motivational components and their relationship with the meaning of work, from the perspective of workers.

Specifically, the issues related to the measurement of the meaning of work construct become relevant, and special attention is required to address the scale validity and reliability. Thus, one guiding concern in this paper is the analysis of the adequacy of the measurement scale with respect to its conceptual structure, in order to enable its application in the organizational context.

To that end, we present evidence with the intent to contribute to the improvement of the meaning of work concept, focusing on the dimensions that materialize the individual's perceptions. In this work, we use the IMST- Inventory of Motivation and Meaning of Work scale proposed by Borges; Alves and Tamayo (2008).

In that sense, from the appropriate theoretical framework and validation of the measurement scale, our main contribution is the continuation of a stream of research that shed light to the manner that people relate to work, to further construct theoretical knowledge in the field.

This stream of research, in fact, is of great interest to the corporate world, as it fosters proper investments by managers and professionals in the human resources management area. The research suggests efficient initiatives aimed at the development of individual well-being, which in turn lead to organizational productivity.

2. LITERATURE REVIEW

The seminal work of Hackman and Oldham (1976) provides the theoretical foundation of this research. The first studies on the subject by these authors show that quality of work has an impact on the assigned meanings.

These authors posited that three main characteristics provide meaning to the work, the first being the variety of tasks (i.e., the fact that a job demands a variety of tasks, which require multiple skills). The second trait is the identity of work, or the ability to allow something to be accomplished from the beginning to the end, with a tangible and identifiable result; and the third is the ability of work to have a positive impact on the welfare of other people, be that in the organizational or in a larger social environment.

For Mow (1987), work denotes several functions, and providing a source of income stands out as one of the most important, intrinsic function. The remainder are satisfaction (i.e., interesting work); providing interpersonal relationships; serving society through work; providing an occupation of time; and yielding status and prestige that comes from a professional occupation (MOW, 1987).

Mow (1987) also stipulates that the meaning of work is represented by the individual, collective and social meanings that are attributed to the concept. This is due to the importance of work in the organization, the satisfaction generated by work, the feeling of personal and professional evolution and the autonomy for its execution.

The general framework presented by Mow (1987) regarding the concept of meaning of work is based on three main factors: the centrality of work, the societal norms of work and the results and objectives that are valued, as a result of the labor activity. These concepts have

been adopted in the wake of several ensuing research, for instance in Borges (1997); Borges and Alves (2001, 2003); Morin (2001); Borges; Alves and Tamayo (2008); Oliveira and Souza (2014).

The stream of research corroborates the centrality of work, based on social norms about work and its valued outcomes; specifically: the importance of work at a given stage in life; the ethical aspects, rewards and work-related rights and duties; and the reasons that make the individual want to work.

The importance of this theme is reinforced by Morin (2001, 2003), who postulates that work is not just a source of income – it is, in fact, a means of relating to others, of feeling as an integral part of a social group, in addition to having an occupation and a goal in life.

For Borges and Alves (2001), there are two perspectives. First, the authors consider that work equates to having a real job (with wages and contracts), and a cognitive perspective, which considers everything that the person lived and experienced, as well as the society and culture in which he belongs. The second perspective can be considered dynamic, historical and with multiple versions of meanings.

When trying to attach meaning to work, the individual often uses what he sees or feels in that moment. In other instances, the meaning of work derives from what he or she currently observes in the organization's environment, or from other intentions that may be relevant in that setting (BORGES; ALVES, 2001).

The core of Rosso; Dekas and Wrzesniewski's (2010) contributions bring an important finding about the meaning of work-study. Specifically, the authors postulate that there is theoretical a gap in terms of its new perspectives and aspects. Namely, they consider that work has an important role in giving meaning to life. In that sense, this notion reflects the fact that learning, autonomy, prestige and professional progress prevail over work-related rights and duties (KUBO; GOUVÊA; MONTOVANI, 2013).

Subsequent theoretical developments have postulated the existence of a dimension related to the personal pleasure in the business environment. According to this thought, the feeling of pleasure is not conditioned to other considerations, such as cultural manifestations, religion and arts, to name a few aspects. Instead, Lourenço; Ferreira and Brito's (2013) posit that the meaning of work incorporates the positive perceptions about work, including personal satisfaction and psychological well-being.

Extant research proposes that the meaning of work is an object that embodies multiple and ambiguous perspectives. This is a notable development as we contemplate the transition from an industrialist world, to the informationalism. These developments have turned the investigation of the meaning of work into a great research challenge (BORGES; YAMAMOTO, 2014).

In recent years, numerous transformations in the form that people relate to work have emerged. This is illustrated by the so-called “gig economy”, in which people work independently and outside the realm of organizations. Often, people use work styles that are quite different from the traditional business practices. Accordingly, new and significant strategic challenges arise, and practitioners and researchers need to develop new forms of understanding the meaning of work (ASHFORD; CAZA; REID, 2018).

It should be noted that business performance often focuses on the efficient allocation of scarce resources, following appropriate forms and aimed at meeting the customer expectations and the expected firm performance in a complex and current environment. The acronym VUCA – originally in English Volatility, Uncertainty, Complexity and Ambiguity – provides a relevant framework for understanding the elements proposed by Bennett and Lemoine (2014).

In line with this idea of ensuring performance in complex environments, Schonberger and Brown (2017) postulate that the consumer demands are sometimes in direct contradiction with the equilibrium of production costs and competitiveness. This imposes a need to design production lines that are in synch with customer demands, by optimizing machine dedication and by allocating an adequate workforce.

While worker allocation is important, there is no doubt that the workers’ well-being is critical for the organizational effectiveness and competitiveness. Accordingly, it is important to ensure that its measurement is valid and effective, a necessary condition for its effective use as an evaluation tool for the firm (DEMO; PASCHOAL, 2016).

Considering these theoretical concepts, a research decision was made to use the IMST (Inventory of Motivation and Meaning of Work) instrument developed by Borges; Alves and Tamayo (2008); a discussion about the quality of this instrument is beyond the scope of this paper.

The third version of the IMST scale was presented in Borges; Alves and Tamayo's (2008) study. It enables the construct to be measured, and greatly facilitates the recognition of

the hierarchical classification of the attributes *per se*, which have been replicated in other research (MAGALHÃES, 2011; GOMES, 2014; CARVALHO, 2015; ARAKAKI; LEITE, 2012; MICHELS; PIVA, 2017 ; PINHEIRO; BENDASSOLLI; BORGES, 2017).

With respect the IMST concepts, the instrument incorporates of the analysis of sets of data that represent value and descriptive attributes. The structure of the evaluative attributes consists of the following identity dimensions (SIQUEIRA, 2008):

[...] Justice at work (FV1): it is defined that the work environment must guarantee the material conditions, assistance, hygiene and appropriate equipment suited for the activities and the adoption of safety measures, as well as ensuring the compatible economic return; the balance of efforts and rights among professionals, and the fulfillment of organizational obligations.

Wear and dehumanization (FV4): define that work, from the worker's perspective, brings a sense of wear, haste, busyness, self-perception as a machine or an animal (dehumanized), physical effort, dedication and discriminatory self-perception.

The first dimension (Justice at Work) states that the work environment should guarantee the right conditions for activities. In addition, it represents a concern for the organization to improve its conditions, through investment or worker awareness (SIQUEIRA, 2008),

According to Martins *et al.* (2018) workers have a good knowledge of the risks to which they are exposed. However, it is not uncommon for them to disregard their effective protection (either due to a lack of proper equipment or improper work routines). This is corroborated by several studies that address the issue of precarious work, as well as the need for effective actions to improve worker safety and health.

Still along those lines, Serrano *et al.* (2017) advocate that occupational health is affected when the meaning of work is based on an obsessive passion for the worker, i.e. an intense emotional dependence between work and individual emotional state.

Siqueira (2008) notes that the second dimension (wear and dehumanization) is part of a value structure. However, VF4 has shown low internal consistency. The author postulates that this may be the result of data from different samples; in other words, this dimension is only relevant for a small portion of the frame of reference.

Following this line of thought, Blake; Richard and Ryan (2016) looked at the deterioration in the meaning of work; they concluded that work stress has a negative relationship in the perception of meaning in life. The authors found no evidence of moderation between the model constructs, but meaning dulled the perception of work stress.

The authors found an important moderator: economic status, which ultimately influence the meaning of the work and career decisions.

For Fasbender *et al.* (2016), the post-retirement participation becomes increasingly important for retired people and employers. Steger; Dik and Duffy (2012) also postulate that companies want to engage people, since this reduces turnover, provides greater involvement and stimulates the behavior of organizational citizenship.

Work relationships are constructed by the values that the parties attribute to them. This concept is presented by Oliveira and Souza (2014) as being representative of trust in the organization. The authors note, however, that this represents a bond that is difficult to understand. Once there is a predominance of some value (for example, autonomy), each side seeks to strengthen confidence that there will be opportunities for professional growth.

Other values need to be present develop trust. This is corroborated by Oliveira and Souza (2014) when they postulate that when an essential value is not present, negative effects will emerge in building trust (even if other important values are present).

Thus, trust rests not only on abstract representations, but on the actual experience of work relations and practices. This chain of events renders a difficulty in the interpretation of the meaning of work, and there is a need to interpret the technological and abstract knowledge in order to track this construct (PUYOU; FAY, 2015).

In a context marked by several innovations – notably, in terms of technological development, increasing speed and access to information -, the perception of the meaning of work implies that it no longer a simple matter of earning income. Extant research highlights the changes in the understanding of this construct, given our current stage of social and interpersonal relationships (PEREIRA; TOLFO, 2016).

From a postmodern critical perspective, Rohm and Lopes (2015) note that labor relations always present ethical dilemmas, and proper attention is not paid to this issue. Accordingly, the authors suggest that labor relations should prevail over the stereotypical concern with financial returns. Instead, organizations ought to seek financial returns obtained from ethical behavior, while nurturing human relations.

In the context of the human relations of people with disabilities, it is worth noting that the meaning of work motivates and inspires life in society. This is a source of identity that strengthens confidence, self-reliance and control, while helping the inclusion and

rehabilitation of connections between people in ordinary situations (ULLAHY; FOSSE; STUCKEY, 2018).

In addition, from the perspective of migrants, this contemporary and dynamic scenario of professional mobility means that socialization is directly related to the perceptions of precarious work. This fact suggests that organizational processes or practices mediated this relationship render it a complex concept (COMIN; PAULI, 2018).

As shown by Falguera *et al.* (2017), human development and the issues related to inequality can affect job satisfaction. The authors have shown a significant relationship between imbalance and job satisfaction, which outweighs the importance of income and opportunities for professional development.

Also, in the context of economic crisis, these issues affect the meaning of work. Several authors point out the negative effects on workers' lives in this context. Workers that are subjected to these conditions exhibit low values in their work relations, and show a low expression of respect and acceptance, as they simply prioritize the acquisition of income (BARRO; BORGES; ALVARO, 2017).

Many theoretical and empirical questions arise from the effects of non-monetary incentives on the meaning of work. Workers manifest considerations that go beyond financial compensation, and these perceptions drive studies on the management of labor relations in modern organizations (CASSAR; MEIER, 2018).

In the wake of developments in interpersonal relationships, Bendassolli and Tadeo (2017) define that the culture directly affects the meaning of work. The authors state that culture is passed on to people based on shared values. Accordingly, they argue that work is a significant activity and directly related to personal and collective culture.

In that sense, it is hoped that the discussion and clarification about this important construct will contribute to the management decisions, orientations and interventions in organizations, so as to enable the work to be meaningful, while at the same time the personal and professional competences are steered into the proper direction, leading to well-being and business productivity.

The IMST scale was developed from the classical theories of organizational behavior. It was selected in this article to answer the guiding question of the research, namely: to study the conceptual structure of the scale, and to corroborate the results of previous research (or, alternatively, to suggest the revision of the construct).

It is important to note that studies on meaning of work remain pertinent. This corroborates the relevance of the theme in the most diverse areas. For example, Peterossi; Simões and Santos (2014) pointed to the lack of equalization between outsourced professionals and those hired directly by the company; Bendassolli and Lima (2015) presented a model on informal work; Lopes and Leite (2015) identified the set of meanings related to the Military Police with acquired disabilities; Kilimnik *et al.* (2015) analyzed the meaning of work for higher education teachers.

Boas and Morin (2016) correlate the meaning of work factors between teachers in Brazil and Canada; Milk; Barrichello and Morin (2016) compared constructs between professionals in public and private hospitals; and Farias *et al.* (2018) observed the perception of health professionals in the primary health care.

3. METHODOLOGICAL PROCEDURES

3.1 Object of study

The IMST Measurement Scale Inventory was analyzed in terms of sampling procedures requirements, data collection and the application of proper analytical techniques. These steps were followed by the conclusions regarding the validity and reliability of the construct.

The structure of the evaluative attributes consists of the identification of the primary dimensions: a) Justice at work ($\alpha = 0.91$): b) Wear and dehumanization ($\alpha = 0.78$) (BORGES; ALVES; TAMAYO, 2008). These Cronbach's Alpha values, which are commonly used for assessing the internal consistency of psychometric scales, are within the parameters recommended by Hair *et al.* (2009). This leads us to conclude that these two dimensions of the scale present the expected reliability of the scale.

3.2 Data collection procedures

The complete IMST instrument presented by Borges; Alves and Tamayo (2008) has three parts: the first refers to the evaluative attributes in the form of sentences (each describing a specific work value). The remaining parts correspond to the expectations, the descriptive attributes that express possible results of the work, and the instrumentality which

indicates how useful the work performance is in terms of results – these are not part of the scope of this research.

We searched the information of 24 questions that correspond to the dimensions FV1 and FV4. Previous research by Borges and Alves (2001, 2003) suggests that the evaluative attributes are grouped into two factors, with 13 items corresponding to the Justice at Work dimension. The theory presents the other 11 items for the wear and tear dimension. Data was collected through questionnaires using a Likert type-scale for IMST questions. Responses were provided from 0 to 4; a “not applicable/ cannot respond” choice was provided from the situations whereby the respondent could not answer, and the value=4 corresponds to totally agreeing with the question.

Respondents were assured the confidentiality of the information. They received an invitation to participate in the survey from a company manager, by email. The survey was sent to several functional areas, and responses included respondents of different ages, gender and hierarchical levels.

For the present study, we used data collected by Moura and Prado (2016) with a sample consisting of 200 effective respondents (which conforms to the recommendations of Hair *et al.* (2009) and Rosseel (2012)). All respondents are residents of the State of São Paulo and work in a Call Center services company. There was no missing data in the sample, and thus it was not necessary to use imputation methods.

3.3 Data analysis procedures

Considering the research objective of validating the scale in terms of its conceptual structure, the choice was made to use the confirmatory factor analysis technique, which analyzes the variability of a set of observed items in order to compose a smaller number of latent variables – which are not directly measured. This technique reduces the dimensionality of factors, because it identifies the redundancy underlying a set of indicators (HAIR *et al.*, 2009).

It is subdivided into two types: exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) (BIDO, 2014). EFA is used to investigate the relationship between the factors and manifest variables, with no prior assumptions about their conceptual structure or construct dimensionality (JORESKOG, 2007). Confirmatory factor analysis, on the other

hand, is based on the theoretical knowledge about the phenomenon. It is assumed that the scales have already gone through the construction and refinement stages, with prior knowledge about the number of factors and items that are compose the construct (WORTHINGTON ; WHITAKER, 2006).

The technique offers a set of fit indices which enables the analysis of post-hoc results of the model's empirical test. The main metrics are the normed χ^2 and the construct validity, as well as convergent and discriminant (HAIR *et al.*, 2009; HINKIN; TRACEY; ENZ, 1997).

We recall that the questionnaire is composed of categorical items. Accordingly, there is a problem related to the limited set of values, the data asymmetry and the absence of possible results at certain points of the scale. These issues decrease the variability of the items, which in turn affect the performance of the technique (that presupposes multivariate normality). To address this, we used the CFA based on covariance analysis, using R software and the Lavaan package (ROSSEEL, 2012; CORE TEAM, 2016).

The choice of the analytical technique enables us to perform a comparative analysis in different contexts, and to identify the compatibility of the scale in different populations. This ensures the measure scale's invariance assumption, in line with the propositions from Borsa; Damasio and Flag (2012).

4. RESULTS AND DISCUSSION

In this research, we used the 24 questions that focus on two dimensions of the IMST scale of value attributes: FV1 - Justice at Work, and FV4 - Wear and Dehumanization, as presented in Tables 1 and 2.

Table 1 - Items on scale FV1: Justice at Work

| | |
|-----|--|
| A8 | If I work, I have a well-deserved economic return. |
| A11 | In my work all necessary care is taken to the hygiene of the environment. |
| A12 | By doing my tasks, I do not take physical risks |
| A18 | The work gives me the main assistance (transportation, education, health, housing, retirement, etc.) |
| A20 | The company fulfills obligations with me |
| A24 | What I get is enough and according to my effort. |
| A27 | I work with comfort in the proper forms of hygiene, availability of materials, adequate equipment and convenience of schedule. |
| A41 | All workers strive like me. |
| A43 | In my work all the recommended safety measures are adopted. |
| A45 | Everyone who works has the same rights. |
| A50 | Work in clean environment. |
| A53 | In my work, I have the necessary tools. |
| A54 | I get all the assistance I deserve. |

Source: Prepared by the authors, from Borges; Alves and Tamayo (2008).

Table 2 - FV4 Scale Items: Wear and Dehumanization

| | |
|-----|---|
| A21 | Working requires physical (bodily) effort |
| A35 | The work is to be done according to what the superiors say. |
| A36 | Every day I do similar tasks. |
| A38 | Work is busy when working at home too. |
| A39 | To work is to do the task. |
| A42 | Working, I feel like a machine or an animal. |
| A44 | I am discriminated against because of my work |
| A47 | The work leaves me exhausted. |
| A48 | Working, I feel busy. |
| A52 | In my work, they are always demanding me fast. |
| A55 | I have to finish my tasks in a hurry |

Source: Prepared by the authors, from Borges; Alves and Tamayo (2008).

Table 3 below presents the main descriptive statistics of the evaluative attributes of the dimensions FV1 and FV4. The variables A8, A21, A24, A42, A43, A44 and A47 did not present any variability, which justifies their exclusion from the study.

Table 3 - Descriptive Statistics

| Scale Items | N | average | DP | median | minimu m | maximu m | range | asym metry | curtose | standard error |
|-------------|-----|---------|------|--------|----------|----------|-------|------------|---------|----------------|
| A8 | 200 | 4.00 | | 4 | 4 | 4 | | | | |
| A21 | | | | | | | | | | |
| A24 | 200 | 4.00 | | 4 | 4 | 4 | | | | |
| A42 | | | | | | | | | | |
| A43 | 200 | 4.00 | | 4 | 4 | 4 | | | | |
| A44 | | | | | | | | | | |
| A47 | 32 | 1.00 | | 1 | 1 | 1 | | | | |
| A11 | 200 | 3.92 | 0.27 | 4 | 3 | 4 | 1 | -3.07 | 7.48 | 0.02 |
| A12 | 200 | 3.94 | 0.24 | 4 | 3 | 4 | 1 | -3.68 | 11.58 | 0.02 |
| A18 | 200 | 3.72 | 0.45 | 4 | 3 | 4 | 1 | -0.97 | -1.06 | 0.03 |
| A20 | 200 | 3.70 | 0.46 | 4 | 3 | 4 | 1 | -0.87 | -1.26 | 0.03 |
| A27 | 200 | 3.83 | 0.38 | 4 | 3 | 4 | 1 | -1.70 | 0.89 | 0.03 |
| A35 | 200 | 3.38 | 0.75 | 4 | 2 | 4 | 2 | -0.74 | -0.86 | 0.05 |
| A36 | 200 | 1.36 | 0.63 | 1 | 1 | 3 | 2 | 1.51 | 1.06 | 0.04 |
| A38 | 200 | 2.05 | 1.05 | 2 | 1 | 4 | 3 | 0.50 | -1.07 | 0.07 |
| A39 | 200 | 3.31 | 0.73 | 3 | 2 | 4 | 2 | -0.56 | -0.98 | 0.05 |
| A41 | 200 | 3.59 | 0.49 | 4 | 3 | 4 | 1 | -0.36 | -1.88 | 0.03 |
| A45 | 200 | 3.84 | 0.37 | 4 | 3 | 4 | 1 | -1.84 | 1.40 | 0.03 |
| A48 | 200 | 3.48 | 0.50 | 3 | 3 | 4 | 1 | 0.10 | -2.00 | 0.04 |
| A50 | 200 | 3.84 | 0.37 | 4 | 3 | 4 | 1 | -1.84 | 1.40 | 0.03 |
| A52 | 200 | 1.85 | 0.67 | 2 | 1 | 3 | 2 | 0.18 | -0.82 | 0.05 |
| A53 | 200 | 3.92 | 0.27 | 4 | 3 | 4 | 1 | -3.07 | 7.48 | 0.02 |
| A54 | 200 | 3.76 | 0.43 | 4 | 3 | 4 | 1 | -1.21 | -0.54 | 0.03 |
| A55 | 101 | 1.39 | 0.49 | 1 | 1 | 2 | 1 | 0.46 | -1.81 | 0.05 |

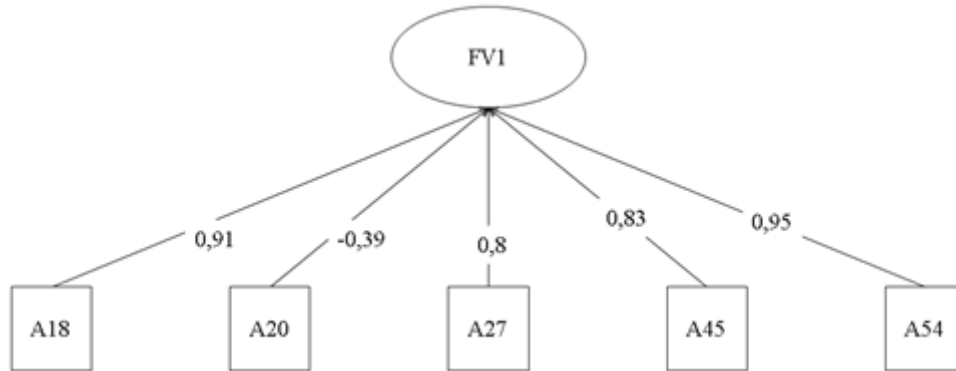
Source: Prepared by the authors.

CFA was used to empirically test the IMST scale. Factors FV1: Justice at Work and FV4: Wear and dehumanization were individually tested. However, they did not present satisfactory results with respect to the fit adjustment indices.

Initially, we sought to identify the items that presented problems in the first factor: A11, A12, A50 and A53. Confirmatory factor analysis of the FV1 dimension shows unsatisfactory fit indices (χ^2 normed: 437 CFI: 0.933 RMSEA: 0.173 CI: 0.215 SRMR: 0.1 GFI: 1.0), which led us to test an alternative model, excluding the above-mentioned items.

The model presents a significant improvement in the adjustment indices (χ^2 normed: 14 CFI: 0.994 RMSEA: 0.059 CI: 0.125 SRMR: 0.069 GFI: 1.0), with χ^2 RMSEA and SRMR deemed acceptable.

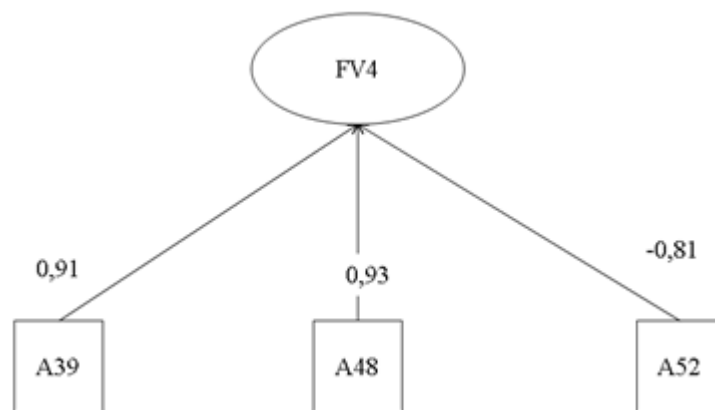
Figure 1 - Scale of the evaluative attributes of justice at work



Source: Prepared by the authors.

Regarding the FV4 dimension, the initial test presented normed χ^2 : 14 CFI: 0.994 RMSEA: 0.059 CI: 0.125 SRMR: 0.069 GFI: 1.0. After removing items A35, A36 and A38, an improvement in the fit adjustment indices is obtained: normed χ^2 : 12 CFI: 0.998 RMSEA: 0.112 CI: 0 SRMR: 0.043 GFI: 0.999. Similarly, fit indices of the alternative model are deemed acceptable.

Figure 2 - Scale of value attributes of Wear and Dehumanization



Source: Prepared by the authors.

Subsequently, the convergent validity was analyzed. The extracted variance (VME) of factor FV1 is 0.6198, and the composite reliability (CC) is 0.8835. In turn, the factor FV4 has VME = 0.6431 and CC = 0.7595. All these values are within the recommended VME (> 0.5)

and CC (> 0.7) parameters, leading us to conclude that the dimensions have convergent validity (HAIR *et al.*, 2009).

To analyze the discriminant validity of the model, we first calculated the value of χ^2 for the free model, then estimate a second model with correlation between factors = 1. The calculated χ^2 are, respectively, 35.75 and 315.46, which allows us to reject the null hypothesis that the correlation between the factors has unit value. This confers discriminant validity to the model tested.

When analyzing the conceptual structure of the meaning of work model, we conclude that when some factors that capture spurious concepts are removed, the scale performance is improved. The empirical tests allow us to conclude that:

(a) The construct has scale validity; In other words, the scale is useful for explaining the nature of the latent trait, for which no external criteria are available, as well as for verifying the legitimacy of the representation of human behavior (PASQUALI, 2007);

(b) The scale has criterion validity, which corresponds to the degree of effectiveness of the scale in the prediction. Convergent validity corresponds to the degree to which two measures of the same concept are correlated, while discriminant validity corresponds to the degree to which one construct is truly different from others;

(c) Reliability - measured by internal consistency (Cronbach's alpha) - and composite reliability attest the scale reliability, in line with the parameters presented by Hair Jr. *et al.* (2009);

(d) Factor loadings and fit indicators confirm the validity of the structural and measurement model, as well as the dimensionality of the analyzed constructs, in line with the accepted parameters (BIDO, 2014; HAIR JR. *et al.*, 2009).

It is worth noting that these results reinforce the concepts presented in the literature review, indicating that work stress has a negative effect, in line with Blake; Richard and Ryan's work (2016). In addition, trust in the organization (manifested through the two dimensions) corroborates the research by Oliveira and Souza (2014).

As recommended by Siqueira (2008), Justice at work confirms the importance of material conditions, assistance, hygiene in relation to the characteristics of the work activity, as well as the balance of efforts and rights and the fulfillment of obligations by the organization.

In line with the postulates of Schonberger and Brown (2017) and Serrano *et al.* (2017), the wear and dehumanization dimensions confirms that haste, busyness and dehumanization lead the worker to express unfavorable feelings about work, which in turns leads to dissatisfaction. In addition, they are part of a value structure, as posited by Siqueira (2008).

The results presented herein match the postulates of Cassar and Meier (2018). These authors raised important questions regarding non-monetary incentives in the meaning of work. This finding reinforces a stream of research aimed at the management of labor relations in modern organizations.

It should be noted that the removal of items from the scale implies an adaptation of the conceptual model. In this context, Hinkin (1995; 1998) advocates the collection of a new sample for scale validation purposes. In this scenario, it is relevant to understand if there are any questions related to the face validity of the items withdrawn, or whether the IMST scale development failed to consider some appropriate aspect for the target audience.

In future research, it is recommended that the instrument items be reviewed and retested. Thus, the conclusion is that the results herein presented partially corroborate Borges; Alves and Tamayo's previous research (2008), while suggesting that the constructs developed by the authors be reviewed.

5. CONCLUSIONS

This research points to recommended procedures in the application of the confirmatory techniques for the development of theory in the field of business administration.

Comparing the scale replication results, from a confirmatory methodological perspective, renders it possible to highlight the situations in which there may be differences in the research context. This allows researchers to identify possible interpretation problems and issues related to the face validity of the scale.

The application of the confirmatory technique on the Borges; Alves and Tamayo's scale (2008) indicates that successive refinements of the scale are required. These should be followed by research procedures that maintain the conceptual structure of the evaluative attributes, while it identifies and avoids "irrelevant spaces" of the construct.

The procedure of replication of a scale, from a confirmatory statistical and methodological perspective, highlights situations where there are differences in context, interpretation problems, or issues related to the face validity of scale items.

In conclusion, in view of the objective of improving the IMST instrument and in answering the research question, using confirmatory techniques allows us to identify that the underlying dimensions of the scale, which could be a reason for the contamination of the measurement scale. In this sense, for further research are indicated for the development of the scale.

In addition to the statistical analysis, it is necessary to adapt the instrument – which, according to Borsa; Damasio e Bandeira (2012) is a complex process that requires high methodological rigor. It is however necessary to discuss considerations concerning the cross-cultural adaptation of instruments.

In this context, this paper contextualizes the need and appreciation of the instrument for measuring the meaning of work presented in the theoretical framework. We consider that we are living a transition period, whereby the relationship of people with work requires some technological adaptation, accumulation of knowledge and higher levels of complexity in terms of information processing, in addition to shaping new forms of communication.

On one hand, there is a great demand for these technological convergences, and on the other hand we face significant transformations in various aspects of human behavior. The meaning of the work demands the stoning of personal and organizational values to generate consistent bonds that lead to the construction of trust and ethical relations. Further studies should be directed to improve the instruments, so that they can reflect the technological reality that shapes relationships, in order to reflect the contemporary meaning of the work.

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