

WORK DESIGN: WORK FEATURES OF CIVIL SERVANTS OF THE SUPERIOR COURT OF JUSTICE

PABLO F. P. FREITAS¹

 <https://orcid.org/0000-0003-0369-0783>

CATARINA C. ODELIUS¹

 <https://orcid.org/0000-0002-2152-5194>

To cite this paper: Freitas, P. F. P., & Odelius, C. C. (2021). Work design: Work features of civil servants of the Superior Court of Justice. *Revista de Administração Mackenzie*, 22(3), 1–29. doi:10.1590/1678-6971/eRAMG210192

Submission: Nov. 13, 2019. **Acceptance:** Sept. 8, 2020.

¹ University of Brasília (UnB), Brasília, DF, Brazil.



This is an open-access article distributed under the terms of the Creative Commons Attribution License.

This paper may be copied, distributed, displayed, transmitted or adapted for any purpose, even commercially, if provided, in a clear and explicit way, the name of the journal, the edition, the year and the pages on which the paper was originally published, but not suggesting that RAM endorses paper reuse. This licensing term should be made explicit in cases of reuse or distribution to third parties.

Este artigo pode ser copiado, distribuído, exibido, transmitido ou adaptado para qualquer fim, mesmo que comercial, desde que citados, de forma clara e explícita, o nome da revista, a edição, o ano e as páginas nas quais o artigo foi publicado originalmente, mas sem sugerir que a RAM endosse a reutilização do artigo. Esse termo de licenciamento deve ser explicitado para os casos de reutilização ou distribuição para terceiros.



ABSTRACT

Purpose: To identify and analyze differences in the tasks, knowledge, and social features of the work of civil servants of the Superior Court of Justice, and, secondarily, to verify the factorial, convergent, predictive, and discriminative validity of the Work Design Questionnaire (WDQ) in the Brazilian Judiciary context.

Originality/value: With the WDQ's development, the work design became the subject of further studies all around the world. Also, in Brazil, since its translation and adaptation, this variable has caused great repercussions in people management, becoming the first study within the scope of the Brazilian Judiciary.

Design/methodology/approach: Through a survey sent to 2,898 civil servants, 895 responses were obtained and subjected to descriptive statistical analysis, confirmatory factorial analysis, reliability analysis, Kendall's tau correlation analysis, and the Kruskal-Wallis test.

Findings: The most indicated work feature was social support, and the least indicated was interaction outside the organization. Special knowledge was most required from professionals with higher education. For the men, there were more problem solving, specialized knowledge, and decision-making autonomy in their work. Civil servants who work in judicial activities claimed to have more meaningful tasks. Managers claimed to have less autonomy in planning their tasks, as all other civil servants stated that their work has a more definite beginning, middle, and end. In a public body of great size and complexity, work features are differentiated by their sociodemographic and functional variables, requiring customization in the management practices of people and organizational policies.

KEYWORDS

Work design. Work Design Questionnaire. Public sector. Judiciary. Superior Court of Justice.

1. INTRODUCTION

Work is a significant part of people's lives and, through it, individuals relate to each other, assume duties and responsibilities, serve society and, thus, in most cases, obtain income and support for their families (Guimarães, 2017). Among the themes related to the phenomenon of work, there is the "work design", which, again, specifies contents, methods, and relationships in the context of work and simultaneously seeks to generate results for the organization, as well as satisfaction and fulfillment for the worker, since a person's work is considered to affect their attitudes and behaviors (Parker, Morgeson, & Johns, 2017).

The most recent instrument of work design is the Work Design Questionnaire (WDQ), which was developed by Morgeson and Humphrey (2006), allowing a more complete appreciation of the modern work environment according to the literature (Parker et al., 2017).

In view of the positive impact of the WDQ, scholars of different nationalities sought to verify how the instrument behaved in other languages and cultures. In addition to the original version, published translations and adaptations of the WDQ were identified in German, Italian, Polish, French, Spanish (Colombian and Spanish versions), Dutch, and Portuguese (Portuguese and Brazilian versions). In addition to these, according to the website maintained by Morgeson (2018), one of the authors of the original WDQ, and also as pointed out by Ríos et al. (2017), there are studies in progress, not yet published, to make WDQ feasible in Chinese, Indonesian, Russian, Arabic, Hebrew, Japanese, and Korean.

The first translation of the WDQ into Brazilian Portuguese (WDQ-BR) was published in the framework of Guimarães' master's dissertation (2017) with public education professionals, such as teachers, administrative agents, cleaning, and security professionals, among others.

Based on this instrument, the present study aims to identify and analyze differences in tasks, knowledge, and social characteristics of the work of civil servants of the Superior Court of Justice (Superior Tribunal de Justiça – STJ), and, secondarily, to verify the factorial, convergent, predictive, and discriminant validity of the WDQ in the context of the Brazilian Judiciary.

This confirmation of the instrument's validity is necessary because, although it has already been applied in the public sector, it is believed that the Judiciary has peculiarities that require confirmation of the instrument's validity and reliability since these attributes are not watertight or perennial;



on the contrary, their adherence needs to be ratified to each new population, circumstance, context or purpose in which it is administered (Souza, Alexandre, & Guirardello, 2017).

Created in 1988 and composed of 33 magistrates and almost three thousand civil servants, the STJ is the largest Brazilian STJ, and it represents the last instance of the Judiciary for infra-constitutional causes (that is, that do not refer directly to the Federal Constitution). It is up to the STJ to definitively resolve civil and criminal cases that do not involve constitutional matters or specialized justice (labor, electoral and military), as well as to standardize the interpretation of federal law throughout Brazil (Freitas, Poncioni, & Odelius, 2015). The main activities of the STJ are to prosecute and judge crimes by authorities, such as state governors, judges, and members of the Courts of Accounts; in addition, numerous appeals, *habeas corpus*, writ of mandamus, conflicts of jurisdiction, and other relevant legal processes for maintaining the legal order, civil rights and democracy in Brazil reach the STJ.

In addition to accessibility, the STJ was selected for criteria such as size, social relevance, notoriety, repercussion of the institution in communication vehicles, and also because studies on the administration of Courts are increasingly recommended since this locus has received little attention from academic research (Guimarães, Odelius, Medeiros, & Santana, 2011).

It is expected, therefore, to close the research gap related to the lack of characterization of the work of civil servants working in the context of the Brazilian Judiciary. After all, you cannot make any organizational diagnosis or recommend measures or policies for managing people without knowing the human component and their perceptions of the work performed.

Finally, with regard to social and institutional justifications, it is considered that studying the design of work at the STJ, a large public body with social relevance, will bring contributions to other public institutions, resulting in potential benefits in structuring careers, positions, development programs, and people management policies. These institutional advances may guide future proposals for reformulating the work design of public servants, as well as provide a kind of “customization” of the work design with respect to the capacities, skills, needs, and interests of these employees, aiming at maximizing satisfaction and commitment to public institutions and, consequently, better meeting citizens’ demands (Ng & Feldman, 2009).



2. WORK DESIGN

The scope of what has become work has been expanding. In a traditional view, the design of work was defined as a set of tasks assigned to a worker in a restricted and prescriptive manner by the employer; for this definition, the term job design (Wong & Campion, 1991) was used. In a more current view, characterized by extended work design theory or work design in situ (Humphrey, Nahrgang, & Morgeson, 2007; Parker, Wall, & Cordery, 2001), emerging activities related to social treatment or even to tasks not assigned, but proposed and idealized by the worker, are admitted. For this definition, the expression work design (Ilgen & Hollenbeck, 1991; Parker et al., 2017) is used. It is common, in the contemporary context, for employees to expand their roles (Parker, Wall, & Jackson, 1997) and negotiate new activities (Ilgen & Hollenbeck, 1991; Rousseau, Ho, & Greenberg, 2006).

In contrast to the definition of job design, more restricted to assigned tasks (Parker & Wall, 1998), work design can be understood in several ways, such as: 1. the nature, content, and structure of the work, covering tasks and activities performed by employees in organizations (Hackman & Oldham, 1975); 2. the study, creation or modification of the composition, the content, the structure and the environment in which the work and roles are performed (Morgeson & Humphrey, 2006); 3. the content and organization of tasks, activities, relationships and work responsibilities (Parker, 2014); 4. the way in which the various tasks related to an occupational activity are grouped, whether they are assigned tasks, social tasks, or even tasks of own initiative (Parker et al., 2017); and 5. the real structure of the work that employees do in their organizations on a daily basis (Oldham, 2012).

The most current measurement instrument to characterize the design of the work is the WDQ. Its authors, Morgeson and Humphrey (2006) carried out an extensive literature review which enabled the cataloging of 107 characteristics, which were subjected to debates, comparative analysis, and classifications, resulting in 18 categories of work characteristics, grouped into three categories of higher-order (macro-dimensions): motivational (task and knowledge), social, and physical-contextual. During the performance of the confirmatory factor analysis (CFA) performed by Morgeson and Humphrey (2006), it was necessary to subdivide the interdependence factor into two (initiated and received) and the autonomy factor into three (work scheduling, decision-making, and working methods), totaling 21 factors, whose definitions are shown in Figure 2.1

(Figure 2.1)

THE 21 CONSTITUTIVE ELEMENTS OF WORK DESIGN

Major categories	Categories	Subcategories	Definitions	
	Task characteristics (how the work itself is accomplished and the range and nature of tasks associated with a particular job).	Autonomy: work scheduling decision-making work methods	The extent to which a job allows freedom, independence, and discretion to schedule work, make decisions, and choose the methods used to perform tasks.	
		Task variety	The degree to which a job requires employees to perform a wide range of tasks on the job.	
		Task significance	The degree to which a job influences the life or work of others, whether inside or outside the organization.	
		Task identity	The degree to which a job involves a whole piece of work, the results of which can be easily identified.	
		Feedback from job	The degree to which the job provides direct and clear information about the effectiveness of task performance.	
	Motivational work characteristics	Knowledge characteristics: (the kinds of knowledge, skill, and ability demands the job places on an individual).	Job complexity	The extent to which tasks on a job are complex and difficult to perform (requires high-level skills, more mentally demanding, etc.).
			Information processing	The degree to which a job requires attending to and processing data or other information.
Problem-solving			The degree to which a job requires unique ideas or solutions and reflects more active cognitive processing. This involves generating unique or innovative ideas or solutions, diagnosing and solving non-routine problems, and preventing or recovering from errors.	
Skills variety			The extent to which a job requires an individual to use a variety of different skills to complete the work.	
	Specialization		The extent to which a job involves performing specialized tasks or possessing specialized knowledge and skills.	

(continue)

(Figure 2.1 (conclusion))
THE 21 CONSTITUTIVE ELEMENTS OF WORK DESIGN

Major categories	Categories	Subcategories	Definitions
		Social support	The degree to which a job provides opportunities for advice and assistance from others.
Social characteristics	Interdependence (Initiated Received)		The degree to which a job depends on others and others depend on it. Interdependence can be either initiated or received depending on whether workflows from one job to others jobs or is affected by work from others jobs.
	Interaction outside the organization		The extent to which the job requires employees to interact and communicate with individuals external to the organization.
	Feedback from others		The degree to which others in the organization provide performance information (co-workers and supervisors, for example).
Contextual characteristics	Ergonomics		The degree to which a job allows correct or appropriate posture and movement.
	Physical requirements		The level of physical activity or effort required in the job.
	Work conditions		The environment where a job is performed: health hazards, noise, temperature, cleanliness, etc.
	Equipment use		The variety and complexity of technology and equipment used in a job.

Source: Rios et al. (2017, p. 5).

3. METHOD

The research is characterized as a quantitative, census, descriptive and cross-sectional study (Creswell, 2013; Richardson, 2010). The 2,889 active civil servants of the STJ, of whom 342 act as public managers, were invited to participate in the research. A response rate of 30.88% was obtained, resulting in a total of 895 respondents (among them 243 managers).

Figure 3.1 summarises the main information about the sample.

(Figure 3.1)

SAMPLE CHARACTERISATION

Variable	Category	Managers		Civil servants	
		Frequency	Percentage	Frequency	Percentage
Type of respondent	Strategic manager	34	13.99%	0	0.00%
	Tactical manager	51	20.99%	0	0.00%
	Operational manager	158	65.02%	0	0.00%
	Advisor civil servant	0	0.00%	100	15.34%
	Assistant civil servant	0	0.00%	323	49.54%
	Other civil servants (without extra remuneration)	0	0.00%	229	35.12%
	Total	243	100.00%	652	100.00%
Sex	Female	102	41.98%	367	56.29%
	Male	141	58.02%	285	43.71%
	Total	243	100.00%	652	100.00%
Age	20-29	3	1.23%	41	6.29%
	30-39	54	22.22%	215	32.98%
	40-49	100	41.15%	219	33.59%
	50-59	84	34.57%	170	26.07%
	60-69	2	0.82%	7	1.07%
	Total	243	100.00%	652	100.00%

(continue)

(Figure 3.1 (conclusion))
SAMPLE CHARACTERISATION

Variable	Category	Managers		Civil servants	
		Frequency	Percentage	Frequency	Percentage
Level of education	Elementary school	0	0.00%	1	0.15%
	High school	6	2.47%	34	5.21%
	Higher education	45	18.52%	145	22.24%
	Specialization	179	73.66%	438	67.18%
	Master's	13	5.35%	32	4.91%
	Doctorate	0	0.00%	2	0.31%
	Total	243	100.00%	652	100.00%
Position	Legal analyst	90	37.04%	279	42.79%
	Judicial technician	135	55.56%	348	53.37%
	From another organ	14	5.76%	22	3.37%
	Without effective link	4	1.65%	3	0.46%
	Total	243	100.00%	652	100.00%
Time in STJ	0-9	69	28.40%	321	49.23%
	10-19	88	36.21%	176	26.99%
	20-29	80	32.92%	136	20.86%
	30-39	6	2.47%	19	2.91%
	Total	243	100.00%	652	100.00%
Predominant activity of the occupancy unit	Judicial activity	101	41.56%	327	50.15%
	Support activity	142	58.44%	325	49.85%
	Total	243	100.00%	652	100.00%

Source: Elaborated by the authors.

Among the managers, most of the respondents belong to the hierarchical operational level and are male, between 40 and 49 years old, with a *lato sensu* postgraduate degree (a specialization for working professionals), an effective position of judicial technician, more than ten years of experience in the STJ, and assigned to units that exercise, predominantly, ancillary activity (administrative support). Among the civil servants, there was a predomi-

nance of respondents with commissioned functions of lower complexity and remuneration (assistants), female, aged between 40 and 49, with education at the level of specialization, in the position of judicial technician, with less than ten years of experience in the STJ, and working in judicial activities (only a slightly higher difference in relation to the support activities).

The sample obtained maintains characteristics similar to the STJ population in terms of education and age and, in general, covers the multiplicity of groups and functional characteristics of the STJ.

The instrument was emailed directly to the civil servants and was answered between July and August 2018. Participants expressed their opinions about the characteristics of their own work (self-assessment) using a 5-point Likert scale that included items from “I totally disagree” to “I totally agree”, along with the option “does not apply”.

The items were organized by the theoretical dimension, as in the original version of the WDQ. And, as in the study by Gonçalves (2015) in Portugal, in view of the homogeneity of a sample of consultants, the dimension context characteristics (ergonomics, physical requirements, working conditions, and use of equipment) was not included in the instrument applied in the STJ because it was considered that the items of this dimension do not align with the studied work context, since most of the work is focused on administrative and procedural analysis routines, being performed in office environments. In addition, the context characteristics usually present inferior results in reliability and reveal instability in some items.

The data were processed using SPSS Statistics (version 22) and RStudio (version 1.1.383). Initially, considering that a minimum knowledge of the activities is a necessary condition for being able to respond about the design of the work, those respondents who had worked in the STJ for less than one year (one manager and 17 civil servants) were removed from the analysis, leaving 877 respondents (Hauk, 2014). Even so, a minimum of five respondents per item of the instrument was achieved (Bentler & Chou, 1987) and, since it is a factor analysis, the minimum of 200 participants was also respected (Pasquali, 2008).

The data analyses were based mainly on CFA, with analysis of the following adjustment indexes: chi-square statistic (X^2); Comparative Fit Index (CFI); Tucker-Lewis Index (TLI); Relative Noncentrality Index (RNI); Standardised Root Mean Square Residual (SRMR); and Root Mean Square Error of Approximation (RMSEA) (Brown, 2014; Hair, Black, Babin, Anderson, & Tatham, 2009). Reliability was verified by calculating Cronbach’s alpha, and comparisons between groups were performed using the Kruskal-Wallis



test (suitable for distributions without normality) combined with analysis of descriptive statistics (Field, 2009). The mentioned groups refer to the separation of the sample based on sociodemographic and functional data, such as managers and non-managers, men and women, analysts and technicians, among other segments.

Regarding the initial treatment of the data, there were no missing values, as all responses were mandatory. However, it was observed that 2.81% of the answers were marked as “not applicable”, on average, with 1.47% in relation to managers and 3.32% in relation to civil servants. Although this percentage was quite low, indicating that, in general, the items were applied to the population studied, it was decided to equate these responses with missing values, which were estimated using the Linear trend at point method, reducing limitations to future analyses (Jesus & Laros, 2004).

To avoid damage to the factorability and the magnitude of the factor loadings (Field, 2009), we opted to exclude eleven multivariate outliers (nine managers and two civil servants), leaving 868 individuals in the sample, but this removal did not negatively affect the minimum sample.

It was identified that the distribution was devoid of normality, that there was no evidence to reject the hypothesis of homoscedasticity, that about 75.8% of the relationships were linear, and that only one correlation signaled multicollinearity (Pasquali, 2010), with an association of 0.918 between the items “Work has a great impact on people outside the institution” and “The work I do has a significant impact on people outside the institution”. The variance inflation factor (VIF) also detected multicollinearity for the latter item (Pasquali, 2010). These characteristics do not prevent the factorial analysis from being performed due to the robustness of this technique (Brown, 2014; Laros, 2012; León, 2011; Pasquali, 2010), especially when there are more than 200 subjects (Hair et al., 2009; Pasquali, 2010).

As the responses related to the WDQ-BR were collected as discrete variables on a Likert agreement scale but actually refer to continuous data, the recommendation to use the Robust Weighted Least Squares estimator based on polychoric correlations was followed (Flora & Curran, 2004).

4. PRESENTATION AND DISCUSSION OF RESULTS

Initially, the averages, medians, and standard deviations of each factor are presented relative to the task, knowledge, and social characteristics in the work of civil servants and managers of the STJ, as shown in Figure 4.1.

(Figure 4.1)

DESCRIPTIVE STATISTICS

Factors	General				Managers			Civil servants		
	Average	Median	Standard deviation		Average	Median	Standard deviation	Average	Median	Standard deviation
Work scheduling autonomy	3.52	4.00	1.02		3.47	4.00	0.94	3.54	4.00	1.06
Decision-making autonomy	3.05	3.00	1.08		3.34	4.00	0.99	2.94	3.00	1.09
Work methods autonomy	3.23	3.00	1.06		3.32	4.00	0.96	3.19	3.00	1.10
Task variety	3.64	4.00	1.09		4.20	4.00	0.84	3.43	4.00	1.10
Task significance	4.06	4.00	0.85		4.18	4.00	0.74	4.01	4.00	0.88
Task identity	4.06	4.00	0.79		4.04	4.00	0.74	4.06	4.00	0.81
Feedback from job	3.41	4.00	1.05		3.51	4.00	0.99	3.37	4.00	1.07
Job complexity	3.42	3.50	0.98		3.64	4.00	0.90	3.33	3.50	1.00
Information processing	4.06	4.00	0.76		4.34	4.00	0.59	3.94	4.00	0.79
Problem-solving	3.49	3.50	0.94		3.67	4.00	0.90	3.42	3.50	0.95
Skills variety	3.84	4.00	0.90		4.12	4.00	0.82	3.73	4.00	0.90
Specialization	3.66	4.00	0.99		3.76	4.00	0.92	3.62	4.00	1.01
Social support	4.43	4.50	0.58		4.51	4.50	0.52	4.40	4.50	0.60
Interdependence initiated	3.26	3.17	1.14		3.46	3.66	1.14	3.19	3.17	1.13
Interdependence received	3.58	4.00	1.09		3.94	4.00	0.97	3.44	4.00	1.11
Interaction outside the organization	2.76	2.80	1.15		3.18	3.00	1.16	2.60	2.80	1.11
Feedback from others	3.26	3.31	1.05		3.44	4.00	0.97	3.19	3.00	1.08

Source: Elaborated by the authors.

In general, there are, on the part of STJ managers, higher rates for almost all factors, except for the following: 1. work scheduling autonomy – possibly due to the fact that 65% of the sample managers are from the operational level and that, although they have a certain autonomy in decision-making and methods, they need to follow the schedule and guidelines established by tactical and strategic managers; and 2. identity of the task – probably because the civil servants usually have activities with a clearer beginning and end, whereas managers have more complex assignments and with systemic repercussions, often without a more rigid delimitation.

The least recognized feature of the work was interaction outside the organization, with an overall average of 2.76. Part of this result can be explained by the nature of the body, which is a Superior Court (also considered to be of third instance) and which does not usually produce evidence, deal directly with witnesses, or with the parties, among other jurisdictions. Also, the expected rigor of civil servants in the Judiciary in relation to the principle of impersonality can contribute to low interaction with people outside the body as a way of avoiding suspicions regarding the fairness and correctness of judicial decisions.

On the other hand, the most recognized work characteristic in the STJ sample is Social Support, with an average of 4.43, which means that the work at the agency provides friendly relationships, that people care about each other, and that managers tend to be concerned with the welfare of employees. This result is very positive because the literature points out that social support tends to favor a learning culture (Coelho & Mourão, 2011), reduce turnover intention rates (Zaniboni, Truxillo, & Fraccaroli, 2013), contribute to the level of employee satisfaction, and avoid environments prone to suffering, tensions, and work overload, in addition to reflecting the quality of the leadership exercised (Buttigieg & West, 2013).

Regarding the evidence of the factorial, convergent, predictive, and discriminant validity of the WDQ in the context of the Brazilian Judiciary, as the main results of the CFA, from the reliability analysis, Kendall's tau correlation analysis, and the Kruskal-Wallis test, the analysis of the differences in the design of the work of groups of civil servants, organized according to sociodemographic and functional variables, will also be evident.

The CFA demonstrated that the solution with the best adjustment was in the form of 17 factors, in a way equivalent to that found in the original WDQ study developed by Morgeson and Humphrey (2006) in the United States, considering the subtraction of the four factors of the macro-dimension Contextual characteristics, whose 14 items were not collected. The

21-factor solution (17 factors now studied plus the four factors of the Contextual characteristics) was also reported as the most feasible solution by Stegmann et al. (2010) in Germany, by Zaniboni et al. (2013) in Italy, by Bigot et al. (2014) in France, by Bayona, Caballer, and Peiró (2015) in Colombia, by Gorgievski, Peeters, Rietzschel, and Bipp (2016) in the Netherlands, and by Ríos et al. (2017) in Spain.

The adjustment indices obtained in the CFA were excellent, as shown in Figure 4.2.

(Figure 4.2)
CFA RESULTS

Measure	Expected values according to Hair et al. (2009, p. 573) (N = 868 63 variables)	Results
χ^2	p-values can be significant	6564.997 (p-value=0)
CFI	Above 0.92	0.971
TLI	Above 0.92	0.968
RNI	Above 0.92	0.971
RMSEA	Below 0.07 (with CFI \geq 0.90)	0.056
SRMR	Up to 0.08 (with CFI > 0.92)	0.057

Fonte: Elaborated by the authors.

The factor loadings, standard errors, and extracted variances are shown in Figure 4.3.

(Figure 4.3)

RESULTS OF CONFIRMATORY FACTOR ANALYSIS - 17 FACTORS

Factor	Task features	Factor loading	Standard error	Extracted variance
Work scheduling autonomy	The work allows me to decide when to do my activities.	0.715	-	51.20%
	The work allows me to decide the order in which things are done.	0.802	0.049	64.30%
	The work allows me to plan how to do my activities.	0.844	0.051	71.20%

(continue)

(Figure 4.3 (continuation))**RESULTS OF CONFIRMATORY FACTOR ANALYSIS - 17 FACTORS**

Factor	Task features	Factor loading	Standard error	Extracted variance
Decision-making autonomy	The work gives me the opportunity to use my personal initiative or judgment to do it.	0.796	-	63.40%
	The work allows me to make many decisions on my own.	0.903	0.025	81.60%
	The work gives me a lot of autonomy to make decisions.	0.92	0.026	84.70%
Work methods autonomy	The work allows me to make decisions about the methods I use to do it.	0.853	-	72.70%
	The work gives me many opportunities for independence and freedom in the way I do it.	0.935	0.02	87.40%
	The work allows me to decide on my own how to do it.	0.852	0.019	72.50%
Task variety	The work includes a wide variety of tasks.	0.931	-	86.70%
	The work is to do many different things.	0.95	0.006	90.30%
	The work requires performing a wide range of tasks.	0.97	0.006	94.20%
	The work includes performing a variety of tasks.	0.968	0.006	93.70%
Task significance	The results of my work are likely to significantly affect other people's lives.	0.797	-	63.50%
	The work itself is very significant and important in a broader context.	0.863	0.029	74.50%
	The work has a great impact on people outside the institution.	0.983	0.027	96.60%
	The work I do has a significant impact on people outside the institution.	0.979	0.027	95.80%
Task identity	The work is to complete activities that have a clear beginning and end.	0.739	-	54.60%
	The work is organized so that I can carry out a complete activity from the beginning to the end.	0.802	0.028	64.40%
	The work gives me the possibility to completely finish the activities I started.	0.958	0.034	91.80%
	The work allows me to complete what I started.	0.953	0.034	90.80%

(continue)

(Figure 4.3 (continuation))

RESULTS OF CONFIRMATORY FACTOR ANALYSIS - 17 FACTORS

Factor	Task features	Factor loading	Standard error	Extracted variance
Feedback from job	The work activities alone provide direct and clear information about the effectiveness (for example, quality and quantity) of my performance.	0.811	-	65.70%
	The work alone provides feedback on my performance.	0.972	0.02	94.60%
	The work alone provides information about my performance.	0.973	0.02	94.70%
Factor	Knowledge features	Factor loading	Standard error	Extracted variance
Job complexity	The work requires me to do only one task or activity at a time.	0.392	-	15.40%
	The work tasks are simple and uncomplicated.	0.917	0.211	84.10%
	The work covers relatively uncomplicated tasks.	0.869	0.198	75.50%
	The work includes performing relatively simple tasks.	0.808	0.188	65.30%
Information processing	The work requires me to monitor a large amount of information.	0.754	-	56.90%
	The work requires a great mental effort.	0.852	0.033	72.50%
	The work requires me to be aware of more than one task at a time.	0.69	0.029	47.60%
	The work requires me to analyze a large amount of information.	0.84	0.03	70.60%
Problem-solving	The work includes solving problems without an obvious right answer.	0.696	-	48.40%
	The work requires me to be creative.	0.792	0.047	62.80%
	The work often includes dealing with problems that I have never seen before.	0.724	0.043	52.40%
	The work requires unique ideas or solutions to problems.	0.584	0.043	34.10%
Skills variety	The work requires a variety of skills.	0.955	-	91.10%
	The work requires me to use several different skills to complete it.	0.957	0.006	91.60%

(continue)

(Figure 4.3 (continuation))**RESULTS OF CONFIRMATORY FACTOR ANALYSIS - 17 FACTORS**

Factor	Knowledge features	Factor loading	Standard error	Extracted variance
Skills variety	The work requires me to use several complex or high-level skills.	0.894	0.01	79.90%
	The work requires the use of a variety of skills.	0.916	0.008	83.90%
Specialization	The work is highly specialized in terms of its purpose, tasks, or activities.	0.912	-	83.10%
	The tools, procedures, materials, etc. used in work are highly specialized.	0.76	0.016	57.80%
	The work requires very specialized knowledge and skills.	0.925	0.014	85.50%
	The work requires deep knowledge and experience.	0.92	0.014	84.60%
Factor	Social features	Factor loading	Standard error	Extracted variance
Social support	I have the opportunity to build friendly relationships in my job.	0.794	-	63.10%
	I have the chance, in my job, to get to know other people	0.935	0.028	87.50%
	I have the opportunity to meet other people at work.	0.929	0.026	86.20%
	The person who supervises me is concerned with the welfare of those who work for him/her.	0.628	0.034	39.40%
	The people I work with care about me.	0.793	0.029	62.90%
	The people I work with are friendly.	0.787	0.032	61.90%
Interdependence initiated	The work requires me to carry out my activities before others finish theirs.	0.588	-	34.60%
	Other works depend directly on mine.	0.868	0.077	75.30%
	Unless my work is done, other works cannot be completed.	0.837	0.072	70.00%
Interdependence received	The work activities to be completed are greatly affected by the work of several different people.	0.81	-	65.60%
	My work depends on the work of many other people for its accomplishment.	0.908	0.037	82.40%

(continue)

(Figure 4.3 (conclusion))

RESULTS OF CONFIRMATORY FACTOR ANALYSIS - 17 FACTORS

Factor	Social features	Factor loading	Standard error	Extracted variance
Interdependence received	My work cannot be done unless other people do theirs.	0.757	0.031	57.30%
	The work requires spending a lot of time with people outside my institution.	0.754	-	56.80%
Interaction outside organization	The work includes interacting with people who do not belong to my institution.	0.846	0.023	71.50%
	At work, I often communicate with people who do not work at my institution.	0.943	0.027	89.00%
	The work includes a large number of interactions with people outside my organization.	0.926	0.027	85.70%
Feedback from others	I get a lot of information from my immediate boss and colleagues about my work performance.	0.806	-	65.00%
	Other people in the organization, such as superiors and colleagues, provide me with information about the effectiveness of my work (for example, quantity and quality).	0.908	0.031	82.50%
	I receive feedback on my work performance from others in my organization (for example, immediate superiors and colleagues).	0.886	0.026	78.50%

The items refer to the Brazilian version of the WDQ, according to Guimarães (2017).

Source: Elaborated by the authors.

To verify the convergent validity, the factor loadings, extracted variance, and reliability of the 17 factors were analyzed.

In addition to achieving good adjustment rates, the results showed excellent reliability for all factors, with Cronbach’s alphas between 0.735 (for the Job complexity factor) and 0.958 (for the Task variety factor), in addition to an average alpha of 0.845 (Field, 2009; Pasquali, 2010).

As for the extracted variance, only the problem-solving factor was below 50%, but the value was very close to it (49.42%). This lower variance for that factor converges with the findings of Guimarães (2017) in WDQ-BR, of Bayona et al. (2015) in the Colombian study; of Gonçalves (2015) in the Portuguese study, and of Ríos et al. (2017) in the Spanish study. According to these authors, the items in the problem resolution factor share variance with other factors, mainly with the factors Information processing and Skills

variety. In this sense, it is suggested that the wording for the items that compose it be rethought. The item “The work includes solving problems without an obvious right answer”, for example, could be revised to “The work includes solving problems for which there is no obvious answer”. And the item “The work requires unique ideas or solutions to problems” could be rewritten with the following words: “The work requires unique ideas and solutions for each problem”.

Finally, as for the factor loadings, six items of five different factors presented loadings less than 0.700, and five of them did not present such low values, with an average of 0.637, with some of them including factor loadings very close to 0.700, such as “The work requires me to be aware of more than one task at a time” (0.690 loadings) and “The work includes solving problems without an obvious right answer” (0.696 loadings).

Only the item “The work requires me to do only one task or activity at a time”, from the Job complexity factor, had a considerably lower factor loading, of 0.392, but still, none of the loadings reached the minimum level of 0.320, as proposed by Tabachnick and Fidell (2007). This finding reinforces the result obtained in the French version, in which Bigot et al. (2014) reported low factor loadings on items of this factor. Anyway, it is worth emphasizing that all items of the Work complexity factor received reverse coding because they are negative statements, which may be one of the reasons for the low factor loading (Bayona et al., 2015; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). It is possible that the reformulation of items in the form of a positive statement would solve the identified problem.

As a comparison, as in the present study, the Social Support factor presented items with lower loadings in the studies by Bigot et al. (2014) in the French version and by Gorgievski et al. (2016) in the Dutch version. Also, Guimarães (2017), in the WDQ-BR, considered the possibility of subdividing the Social Support factor in two: one regarding the way the respondent perceives the support relationship; and the other regarding the way the respondent believes that others perceive him/her. As a suggestion for improvement, it is proposed that the item “The person who supervises me is concerned with the welfare of those who work for him/her” should be rewritten as follows: “My boss is concerned with the well-being of the people on the team”.

To analyze the predictive (or criterion) validity of the instrument, the scale’s ability to reveal expected differences with respect to different groups of respondents was verified (Hair et al., 2009). For that, some theoretical propositions and empirical findings were recovered from being analyzed by the Kruskal-Wallis test, as shown in Figure 4.4.

(Figure 4.4)

ELEMENTS OF VALIDITY CRITERION

	WDQ factor	Kruskal-Wallis	p-value	Category	Average	Median	Standard deviation
Education	Specialization	11.37	0.044	Doctorate	4.50	4.50	0.71
				Master's	3.83	4.00	0.95
				Specialization	3.70	4.00	0.98
				Higher education	3.52	4.00	1.04
				High school	3.38	3.50	0.91
Sex	Decision-making autonomy	15.13	0.000	Female	2.92	3.00	1.09
				Male	3.21	3.00	1.05
	Problem-solving	5.10	0.024	Female	3.43	3.50	0.96
				Male	3.56	4.00	0.91
	Specialization	25.88	0.000	Female	3.49	4.00	1.04
				Male	3.84	4.00	0.89
Human life	Meaning of the task	148.23	0.000	Judicial activity	4.41	4.50	0.70
				Support activity	3.74	4.00	0.85
External activities	Interaction outside organization	18989	0.000	Strategic level managers	3.54	3.50	1.15
				Other respondents	2.73	2.80	1.14
	Interaction outside organization	22943	0.000	Strategic and tactical level managers	3.32	3.00	1.17
				Operational managers and civil servants	2.70	2.80	1.14
	Interaction outside organization	96326	0.000	Managers	3.18	3.00	1.16
				Civil servants	2.60	2.80	1.11

Source: Elaborated by the authors.

As for education, the results showed that there are significant differences between the groups categorized by level of education. In turn, descriptive statistics confirm the theoretical proposition that the higher the level of education, the greater the perception that the respondents' work is more specialized, and vice-versa (Bigot et al., 2014; Gorgievski et al., 2016; Morgeson

& Humphrey, 2006; Ríos et al., 2017). In view of this result and considering that the interface between the legal field and artificial intelligence is already beginning to demonstrate that, in the short and medium terms, the algorithms will be able to handle simpler judicial decisions, civil servants will be left with more complex cases that require a higher level of specialization. Thus, it is recommended that the agency considers investing in policies to encourage the raising of the educational level of the staff, for example, through campaigns, raising requirements for entry into office, total or partial funding for graduate scholarships, and/or partnerships with universities.

In relation to sex, men, when compared to women, declared that they perform more work that requires the development of solutions to problems, as well as more specialized tasks, and that gives them more Decision-making autonomy, which confirms the theoretical proposal of Bigot et al. (2014). Although the demographic data of the population indicate that there is a balance in the number of male and female civil servants and managers, the results support a distinction in perceptions regarding three motivational characteristics of work (autonomy, problem-solving, and specialization). It is important to diagnose the reasons that lead to these differences and to propose affirmative policies that promote gender equality not only in quantitative terms but mainly in qualitative aspects, capable of leading women to perceive a higher level of motivation in their work.

As for work related to human life, considering that civil servants in the judicial activities of the STJ deal with legal aspects related to citizenship, civil rights, criminal matters, and family disputes, among other issues that indirectly impact human life, the results showed that there are significant differences between the groups of civil servants in the judicial activities and in the support activities. This indicates that the descriptive statistics in the meaning of the task is higher for those working in the judicial activities of the STJ, which confirms the studies by Gorgievski et al. (2016), Morgeson and Humphrey (2006), and Ríos et al. (2017), analogous with work that deals directly with human life (such as health professionals).

Lastly, with regard to work that focuses on external activities (such as sales or commercial professionals), an analogy with managerial work was idealized since the STJ does not carry out work of a commercial nature comparable to the studies by Morgeson and Humphrey (2006) and Ríos et al. (2017). Therefore, the analysis was based on the hypothesis that managers would be more focused on the external environment, interacting more with people outside the STJ, especially those at the strategic level, aiming at exercising competencies such as working in networks, fundraising, negotiating



with partner organizations, and political skills (Freitas & Odelius, 2018). In view of this analogy, the results confirmed that the higher the hierarchical level, the greater the interaction outside the organization, confirming previous studies.

Regarding the discriminant validity, Kendall's tau correlation was used, given the lack of normality in the data distribution. Taking Shipp, Burns, and Desmul (2010) as a parameter, there was discriminant validity for the instrument since the correlation coefficients between the 17 factors were all less than 0.85, which attests to the instrument's discriminating validity, even in the case of variables close to the same construct. The highest coefficient was 0.531, between Skills variety and Information processing, and the lowest was -0.001, between Interdependence received and Work methods autonomy.

Thus, it would be crucial for organizations to better identify the work design and establish organizational policies and people management practices compatible with the characteristics of the work of each group of employees. The STJ can, for example, take advantage of Social Support identified as the most recognized feature in the work of its staff. It is also possible to analyze whether low interaction outside the organization is a natural characteristic of the organization or whether it may represent a culture of introjection, introspection, or isolation, which needs to be combated.

5. FINAL CONSIDERATIONS

The present study achieved the objective of identifying and analyzing differences in the task, knowledge, and social characteristics in the work of civil servants of the STJ, presenting, secondarily, evidence of factorial, convergent, predictive, and discriminating validity of the WDQ in the context of the Brazilian Judiciary.

From a sample of 895 STJ civil servants and managers, the main findings of the study were:

- The most recognized feature of the work was social support, while the least recognized was interaction outside the organization.
- Specialized knowledge is more required from higher education professionals.
- In men's work, there is more problem solving, more specialized knowledge, and decision-making autonomy.
- Civil servants who work in judicial activities claim to perform tasks with more meaning.

- Managers believe they have less autonomy to plan tasks, while the other employees state that their work has a better-defined beginning, middle, and end.

These results may signal, for example, that: policies to promote increased schooling could be a viable way to perform more specialized work; there is a need for affirmative policies for the qualitative balance of opportunities for female employees in more thought-provoking, challenging, autonomous, and specialized work; there is a lack of visualization of the impact of the work of civil servants of the support activities on the results and services provided by the judicial activities; managers would like to have a greater level of autonomy in planning, controlling deadlines and deliveries; and there is effectiveness in the management practices, work processes and delegation of activities that delimit the beginning, the middle and the end of the employees' work.

The study, therefore, shows that, in a large and complex public agency such as the STJ, the characteristics of the work differ according to socio-demographic and functional variables, requiring customizations in people management practices and organizational policies.

As for limitations, it is possible to highlight the fact that some characteristics of the sample, such as the lack of variability in contextual and physical aspects of work and the low differentiation in the professions and positions surveyed, limit the comparison of the results since, usually, the WDQ is applied to samples composed of multiple professions, with work of different natures. At STJ, the work may be considered relatively homogeneous, as well as focused on administrative routines and procedural analysis. In addition, the fact that the data were collected electronically, in a virtual way, may also have represented a limitation, since immediate guidance for the participants is not allowed in cases of doubt or unclear items, terms or expressions, or even, disregarding the circumstances in which the questionnaire was answered.

Finally, regarding the academic recommendations, the instrument is considered to have evidence of factorial, convergent, predictive, and discriminant validity, but, in any case, the validity of scales cannot be considered a permanent and insensitive attribute to the contexts and, therefore, it is necessary to verify the applicability of WDQ-BR in new populations (Souza et al., 2017). Therefore, it is suggested to apply this instrument in different Brazilian public agencies. In addition, it is recommended to include, in the future research agenda, correlational studies between the 17 factors identified and variables such as managerial skills and people management policies.

WORK DESIGN: CARACTERÍSTICAS DO TRABALHO DE SERVIDORES DO SUPERIOR TRIBUNAL DE JUSTIÇA

RESUMO

Objetivo: Identificar e analisar diferenças nas características da tarefa, do conhecimento e sociais no trabalho de servidores do Superior Tribunal de Justiça (STJ), e, secundariamente, verificar a validade fatorial, convergente, preditiva e discriminante do *Work Design Questionnaire* (WDQ) no contexto do Poder Judiciário brasileiro.

Originalidade/valor: Com o desenvolvimento do WDQ, o desenho do trabalho passou a ser ainda mais estudado mundialmente. Também no Brasil, desde sua tradução e adaptação, essa variável vem apresentando grande repercussão na gestão de pessoas, sendo este o primeiro estudo no âmbito do Poder Judiciário brasileiro.

Design/metodologia/abordagem: Por meio de *survey* encaminhado aos 2.898 servidores, obtiveram-se 895 respostas, que foram submetidas à análise de estatísticas descritivas, análise fatorial confirmatória, análise de confiabilidade, análise de correlação de Kendall-tau e teste Kruskal-Wallis.

Resultados: A característica do trabalho mais reconhecida foi o suporte social, enquanto a menor foi a interação fora da organização. Conhecimentos especializados são mais requeridos de profissionais de nível superior. No trabalho dos homens, há mais resolução de problemas, conhecimentos mais especializadas e autonomia na tomada de decisão. Servidores da área finalística afirmaram exercer tarefas com mais significado. Gestores consideraram ter menos autonomia para planejar suas tarefas, enquanto os demais servidores avaliam que seus trabalhos têm início, meio e fim mais bem definidos. Num órgão público de grande porte e complexidade, as características dos trabalhos se diferenciam em função de variáveis sociodemográficas e funcionais, exigindo-se customizações nas práticas de gestão de pessoas e nas políticas organizacionais.

PALAVRAS-CHAVE

Desenho do trabalho. *Work Design Questionnaire*. Setor público. Poder Judiciário. Superior Tribunal de Justiça.



REFERENCES

- Bayona, J., Caballer, A., & Peiró, J. (2015). The Work Design Questionnaire: Spanish version and validation. *Revista de Psicología del Trabajo y de las Organizaciones*, 31(3), 187–200. doi:10.1016/j.rpto.2015.06.001
- Bentler, P., & Chou, C. (1987). Practical issues in structural modeling. *Sociological Methods & Research*, 16(1), 78–117. doi:10.1177/0049124187016001004
- Bigot, L., Fouquereau, E., Lafrenière, M., Gimenes, G., Becker, C., & Gillet, N. (2014). Analyse préliminaire des qualités psychométriques d’une version française du Work Design Questionnaire. *Psychologie du Travail et des Organisations*, 20(2), 203–232. doi:10.17652/rpot/2019.3.16837
- Brown, T. (2014). *Confirmatory factor analysis for applied research*. New York: Guilford.
- Buttigieg, S. C., & West, M. A. (2013). Senior management leadership, social support, job design and stressor-to-strain relationships in hospital practice. *Journal of Health Organization and Management*, 27(2), 171–192. doi:10.1108/14777261311321761
- Coelho, F. A., Jr., & Mourão, L. (2011). Suporte à aprendizagem informal no trabalho: Uma proposta de articulação conceitual. *Revista de Administração Mackenzie*, 12(6), 224–253. doi:10.1590/S1678-69712011000600010
- Creswell, J. (2013) *Research design: Qualitative, quantitative, and mixed methods approaches*. London: Sage.
- Field, A. (2009). *Descobrimos a estatística usando o SPSS-2*. Porto Alegre: Bookman.
- Flora, D., & Curran, P. (2004). An empirical evaluation of alternative methods of estimation for confirmatory factor analysis with ordinal data. *Psychological Methods*, 9(4), 466–491. doi:10.1037/1082-989X.9.4.466
- Freitas, P., & Odélius, C. (2018). Competências gerenciais: Uma análise de classificações em estudos empíricos. *Cadernos EBAPE.BR*, 16(1), 35–49. doi:10.1590/1679-395159497
- Freitas, P. F. P., Poncioni, W. A. O., & Odélius, C. C. (2015). O Programa de Desenvolvimento Gerencial do Superior Tribunal de Justiça. *Anais do Encontro Nacional de Escolas de Governo*, Brasília, DF, Brasil, 11. Recuperado de https://redeescolas.enap.gov.br/wp-content/uploads/2015/12/XI-ENEG_Prog_Desenv_Institucional_STJ.pdf



- Gonçalves, M. (2015). *Job design in consultancy sector and its relationship with consultants' wellbeing* (Dissertação de mestrado, Universidade do Porto, Porto, Portugal). Recuperado de <https://www.fep.up.pt/servicos/sa/submissao/uploads/120499044-S40-T768-20150930131922-df2zunm7z5.pdf>
- Gorgievski, M., Peeters, P., Rietzschel, E., & Bipp, T. (2016). Betrouwbaarheid en Validiteit van de Nederlandse vertaling van de Work Design Questionnaire. *Gedrag en Organisatie*, 29(3), 273–301. Recuperado de https://msu.edu/~morgeson/gorgievski_peeters_rietzschel_bipp_2016.pdf
- Guimarães, R. (2017). *Work Design Questionnaire: Evidências de validade fatorial no contexto brasileiro* (Dissertação de mestrado, Centro Universitário de Brasília, Brasília, DF, Brasil).
- Guimarães, T. D. A., Odelius, C. C., Medeiros, J. J., & Santana, J. A. V. (2011). Management innovation at the Brazilian Superior Tribunal of Justice. *The American Review of Public Administration*, 41(3), 297–312 doi:10.1177/0275074010380449
- Hackman, J., & Oldham, G. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology*, 60(2), 159–170. doi:10.1037/h0076546
- Hair, J., Jr., Black, W., Babin, B., Anderson, R., & Tatham, R. (2009). *Análise multivariada de dados*. Porto Alegre: Bookman.
- Hauk, M. (2014). Kwestionariusz Cech Pracy – opracowanie polskiej wersji narzędzia do badania cech pracy i środowiska zawodowego. Wstępne wyniki badań. *Acta Univeristatis Lodziensis. Folia Psychologica, Wydawnictwo Uniwersytetu Łódzkiego*, 18(1) 129–144. Recuperado de <http://dspace.uni.lodz.pl:8080/xmlui/bitstream/handle/11089/8573/07%20Hauk.pdf?sequence=1&isAllowed=y>
- Humphrey, S., Nahrgang, J., & Morgeson, F. (2007). Integrating motivational, social, and contextual work design features: A meta-analytic summary and theoretical extension of the work design literature. *Journal of Applied Psychology*, 92(5), 1332–1356. doi:10.1037/0021-9010.92.5.1332
- Ilgen, D., & Hollenbeck, J. (1991). Job design and roles. *Handbook of Industrial and Organizational Psychology*, 2, 165–207.
- Jesus, G., & Laros, J. (2004). Eficácia escolar: Regressão multinível com dados de avaliação em larga escala. *Avaliação Psicológica*, 3(2), 93–106. Recuperado de <http://pepsic.bvsalud.org/pdf/avp/v3n2/v3n2a04.pdf>
- Laros, J. (2012). O uso da análise fatorial: Algumas diretrizes para pesquisadores. In L. Pasquali (Ed.), *Análise fatorial para pesquisadores* (pp. 163–193). Brasília: LabPAM.



- León, D. (2011). *Análise fatorial confirmatória através dos softwares R e Mplus* (Monografia, Universidade Federal do Rio Grande do Sul, Porto Alegre, RS, Brasil). Recuperado de <https://www.lume.ufrgs.br/handle/10183/31630>
- Morgeson, F. (2018). *WDQ. The Work Design Questionnaire*. Recuperado de <http://www.morgeson.com/wdq.html>
- Morgeson, F., & Humphrey, S. (2006). The Work Design Questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology, 91*(6), 1321–1339. doi:10.1037/0021-9010.91.6.1321
- Ng, T., & Feldman, D. (2009). How broadly does education contribute to job performance? *Personnel Psychology, 62*(1), 89–134. doi:10.1111/j.1744-6570.2008.01130.x
- Oldham, G. (2012). The design of jobs: A strategy for enhancing the positive outcomes of individuals at work. In G. M. Spreitzer & K. S. Cameron (Eds.), *The Oxford handbook of positive organizational scholarship* (pp. 651–663). Oxford, UK: Oxford University Press.
- Parker, S. (2014). Beyond motivation: Job and work design for development, health, ambidexterity, and more. *Annual Review of Psychology, 65*, 661–691. doi:10.1146/annurev-psych-010213-115208
- Parker, S., Morgeson, F., & Johns, G. (2017). One hundred years of work design research: Looking back and looking forward. *Journal of Applied Psychology, 102*(3), 403–420. doi:10.1037/apl0000106
- Parker, S., & Wall, T. (1998). *Job and work design: Organizing work to promote well-being and effectiveness* (Vol. 4). London: Sage.
- Parker, S., Wall, T., & Cordery, J. (2001). Future work design research and practice: Towards an elaborated model of work design. *Journal of Occupational and Organizational Psychology, 74*(4), 413–440. doi:10.1348/096317901167460
- Parker, S., Wall, T., & Jackson, P. (1997). “That’s not my job”: Developing flexible employee work orientations. *Academy of Management Journal, 40*(4), 899–929. doi:10.5465/256952
- Pasquali, L. (2008). *Análise fatorial para pesquisadores*. Brasília: LabPAM, UnB.
- Pasquali, L. (2010). *Instrumentação psicológica: Fundamentos e práticas*. Porto Alegre: Artmed.
- Podsakoff, P., MacKenzie, S., Lee, J., & Podsakoff, N. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879–903. doi:10.1037/0021-9010.88.5.879



- Richardson, R. (2010). *Pesquisa social: Métodos e técnicas*. São Paulo: Atlas.
- Ríos, M., Vielma, R., García, J., Aravena, M., Vargas, J., & Díaz, M. (2017). Spanish-language adaptation of morgeson and Humphrey's Work Design Questionnaire (WDQ). *The Spanish Journal of Psychology*, 20(28), 1–30. doi:10.1017/sjp.2017.24
- Rousseau, D., Ho, V., & Greenberg, J. (2006). I-deals: Idiosyncratic terms in employment relationships. *Academy of Management Review*, 31(4), 977–994. doi:10.5465/amr.2006.22527470
- Shipp, F., Burns, G., & Desmul, C. (2010). Construct validity of ADHD-IN, ADHD-HI, ODD toward adults, academic and social competence dimensions with teacher ratings of Thai adolescents: Additional validity for the Child and Adolescent Disruptive Behavior Inventory. *Journal of Psychopathology and Behavioral Assessment*, 32(4), 557–564. doi:10.1007/s10862-010-9185-6
- Souza, A., Alexandre, N., & Guirardello, E. (2017). Propriedades psicométricas na avaliação de instrumentos: Avaliação da confiabilidade e da validade. *Epidemiologia e Serviços de Saúde*, 26(3), 649–659. doi:10.5123/S1679-49742017000300022
- Stegmann, S., Dick, R. van, Ullrich, J., Charalambous, J., Menzel, B., Egold, N., & Wu, T. (2010). Der work design questionnaire. *Zeitschrift für Arbeits- und Organisationspsychologie A&O*, 54(1), 1–28. doi:10.1026/0932-4089/a000002
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*. New York: Allyn & Bacon, Pearson Education.
- Wong, C., & Champion, M. (1991). Development and test of a task level model of motivational job design. *Journal of Applied Psychology*, 76(6), 825–837. doi:10.1037/0021-9010.76.6.825
- Zaniboni, S., Truxillo, D., & Fraccaroli, F. (2013). Validation of the Italian version of the Work Design Questionnaire (WDQ). In S. Stegmann (Chair), SIOPIAAP-EAWOP Alliance Symposium: Comprehensive Work Design Analysis-Insights from Around the Globe. *Anais do Symposium conducted at the EAWOP Congress*, Münster, Germany, 16.



AUTHOR NOTES

Pablo F. P. Freitas, Ph.D. from the Faculty of Economics, Administration, Accounting and Public Policy Management, University of Brasília (UnB); **Catarina C. Odelius**, Ph.D. from the Institute of Psychology, University of Brasília (UnB).



Pablo F. P. Freitas is now a researcher at the Faculty of Economics, Administration, Accounting and Public Policy Management of UnB; Catarina C. Odelius is now a retired associate professor from the Faculty of Economics, Administration, Accounting and Public Policy Management of UnB. Correspondence concerning this article should be addressed to Pablo F. P. Freitas, SQS 413 Bloco C, 206, Asa Sul, Brasília, Distrito Federal, Brazil, CEP: 70.296-030.
E-mail: freitaspfp@gmail.com

EDITORIAL BOARD

Editor-in-chief
Gilberto Perez

Associate editor
Janaina Macke

Technical support
Vitória Batista Santos Silva

EDITORIAL PRODUCTION

Publishing coordination
Jéssica Dametta

Language editor
Daniel de Almeida Leão

Layout designer
Emap

Graphic designer
Libro

