

**GOVERNANCE MATURITY
SCALE: DISCRIMINANT,
REPRESENTATIVENESS,
AND CONSTRUCT ANALYSIS
AMONG EMPLOYEES OF A
PUBLIC HIGHER
EDUCATION INSTITUTION IN
PARAÍBA, BRAZIL**

ESCALA DE MATURIDADE DE GOVERNANÇA: ANÁLISE DISCRIMINANTE,
DE REPRESENTATIVIDADE E DE CONSTRUTO ENTRE FUNCIONÁRIOS DE
UMA INSTITUIÇÃO PÚBLICA DE ENSINO SUPERIOR NA PARAÍBA, BRASIL

Ciências Sociais Aplicadas • 01/06/2026

REGISTRO DOI: [10.70773/revistatopicos/780172207](https://doi.org/10.70773/revistatopicos/780172207)

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ABSTRACT

This study aimed to empirically evaluate the factorial structure of the Organizational Governance Maturity Scale (EMGO), an instrument based on the framework of Wilkinson (2014) and the Basic Governance Framework of the Brazilian Federal Court of Accounts (TCU). The research employed a quantitative, descriptive, exploratory, and correlational method, applied to 116 employees of a federal institute of higher education in Paraíba, Brazil. The EMGO, composed of 17 items distributed across three dimensions—Leadership, Strategy, and Processes—demonstrated validity and robust consistency, as evidenced by psychometric reliability indices corresponding to statistical standards in confirming the three-factor model. Additional analyses indicated significant differences in the perception of governance maturity among groups, such as gender and length of service. The results revealed that women with more than 10 years of experience achieved the highest organizational maturity scores, attributed to greater exposure to leadership practices, broader decision-making experience, and accumulated skills. This finding reinforces the importance of external organizational policies aimed at gender equity and continuous development, fostering a more efficient and inclusive governance system. The evaluation confirmed the scale's capability to identify governance maturity stages and areas for improvement in organizational practices. The findings contribute to a better understanding of the factors influencing governance and highlight the role of measurement tools in supporting the enhancement of institutional capacities. This study expands diagnostic and intervention possibilities in governance across diverse organizational contexts.

Keywords: Maturity; Organizational Governance; Evaluation; Measurement.

RESUMO

Este estudo teve como objetivo avaliar empiricamente a estrutura fatorial da Escala de Maturidade da Governança Organizacional (EMGO), instrumento fundamentado no referencial de Wilkinson (2014) e no Referencial Básico de Governança do Tribunal de Contas da União (TCU). A pesquisa utilizou um método quantitativo descritivo, exploratório e correlacional, aplicado a 116 servidores de um instituto federal de ensino superior na Paraíba. A EMGO, composta por 17 itens distribuídos em três dimensões — Liderança, Estratégia e Processos, demonstrou validade e consistência psicométrica robustas, evidenciadas pelos índices de confiabilidade correspondentes ao padrão estatístico na comprovação do modelo trifatorial. Análises adicionais indicaram diferenças significativas na percepção da maturidade de governança entre grupos, como gênero e tempo de serviço. Os resultados revelaram que mulheres com mais de 10 anos de experiência apresentaram os maiores escores de maturidade organizacional, atribuídos à maior exposição a práticas de liderança, maior vivência em processos decisórios e habilidades acumuladas. Este dado reforça a importância de políticas organizacionais voltadas para a equidade de gênero e desenvolvimento contínuo, visando promover uma governança mais eficiente e inclusiva. A avaliação confirmou a capacidade da escala de identificar estágios de maturidade e áreas para melhorias nas práticas organizacionais. Os achados contribuem para a compreensão dos fatores que influenciam a governança e destacam o papel das ferramentas de mensuração como suporte ao aperfeiçoamento das capacidades institucionais. Este trabalho amplia as possibilidades de diagnóstico e intervenção na governança em contextos organizacionais diversos.

Palavras-chave: Maturidade; Governança Organizacional; Avaliação; Medida.

INTRODUCTION

The concept of governance has gained increasing prominence in public administration, driven by the growing demand for transparency, sustainability, and efficiency. The Basic Governance Framework established by the Brazilian Federal Court of Accounts (Tribunal de Contas da União [TCU]) defines governance as the set of leadership, strategy, and control mechanisms applied to evaluate, direct, and monitor organizational management, with the purpose of promoting effective public policies and delivering high-quality services to society.

This framework emphasizes three central components: leadership, which establishes organizational culture and promotes integrity; strategy, which involves planning and aligning actions with institutional objectives; and control, which ensures continuous monitoring and compliance with organizational activities. When effectively implemented, these elements strengthen governance in public organizations, enabling greater accountability and transparency.

Beyond the implementation of these components, it is essential to assess the level of governance maturity within organizations by identifying their current stage of development and opportunities for improvement. Hammer (2007) suggests that maturity is directly associated with the continuous enhancement of organizational capabilities and processes aimed at increasing productivity over time.

Complementing this perspective, Lin et al. (2012) define maturity as the degree to which a specific process is clearly delineated,

managed, measured, and controlled, thereby achieving greater effectiveness. Thus, maturity is understood as a dynamic and evolutionary process in which practices are continuously improved and refined.

Marx et al. (2012) reinforce this perspective by arguing that maturity reflects a natural progression from an initial stage toward a desired final state, characterizing an evolutionary path aimed at the full development of governance capabilities.

Assessing organizational governance maturity therefore makes it possible to understand how public organizations apply the principles of leadership, strategy, and control recommended by the TCU, while also providing clear guidance for the continuous improvement of these practices, thereby promoting greater efficiency and institutional legitimacy.

Such assessment requires accurate instruments capable of effectively capturing the degree of implementation and evolution of governance practices in public organizations. In this context, the development of measurement scales is fundamental; however, it also represents a complex and challenging process that requires careful item selection and empirical validation.

As highlighted by Kieling et al. (2022), it is imperative that such scales be developed with methodological rigor and tested across different contexts and populations to ensure both validity and reliability.

The consistent application of these instruments makes it possible not only to diagnose the current maturity level but also to identify areas for continuous development, thereby contributing to the

strengthening of governance practices and, ultimately, to the effectiveness and sustainability of public organizations.

However, the lack of robust instruments to assess the maturity of governance practices across different governmental spheres represents a significant gap in the literature. Although the TCU provides clear guidelines, there remains a need for instruments capable of measuring, in an integrated and objective manner, the degree of maturity of these practices within public organizations.

A recent search for scientific publications in international and national databases (e.g., periódicos.capes.gov.br, SciELO, Scopus) between 2022 and 2025, within the fields of human and social sciences as well as applied social sciences, identified only five studies addressing the topic of organizational maturity.

The study conducted by Prochnow et al. (2022) analyzed the maturity level of Local Productive Arrangements (LPAs) in the Serra Gaúcha region, composed of micro, small, and medium-sized enterprises specializing in products, processes, and technologies. Using Pietrobon's (2009) model, data were collected through questionnaires assessing variables such as process mapping and standardization, training, organizational structure, continuous improvement, relationships, certification, partnerships, organizational climate, information technology, and strategic planning.

Urrbieta (2022) investigated the relationship between governance and organizational integrity, focusing on the legislative branch. The study emphasized the relevance of ethics and morality in agents' behavior within the Brazilian patrimonialist context and in the

absence of clear behavioral standards. Through a literature review, significant gaps were identified regarding governance, integrity, and compliance in legislative institutions.

Silveira et al. (2023) examined the relationship between audit costs and organizational life cycle stages among 113 non-financial companies listed on the Brazilian stock exchange (B3) in 2020. This descriptive quantitative study used data from *Economática*, reference forms, and consolidated financial statements to investigate how different life cycle stages affect audit costs within organizations.

Albuquerque, Correia-Neto, and Silva (2024) conducted a systematic mapping of the scientific literature on guidelines for implementing integrity programs in public institutions, based on Decree No. 9,203/2017 and the TCU's Basic Organizational Governance Framework.

Finally, the study developed by Soares, Formiga, and Trigueiro-Fernandes (2024) proposed the Organizational Governance Maturity Scale, grounded in Wilkinson's (2014) framework, which offers a comprehensive model for evaluating the evolution of governance practices. These authors developed and assessed the content quality of the proposed measure, revealing satisfactory psychometric indicators (e.g., Kappa, CVI, CVR, and Kuder-Richardson coefficients), meeting statistical expectations regarding agreement in comprehension, clarity, and relevance. All items achieved a high percentage of agreement among expert judges in both semantic and content evaluations.

Among the aforementioned studies, only one presented a theoretical and empirical direction specifically related to measuring the governance maturity phenomenon. In this context, the present study, based on the proposal of Soares, Formiga, and Trigueiro-Fernandes, aims to empirically analyze the factorial distribution of the Organizational Governance Maturity Scale, examining its proposed three-factor theoretical structure, grounded in three core domains: leadership, strategy, and processes.

Leadership addresses behavioral and managerial practices that ensure the minimum conditions required for good governance. Strategy examines how the organization defines its objectives and allocates resources to achieve them. The processes domain refers to the management of organizational activities that ensure effectiveness, including internal controls and risk management.

METHOD

This study adopted a quantitative methodological approach, comprising a descriptive, exploratory, and correlational design, conducted with civil servants from a public higher education institution in the state of Paraíba, Brazil.

Sample and Ethical Procedures

Participants were civil servants employed at a public higher education institution in Paraíba. The sample was selected using a non-probabilistic intentional sampling technique. To determine sample adequacy, statistical power analysis was conducted using G*Power version 3.2, considering the relationship between the required sample size and the intended statistical procedures.

The following parameters were adopted: a 95% probability level ($p < .05$), an effect size magnitude of $r \geq .50$, and a minimum hypothetical statistical power of $\pi \geq .80$, aiming to ensure both the adequacy and sufficiency of the sample for the proposed analyses.

Based on these criteria, sample estimation indicated that a minimum of 100 participants, including men and women from the state of Paraíba and representing different professional areas (legal, management, and teaching), would be sufficient for the study, yielding the following statistical indicators: $t \geq 1.98$; $\pi \geq .95$; $p < .05$.

The inclusion criteria were:

- a. holding a formal academic qualification and belonging directly to one of the specified professional areas;
- b. being employed in a public and/or private educational organization;
- c. being actively engaged in their professional role, whether as a service provider or formally contracted employee.

Exclusion criteria included participants who:

- a. did not belong to the professional domains relevant to the study;
- b. declined to accept the ethical research terms;
- c. failed to provide complete responses in accordance with the study requirements.

Data Collection Instruments

Participants completed the following instruments:

Organizational Governance Maturity Scale (OGMS): The Organizational Governance Maturity Scale (OGMS) was developed by Soares, Formiga, and Trigueiro-Fernandes (2024), based on the preliminary organizational governance maturity framework proposed by Wilkinson (2014). The instrument consists of 17 items designed to assess the degree to which an organization establishes an adequate governance framework (including structures, systems, and processes), as well as the implementation and adherence to this framework by the relevant stakeholders. Theoretically, the scale is organized into three dimensions:

Leadership – Refers to the set of human and behavioral practices that ensure the minimum conditions necessary for effective governance. This dimension comprises four items, including examples such as:

- *“Effective leadership for organizational decision-making is associated with proactive and transparent communication.”*
- *“Decisions made by leadership are understood and justified within the organization, contributing to a long-term strategic vision.”*

Strategy – Refers to the manner in which the organization defines its long-term objectives and plans the activities necessary to achieve them, allocating resources accordingly. This dimension comprises seven items, such as:

- *“The governance strategies and structures currently adopted by the organization are clearly defined and understood within organizational dynamics.”*
- *“Current governance structures support the organization’s vision and strategies and are regularly reviewed to maintain organizational relevance.”*
- *“Formal committees within the organization play a fundamental role in the organizational system and are perceived as important for governance.”*

Processes – Refers to end-to-end organizational activities encompassing both customer-oriented and internal processes. This dimension comprises six items, including examples such as:

- *“Risk management within the organization is a formalized process and is widely recognized as the basis for developing comprehensive risk awareness at all organizational levels.”*
- *“There is recognition and encouragement regarding the importance of internal controls within the organization.”*
- *“The organization maintains ethical standards that are formally applied and/or managed (e.g., formal Ethics and Compliance programs and the extent to which ethics is integrated into organizational culture).”*

Responses were recorded on a five-point Likert scale, ranging from: 1 = Immature, 2 = Developed, 3 = Compatible, 4 = Institutionalized, 5 = Mature. Soares, Formiga, and Trigueiro-Fernandes (2024) validated the content of this instrument and reported that all items

met psychometric criteria regarding agreement in comprehension, clarity, and relevance. Specifically: Kappa coefficient: .90 to 1.00, Kuder–Richardson reliability coefficient (KR): .89, Content Validity Index (CVI): 1.00, Content Validity Ratio (CVR): 1.00

According to the authors, the scale demonstrated satisfactory semantic and content validity, with expert judges confirming that the items adequately reflected the theoretical logic and conceptual meaning of the construct, ensuring robust content validation.

A **sociodemographic questionnaire** was also administered to characterize participants regarding: sex, age, educational level, years since graduation, length of professional service

RESEARCH ADMINISTRATION PROCEDURES, ETHICAL CONSIDERATIONS, AND DATA ANALYSIS

For this study, all ethical procedures established by Brazilian National Health Council Resolution No. 466/2012 and Federal Council of Psychology Resolution No. 016/2000 concerning research involving human participants were fully observed (Conselho Nacional de Saúde [CNS], 2012; Associação Nacional de Pesquisa e Pós-Graduação em Psicologia [ANPEPP], 2000). The study was approved under CAAE No. 78239124.4.0000.5296.

The instrument was administered individually to participants through an electronic questionnaire hosted on Google Forms. Participants were instructed to complete the questionnaire according to their availability in terms of time and physical setting, whether at their workplace, residence, or another personal environment.

Participation was entirely voluntary, anonymous, and confidential. The questionnaire link was distributed through social media platforms and electronic messaging application groups.

Participants were informed that no personal identification would be required upon accessing the survey, ensuring anonymity and confidentiality. They were also informed of their right to withdraw from the study at any time without any penalty or consequence to themselves or the researchers.

A researcher with prior experience in survey administration remained available via email, social media, and mobile phone throughout the data collection period to clarify doubts and resolve potential misunderstandings related to the instrument. The average completion time for the questionnaire was approximately five minutes.

Data Analysis

Data analysis was conducted in sequential stages. Initially, SPSS version 25.0 was used to perform descriptive and inferential statistical analyses, including:

- descriptive statistics;
- Student's t-test;
- Pearson's correlation analysis, aimed at evaluating item discrimination and representativeness.

Subsequently, the factorial organization of the proposed construct was examined using Confirmatory Factor Analysis (CFA) and

Structural Equation Modeling (SEM) to test the multivariate explanatory adequacy of the hypothesized theoretical model. For these analyses, AMOS Graphics version 25.0 was employed.

This software provides robust psychometric indicators that contribute to more accurate instrument validation and model specification, allowing graphical representation of the proposed theoretical structure. The analyses were based on the covariance matrix of the measurement items, using the Maximum Likelihood (ML) estimator (Fleury et al., 2017).

Given the rigor required for this type of statistical analysis, the theoretical structure identified in the exploratory phase was tested alongside alternative factorial models (e.g., one-factor, two-factor, three-factor, or higher-order factorial structures). To assess model fit, the following indices were considered, following recommendations from Hair et al. (2005) and Lattin, Carroll, and Green (2011):

Chi-square (χ^2) - The chi-square statistic evaluates the probability that the theoretical model adequately fits the observed data. Higher χ^2 values indicate poorer fit. However, due to its sensitivity to sample size, the $\chi^2/\text{degrees of freedom}$ ratio (χ^2/df) is more commonly used, with values up to 3 indicating acceptable fit.

Goodness-of-Fit Index (GFI) and Adjusted Goodness-of-Fit Index (AGFI) - These indices are analogous to the coefficient of determination (R^2) in multiple regression and indicate the proportion of variance–covariance explained by the model. Values range from 0 to 1, with values of .80 to .90 or higher considered satisfactory.

Root Mean Square Error of Approximation (RMSEA) - The RMSEA, together with its 90% confidence interval (90% CI), is considered an index of model misfit. Lower values indicate better model fit. Recommended values are:

- .05 to .08 = acceptable fit
- up to .10 = tolerable fit

Comparative Fit Index (CFI) - The CFI compares the estimated model with a null model. Values closer to 1.00 indicate satisfactory fit. Tucker–Lewis Index (TLI). The TLI assesses model parsimony relative to the null model. Values range from 0 to 1, with values above .90 considered acceptable.

Expected Cross-Validation Index (ECVI) and Consistent Akaike Information Criterion (CAIC) - These indices are generally used for comparing alternative models. Lower ECVI and CAIC values indicate superior model fit.

Additionally, the following reliability and validity indicators were calculated:

- Composite Reliability (CR) → acceptable threshold: >.70
- Average Variance Extracted (AVE) → acceptable threshold: >.50

Convergent and Divergent Validity Assessment

To assess convergent and divergent validity, analyses included: Pearson's correlation coefficients, Multivariate Analysis of Variance (MANOVA) Scheffé post hoc test

These procedures were intended to evaluate the extent to which the phenomenon under investigation was represented within the target population/sample.

RESULTS AND DISCUSSION

After data collection, an assessment of sample normality was conducted. Regarding multicollinearity among the variables, Pearson's correlation coefficients remained within acceptable parameters ($r < .90$), ranging from .21 to .74. The Kolmogorov-Smirnov (KS) normality test indicated a normal distribution for the sample ($KS = 0.81$; $p < .67$). These values indicate the absence of highly correlated variables, thereby reducing the likelihood of statistical models with substantial explanatory error.

The independent variables (IVs) and dependent variables (DVs) were measured based on respondents' self-reports collected within the same application context, which could potentially introduce common method variance (CMV) and affect statistical analyses. To examine the presence of common method bias in the collected data, Harman's single-factor test was performed, as recommended by Podsakoff, MacKenzie, and Podsakoff (2003). The analysis revealed the presence of a single factor with an eigenvalue greater than 1.00, accounting for less than 50% of the covariance among the variables (41.84%), indicating the absence of significant CMV-related concerns.

The sample consisted of 116 employees from a Federal Institute in Paraíba, aged between 31 and 68 years ($M = 44.58$; $SD = 8.27$). Among the participants, 55% were male, 60% were married, and 98% had completed higher education (3% held a bachelor's degree, 43% a specialization degree, 26% a master's degree, and 25% a doctoral

degree). Regarding occupational position, 78% had more than ten years of service, and 27% held technical-level positions.

Once sample normality was confirmed, ensuring the suitability of the data for statistical analyses, verification procedures were conducted based on the theoretical and empirical assumptions of the study. In a pioneering approach, this study sought to evaluate the discriminative power of the scale items, as well as their content representativeness, considering both their statistical specificity and the empirical verification of the scale's factorial structure.

Based on the assumptions of Classical Test Theory (CTT), the extent to which the items discriminated according to their magnitude was examined using scores close to the mean values of the lower and upper groups on the measured construct (Pasquali, 2011). To accomplish this, a total scale score was computed, and the median value was used to classify respondents: participants scoring below the median were allocated to the lower group, whereas those scoring above the median were assigned to the upper group.

Based on the scale items, an independent samples t-test was performed comparing the two groups to identify which items discriminated between participants with statistically significant magnitudes (see Table 1). The results indicated that all items were statistically significant, both in terms of discrimination and representativeness, demonstrating that they accurately reflect the content described by the scale authors and recognized by respondents within the context measured by the construct.

Additionally, an analysis of item normality was performed, given that sample-level normality had already been established. The skewness

(Sk) and kurtosis (Ku) indicators were found to be within acceptable normality parameters (Sk ranging from -0.27 to 0.32; Ku ranging from -0.93 to 1.23). Thus, both the sample and the scale items demonstrated normal distribution properties.

Table 1: Discriminant and Representativeness Analysis of the Items of the Organizational Governance Maturity Scale

Items	Level	Mean	SD	Discriminant	
				Statis	
				t	gl
MG 1	Lower	2,48	1,321	-5,74	87,6
	Upper	3,74	0,853		
MG 2	Lower	2,00	1,353	-6,00	86,6

⚠ Esta tabela possui muitas colunas e foi cortada para impressão. Para visualizá-la completa, acesse o artigo original em:

<https://revistatopicos.com.br/artigos/governance-maturity-scale-discriminant-representativeness-and-construct-analysis-among-employees-of-a-public-higher-education-institution-in-paraiba-brazil?noblockage>

The results presented in Table 1 demonstrate that all items of the Organizational Governance Maturity Scale showed strong performance in terms of both discrimination and representativeness for the respondents, enabling the assessment of issues related to the central theme of the study (Pasquali, 2011).

Based on the theoretical assumptions of Classical Test Theory (CTT), these statistical analyses revealed that the content of the items was

systematically evaluated in relation to the theoretical framework proposed by the instrument, confirming the coherence between the expected theoretical and empirical aspects (Cunha, 2000; Pasquali, 2011).

Subsequently, an evaluation of the factorial structure of the scale was conducted using a recursive-reflective model as the analytical basis. For this purpose, the statistical software AMOS Graphics was employed to perform a Confirmatory Factor Analysis (CFA) under the hypothesis of a three-factor model, axiomatically formulated from theoretical perspectives. During the CFA, the covariances (φ) were freely estimated, and widely recommended model fit indices from the specialized literature were considered (Maroco, 2010; Hair et al., 2010; Neves & Silva, 2023), including: χ^2/df , GFI, AGFI, RMSEA, CFI, ECVI, CAIC, AVE, Cronbach's alpha and McDonald's ω .

The results indicated that the proposed structural model presented statistical indicators that confirmed the factorial quality of the Organizational Governance Maturity Scale. The three-factor model demonstrated strong adequacy to the observed data, robustly supporting the theoretical proposal advanced by the authors (see Table 2).

The statistical indicators showed superior performance when compared to the one-factor structure, as evidenced by the following comparison: Three-factor model: [$\chi^2/df = 1.50$; GFI = .95; AGFI = .97; CFI = .95; TLI = .93; RMSEA = .05; CAIC = 432.09; ECVI = 2.51; $\Delta AVE = .74$; Cronbach's $\alpha = .88$; McDonald's $\omega = .88$], One-factor model: [$\chi^2/df = 3.83$; GFI = .78; AGFI = .75; CFI = .71; TLI = .75; RMSEA = .16; CAIC = 651.96; ECVI = 5.13; $\Delta AVE = .52$; Cronbach's $\alpha = .88$; McDonald's $\omega = .88$]

Additionally, a positive relationship among the factors (HTMT) was observed, with coefficients exceeding .50. These findings reinforce the validity and reliability of the proposed three-factor model, highlighting its superiority over the one-factor structure and confirming its theoretical and empirical adequacy for assessing organizational governance maturity.

Table 2: Psychometric Indicators of the Factorial Structure of the Organizational Governance Scale

Factors	Items	Estimates	R ²	z-value	p-value
Leadership	MG1	0.960	0.569	8.639	< .00
	MG2	1.190	0.771	10.902	< .00
	MG3	1.209	0.747	10.645	< .00

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Based on the findings of the factorial structure of the governance scale, an ANOVA was conducted to evaluate the mean scores of participants' responses regarding organizational maturity, considering the total score in relation to the variables sex, age, and length of service. As shown in Table 3, only the interaction effect

revealed a significant result: women with more than 10 years of service presented higher scores.

Table 3: Analysis of variance between governance maturity and sociodemographic data.

Sex	Length of Service	Mean	S.D.		
				F	df
Male	Less than 10 years	41,392	4,516	4,49	14
	More than 10 year	46,452	3,062		
Female	Less than 10 years	39,833	3,646		

△ Esta tabela possui muitas colunas e foi cortada para impressão. Para visualizá-la completa, acesse o artigo original em:

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Considering the dimensions of governance maturity (leadership, processes, and strategy), a significant interaction effect was also observed (sex versus length of service) (see Table 4). Across all dimensions, higher scores were observed among women with more than 10 years of service.

Table 4: Analysis of variance between the dimensions of governance maturity and sociodemographic data

Leadership

Sex	Length of Service	Mean	S.D.	F	df
Male	Less than 10 years	9,16	1,47	4,37	14
	More than 10 year	10,18	1,00		
Female	Less than	11,69	1,19		

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The present study aimed to evaluate the organizational governance maturity measure among public employees across different governmental spheres and states of the Brazilian federation. Its empirical foundation was guided both by the study developed by Soares, Formiga, and Trigueiro-Fernandes (2024) concerning the semantic and content validity of this measure—which yielded highly significant results—and by the theoretical perspective adopted in the study, which conceptualizes organizational maturity as the degree to which a specific process is clearly defined, managed, measured, and controlled, thereby achieving greater effectiveness in the development of organizational capabilities.

According to Hammer (2007) and Lin et al. (2012), organizational maturity is a dynamic, evolutionary, and continuous construct. Hammer emphasizes maturity as the ongoing improvement of skills and processes to achieve greater productivity, whereas Lin et al. highlight the progression through developmental stages until an ideal organizational state is reached.

In this context, the statistical indicators related to item discrimination and content representativeness, presented in Table 1, demonstrated that the assessment of issues associated with organizational governance maturity systematically encompassed the content of the scale items, thereby confirming the meaning and coherence of the theoretical and empirical dimensions of the construct.

Following confirmation of item content validity, an axiomatic assumption regarding organizational governance maturity was established, defining this construct as the broader concept of organizational governance, understood as a set of structural, behavioral, and systemic practices that enable the evaluation and implementation of sound organizational governance practices.

The maturity scale is based on Wilkinson's (2014) framework, which proposes a holistic perspective of governance systems by integrating elements such as leadership, strategy, and processes. In addition, it is grounded in the Basic Governance Framework of the Brazilian Federal Court of Accounts (TCU), which recognizes leadership, strategy, and control as essential governance pillars.

From this conceptual perspective, the existence of an interdependent three-factor model was proposed, comprising the dimensions of Leadership, Strategy, and Processes.

The Leadership dimension encompasses behavioral and managerial practices aimed at establishing favorable governance conditions, such as transparent communication and justified decision-making.

The Strategy dimension relates to the definition of organizational goals and the allocation of resources necessary to achieve them.

Finally, the Processes dimension refers to the efficient management of organizational activities and internal control mechanisms.

Together, these components provide a comprehensive framework for evaluating governance practices within organizations.

Based on confirmatory analysis conducted according to theory-testing assumptions (Pasquali, 2011), the proposed model demonstrated not only factor loadings above .50 (ranging from .50 to .77) but also satisfactory indicators of internal consistency, including Cronbach's alpha, McDonald's omega, and Average Variance Extracted (AVE), which corroborated the reliability of the factorial structure, as presented in Table 2.

To ensure factorial robustness, the three-factor model was compared with a one-factor model. Comparison of the psychometric indicators clearly demonstrated the superiority of the three-factor solution:

Three-factor model: $\chi^2/df = 1.50$; GFI = .95; AGFI = .97; CFI = .95; TLI = .93; RMSEA = .05; CAIC = 432.09; ECVI = 2.51; $\Delta AVE = .74$; $\alpha = .88$; $\omega = .88$

One-factor model: $\chi^2/df = 3.83$; GFI = .78; AGFI = .75; CFI = .71; TLI = .75; RMSEA = .16; CAIC = 651.96; ECVI = 5.13; $\Delta AVE = .52$; $\alpha = .88$; $\omega = .88$

These findings indicate that the three-factor model provides a substantially better fit. Considering these results, the scale demonstrated not only a coherent item-factor organization structured across three dimensions, but also a parsimonious factorial solution, particularly when considering TLI, CFI, ECVI, and CAIC, where the first two indices are expected to exceed .90, and the latter two should be comparatively lower.

A particularly relevant finding concerns the interrelationship among the factors, suggesting that respondents who obtain higher scores in one dimension are also likely to score highly in the remaining dimensions, reinforcing the integrated nature of governance maturity.

Regarding the practical relevance of the scale, it plays a fundamental role in diagnosing how governance practices are developing within organizations, enabling the identification of areas requiring improvement.

It also serves as a strategic instrument for continuous organizational development, contributing to increased transparency, efficiency, and institutional legitimacy.

Furthermore, it supports managers in adjusting organizational strategies based on empirical evidence.

With the psychometric quality of the organizational governance maturity measure established, an analysis of variance (ANOVA/MANOVA) was conducted to assess differences in total governance maturity scores and in each of its dimensions (Leadership, Processes, and Strategy) according to sex and length of service.

The results were statistically significant, particularly for female employees with longer tenure, who showed higher scores in both overall governance maturity and across each construct dimension (see Tables 3 and 4).

Variation in governance maturity dimension scores across groups such as sex and tenure suggests meaningful differences in the

perception of governance practices.

Regarding gender, the findings suggest that men and women perceive organizational maturity differently, particularly in relation to behavioral dimensions (Leadership) and technical dimensions (Processes and Strategy).

Concerning length of service, more experienced employees tended to demonstrate greater alignment with the Processes dimension, whereas less experienced employees perceived more pronounced gaps in the Strategy and Leadership dimensions.

The primary organizational benefit of analyzing these differences lies in identifying specific areas requiring intervention to promote more balanced and effective governance.

Recognizing that gender-based perceptions may vary across leadership, process, and strategy dimensions allows organizations to implement targeted training and development policies aimed at reducing disparities, improving communication, and strengthening collaboration among employees.

Similarly, by identifying differences associated with length of service, organizations can design capacity-building strategies that align more experienced and less experienced employees, thereby refining governance practices according to the specific developmental needs of each group.

This contributes to a more inclusive, efficient, and context-sensitive governance system, ultimately strengthening organizational capacity.

The analysis also revealed that women with longer organizational tenure obtained the highest governance maturity scores compared with other groups. This finding may be explained by several factors.

First, women with greater experience in organizational contexts may have developed stronger familiarity with governance practices due to prolonged exposure to leadership processes, decision-making structures, and organizational management routines.

Such practical experience likely enhances capabilities associated with the Processes dimension while also strengthening strategic and behavioral competencies required for sound governance.

Additionally, evidence suggests that women in organizational roles often face greater challenges and higher expectations regarding the demonstration of competence in their professional domains.

This context may contribute to the development of more robust skills over the course of their careers, particularly in environments where high performance is necessary to overcome gender-related barriers.

Finally, longer tenure enables broader and more intensive participation in professional development and organizational training activities, directly contributing to higher organizational maturity scores, particularly in technical and behavioral dimensions.

This finding reinforces the importance of organizations promoting gender equity policies that recognize and strengthen women's contributions, ensuring that governance practices can be broadly disseminated and sustained through inclusive strategies focused on the continuous development of organizational capabilities.

CONCLUSION

The present study confirmed the robustness and validity of the Organizational Governance Maturity Scale (OGMS), demonstrating its capacity to measure critical aspects of organizational governance across three interdependent dimensions: Leadership, Strategy, and Processes. The three-factor model exhibited strong theoretical and empirical support, establishing the instrument as an effective tool for organizational diagnosis and strategic planning.

The study findings highlighted relevant differences in the perception of governance practices across sociodemographic groups, particularly regarding gender and length of service. The identification of higher scores among women with greater professional experience reinforces the need to recognize the impact of professional experience on dimensions such as leadership and processes, while also underscoring the importance of gender equity within organizations.

In the context of public organizations, the OGMS contributes as a guiding instrument for managers seeking to assess and strengthen governance practices. It not only identifies stages of organizational maturity but also provides empirical support for the planning of strategies aimed at continuous improvement. As practical implications, the findings emphasize the need for development policies that take into account the specific characteristics of different organizational groups, thereby promoting inclusion, effectiveness, and institutional efficiency.

Finally, this study reinforces the relevance of measuring governance maturity as a means of strengthening accountability, transparency,

and organizational legitimacy, while expanding institutional capacities to address contemporary organizational challenges.

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