CONSTRUCT VALIDATION AND PSYCHOMETRIC TAXONOMY OF ORGANIZATIONAL GROWTH INHIBITORS SCALE AMONG PUBLIC AND PRIVATE SECTOR WORKERS IN SOUTHEASTERN NIGERIA: A PRELIMINARY STUDY

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ABSTRACT

Organizational growth in developing economies is frequently impeded not by a single isolated operational failure, but by an interplay of toxic leadership practices, institutional red tape, environmental/infrastructural deficits, and destructive workplace behaviors. Despite the prevalence of these systemic bottlenecks, existing psychometric instruments measuring organizational constraints or dark leadership have primarily originated in Western settings, failing to capture the socio-cultural and structural realities of Sub-Saharan African organizations. This study aimed to develop and psychometrically validate the Organizational Growth Inhibitors Scale (OGIS) among public civil service and private sector workers in Southeastern Nigeria. A cross-sectional psychometric design was executed across three phases. First, a 20-item candidate pool was evaluated for content validity by a panel of six Subject Matter Experts (SMEs). Next, the refined item pool was administered to a stratified sample of formal sector workers (N = 550) across five Southeastern states (Abia, Anambra, Ebonyi, Enugu, Imo). The dataset was randomly split into two independent samples: Sample A (n1 = 250) for Exploratory Factor Analysis (EFA using Principal Axis Factoring with Promax Oblique rotation) and Sample B (n2 = 300) for Confirmatory Factor Analysis (CFA), construct validity evaluation, and Multigroup Measurement Invariance (MGCFA). Content validation eliminated 2 items, retaining an 18-item scale (S-CVI/Ave = 0.93, S-CVI/UA = 0.85). EFA on Sample A revealed a clean 4-factor structure accounting for 63.85% of total variance: Toxic & Autocratic Leadership (TAL), Bureaucratic & Process Inertia (BPI), Infrastructural & Resource Bottlenecks (IRB), and Interpersonal Sabotage & Cultural Friction (ISCF). CFA on Sample B confirmed excellent model fit for the first-order 4-factor model (CMIN/DF = 1.65, CFI = 0.965, TLI = 0.958, RMSEA = 0.046, SRMR = 0.042). High internal consistency (alpha >= 0.84, omega >= 0.84), composite reliability (CR >= 0.84), convergent validity (AVE >= 0.57), and discriminant validity (HTMT < 0.85) were established. Multigroup CFA demonstrated full configural, metric, scalar, and strict measurement invariance across public and private sector cohorts. Latent mean comparisons revealed that public sector workers experienced significantly higher Process Inertia ($d = 0.74$, $p < 0.001$) and Resource Bottlenecks ($d = 0.45$, $p < 0.001$) than private sector workers, while Toxic Leadership and Cultural Friction were equally prevalent across both sectors. The 18-item OGIS is a psychometrically robust, culturally anchored, and cross-sectorally invariant diagnostic tool for measuring organizational growth constraints in developing economies.

Keywords: *Organizational Growth Inhibitors, Scale Validation, Dark Leadership, Bureaucratic Red Tape, Infrastructural Bottlenecks, Psychometrics, Southeastern Nigeria, Public vs. Private Sector.*

INTRODUCTION

In an era characterized by dynamic global markets and rapid technological advancement, sustained organizational growth remains the cornerstone of economic development, job creation, and institutional capacity building (World Bank, 2022). In Sub-Saharan Africa—and specifically within Nigeria's commercial hubs organizations operate in a high-complexity business environment where internal inefficiencies, leadership toxicity, and institutional voids frequently converge to throttle growth. While strategic management and organizational behavior literature historically emphasize growth drivers—such as dynamic capabilities, transformational leadership, and innovation orientation (Teece, 2014)—an emerging paradigm highlights that identifying and eliminating growth inhibitors is equally, if not more, critical for organizational survival (Spector & Jex, 1998; Tepper, 2000).

Organizational Growth Inhibitors (OGI) refer to systemic, behavioral, structural, and environmental bottlenecks within an enterprise that impede task completion, destroy psychological safety, slow administrative decision velocity, and drain operational resources. In Southeastern Nigeria—comprising Abia, Anambra, Ebonyi, Enugu, and Imo states—formal enterprises operate across a sharp dual-sector divide: (1) The Public Civil Service, characterized by administrative red tape, political interference, rigid procedural rules, opaque approval chains, and chronic budget starvation (Onuoha & Eme, 2018); and (2) The Private Commercial Sector, comprising commercial banks, manufacturing enterprises, and tech SMEs, which, despite greater agility, frequently grapple with autocratic owner-manager leadership, nepotistic hiring, and severe external infrastructural failures (Ikonne & Okeke, 2021).

Statement of the Problem

Despite the pervasive impact of organizational growth constraints in developing economies, existing psychometric instruments designed to evaluate workplace hindrance constraints possess significant conceptual and contextual limitations when applied to the Nigerian formal sector. First, standard Western measures such as Spector and Jex's (1998) Organizational Constraints Scale (OCS) or Schmidt's (2008) Toxic Leadership Scale (TLS) assume stable public utilities, basic digital infrastructure, and institutional meritocracy. They fail to capture crucial operational constraints endemic to Sub-Saharan Africa, such as chronic public power grid collapses, utility generator overheads, digital infrastructure deficits, and socio-cultural workplace friction like ethnic bias and 'godfatherism' (favoritism).

Second, existing research tends to examine dark leadership (Tepper, 2000), institutional red tape (Bozeman, 2000), or physical resource constraints in isolation. There is a lack of an integrative, multi-dimensional instrument that captures how these distinct operational bottlenecks interact within a single organizational system. Third, studies comparing public civil service and private enterprise in West Africa frequently utilize unvalidated scales without establishing multigroup measurement invariance, risking measurement bias in cross-sectoral comparisons. To address these empirical and methodological gaps, this study constructs and validates the Organizational Growth Inhibitors Scale (OGIS).

Purpose and Hypotheses

The primary purpose of this study is to develop, structurally validate, and test the measurement invariance of the Organizational Growth Inhibitors Scale (OGIS) among formal sector workers in Southeastern Nigeria. Specifically, the study tests five hypotheses: H1: The candidate item pool demonstrates high content validity (I-CVI >= 0.78, S-CVI/Ave >= 0.90) following SME evaluation; H2: Exploratory Factor Analysis on Sample A extracts a clean multidimensional factor structure corresponding to Toxic Leadership, Process Inertia, Resource Bottlenecks, and Cultural Friction; H3: Confirmatory Factor Analysis on Sample B confirms excellent goodness-of-fit for the first-order 4-factor correlated model (CFI >= 0.95, RMSEA <= 0.06, SRMR <= 0.08); H4: The OGIS demonstrates full multigroup measurement invariance across public and private sector employees; H5: Public sector workers report significantly higher latent mean levels of Bureaucratic Process Inertia and Infrastructural Resource Bottlenecks compared to private sector workers.

THEORETICAL FRAMEWORK

The conceptualization of Organizational Growth Inhibitors (OGI) as a distinct psychometric construct requires an integrative, multi-level theoretical foundation. Organizational growth is rarely impeded by a single isolated failure; rather, it is choked by the interplay of toxic leadership practices, structural-bureaucratic inertia, environmental/infrastructural constraints, and destructive interpersonal dynamics.

Dark Leadership Theory and Abusive Supervision (Tepper, 2000; Schmidt, 2008) explain how authoritarian control, credit-stealing, and favoritism ('godfatherism') destroy psychological safety (Edmondson, 1999), fostering employee silence and suppressing discretionary effort (OCBs). Institutional Red Tape Theory (Bozeman, 2000) and Structural Inertia Theory (Hannan & Freeman, 1984) account for how excessive approval sign-offs and archaic procedural rules reduce decision velocity and hinder e-governance modernization.

Organizational Constraints Theory (Spector & Jex, 1998) and Conservation of Resources (COR) Theory (Hobfoll, 2001) describe how chronic infrastructural failures—such as power grid collapses and ICT deficits—deplete employee cognitive and physical energy, forcing workers into reactive survival strategies. Finally, Social Exchange Theory (Blau, 1964) and Counterproductive Work Behavior frameworks (Spector et al., 2006) explain how perceived unfairness, tribal bias, and knowledge withholding erode internal trust, fostering organizational apathy and peer sabotage.

METHODOLOGY

This study adopted a multi-stage psychometric scale development and structural validation design (DeVellis & Thorpe, 2021; Worthington & Whittaker, 2006). The target population comprised full-time formal sector employees across the five states of Southeastern Nigeria (Abia, Anambra, Ebonyi, Enugu, and Imo). A multi-stage stratified random sampling technique was utilized to recruit N = 550 participants (Public Sector n = 265, 48.2%; Private Sector n = 285, 51.8%). The dataset was randomly split into two independent subsamples: Sample A (EFA Calibration Sample; n1 = 250) and Sample B (CFA Cross-Validation Sample; n2 = 300).

An initial pool of 20 candidate items was subjected to content validation by a panel of N = 6 Subject Matter Experts (SMEs). Items were evaluated on Relevance (1–4), Clarity (1–4), and Essentiality (1–3) to calculate Item-Level Content Validity Index (I-CVI), Modified Kappa (k*), and Content Validity Ratio (CVR; Lawshe, 1975; Polit et al., 2007). A pilot study (N = 40) confirmed feasibility and readability (mean completion time = 8.5 minutes, alpha = 0.88). Procedural remedies (anonymity assurances, section separation, counterbalancing) and statistical tests (Harman's single-factor test, Common Latent Factor) confirmed that Common Method Bias was minimal.

Statistical analysis proceeded in four phases: Phase I evaluated SME content validity; Phase II executed Exploratory Factor Analysis (EFA) on Sample A using Principal Axis Factoring with Promax Oblique rotation (guided by Horn's Parallel Analysis); Phase III conducted Confirmatory Factor Analysis (CFA) on Sample B using Maximum Likelihood estimation in R lavaan / AMOS; Phase IV performed Multigroup Measurement Invariance (MGCFA) across Public (n = 145) and Private (n = 155) sector cohorts in Sample B.

RESULTS

SME evaluation resulted in the retention of 18 candidate items (I-CVI >= 0.83, CVR >= 0.99, k* >= 0.74). Two items were eliminated due to low essentiality and relevance ratings. The overall scale achieved S-CVI/Ave = 0.93 and S-CVI/UA = 0.85, confirming excellent content validity (Table 1).

Table 1: Content Validity Index (CVI) and Content Validity Ratio (CVR) Summary (N = 6 SMEs)

Dimension / Items	Item Codes	I-CVI Range	k* Range	CVR Range	Decision
Toxic Leadership (5 items)	TAL1 – TAL5	0.83 – 1.00	0.81 – 1.00	0.67 – 1.00	Retained (1 revised)
Process Inertia (5 items)	BPI1, BPI2, BPI4, BPI5	0.83 – 1.00	0.81 – 1.00	1.00	4 Retained, 1 Dropped
Resource Bottlenecks (5 items)	IRB1 – IRB5	0.83 – 1.00	0.81 – 1.00	0.67 – 1.00	Retained (1 revised)
Cultural Friction (5 items)	ISCF1 – ISCF4	0.83 – 1.00	0.81 – 1.00	1.00	4 Retained, 1 Dropped

Note: N = 6 SMEs. Scale-level indices: S-CVI/Ave = 0.93, S-CVI/UA = 0.85.

Exploratory Factor Analysis on Sample A (n1 = 250) satisfied sampling adequacy (KMO = 0.87, Bartlett's chi-square = 1845.20, $p < 0.001$). Principal Axis Factoring with Promax Oblique rotation extracted 4 clean factors accounting for 63.85% of total cumulative variance (Table 2). All 18 retained items loaded heavily (>= 0.52) on their primary factors with no cross-loadings above 0.25.

Table 2: EFA Factor Extraction & Variance Summary (Sample A, n1 = 250)

Extracted Factor Dimension	Retained Items	Eigenvalue	% Variance	Cumulative %
Factor 1: Toxic Leadership (TAL)	5 items (TAL1–5)	5.42	30.11%	30.11%
Factor 2: Process Inertia (BPI)	4 items (BPI1,2,4,5)	2.85	15.83%	45.94%
Factor 3: Resource Bottlenecks (IRB)	5 items (IRB1–5)	1.82	10.11%	56.05%
Factor 4: Cultural Friction (ISCF)	4 items (ISCF1–4)	1.40	7.80%	63.85%

Note: Principal Axis Factoring with Promax Oblique Rotation (kappa = 4).

Confirmatory Factor Analysis on Sample B (n2 = 300) supported the First-Order Correlated 4-Factor Model over alternative unidimensional and hierarchical models (Table 3). High composite reliability (CR >= 0.84), convergent validity (AVE >= 0.57), and discriminant validity (HTMT < 0.85) were established across all four subscales.

Table 3: CFA Model Goodness-of-Fit Comparison (Sample B, n2 = 300)

Model Specification	CMIN/DF	CFI	TLI	RMSEA [90% CI]	SRMR
Model 1: Unidimensional (1-Factor)	6.26	0.680	0.640	0.133 [0.124, 0.142]	0.115
Model 2: First-Order Correlated 4-Factor	**1.65**	**0.965**	**0.958**	**0.046 [0.035, 0.057]**	**0.042**

Model 3: Second-Order Hierarchical	1.89	0.948	0.939	0.055 [0.045, 0.065]	0.051

Note: Model 2 represents the optimal baseline measurement model.

Multigroup CFA established full configural, metric, scalar, and strict measurement invariance across Public (n = 145) and Private (n = 155) sector workers (delta-CFI <= -0.005, delta-RMSEA <= +0.001). Latent mean comparisons demonstrated that public sector workers experienced significantly higher Process Inertia (d = 0.74, p < 0.001) and Resource Bottlenecks (d = 0.45, p < 0.001) than private sector workers, while Toxic Leadership and Cultural Friction showed no significant sectoral difference (Table 4).

Table 4: Sectoral Latent Mean Comparisons (Public vs. Private Workers)

OGIS Subscale Dimension	Public Sector (Ref)	Private Sector (Δμ)	SE	p-value	Cohen's d
Toxic Leadership (TAL)	0.00	-0.14	0.08	0.080 (ns)	0.18 (Small)
Process Inertia (BPI)	0.00	**-0.62**	0.09	**< 0.001**	**0.74 (Large)**
Resource Bottlenecks (IRB)	0.00	**-0.38**	0.08	**< 0.001**	**0.45 (Medium)**
Cultural Friction (ISCF)	0.00	-0.11	0.08	0.168 (ns)	0.14 (Small)

Note: Public Sector served as the reference group (mean = 0.00). Negative values indicate lower OGI perceptions in the private sector.

DISCUSSION

The empirical confirmation of an 18-item, 4-factor latent structure validates the integrative framework of OGIS. Rather than treating dark leadership, red tape, physical resource deficits, and relational friction in isolation, OGIS synthesizes these constructs into a multi-level operational framework specifically tailored to developing economic contexts. Toxic Leadership accounted for 30.11% of scale variance, confirming that authoritarian control, credit-stealing, and favoritism ('godfatherism') destroy psychological safety (Edmondson, 1999) and foster employee silence.

Process Inertia highlighted how administrative sign-offs and procedural rigidity reduce decision velocity and impede e-governance modernization. Infrastructural Resource Bottlenecks validated Organizational Constraints Theory (Spector & Jex, 1998) and Conservation of Resources Theory (Hobfoll, 2001) in an emerging economy, showing that chronic power grid collapses and digital tool deficits force employees into reactive coping rather than goal accomplishment. Interpersonal Sabotage & Cultural Friction confirmed that tribal bias and knowledge withholding trigger counterproductive workplace behaviors (Spector et al., 2006).

Establishing full multigroup measurement invariance proves that OGIS measures growth inhibitors with identical precision across public civil service and private commercial firms. Latent mean comparisons revealed significant public sector disadvantages in Process Inertia (d = 0.74) and Resource Bottlenecks (d = 0.45), while Toxic Leadership and Cultural Friction showed no sectoral differences, indicating that autocratic management and relational friction represent pervasive socio-cultural workplace dynamics across Southeastern Nigerian organizations.

6. CONCLUSION AND RECOMMENDATIONS

The 18-item Organizational Growth Inhibitors Scale (OGIS) is a psychometrically sound, culturally anchored, and cross-sectorally invariant diagnostic instrument. It provides researchers, public administrators, and HR strategists with a validated tool to quantify and dismantle internal growth bottlenecks in developing economies.

Based on the empirical findings, the following recommendations are proffered: (1) Public Sector Administrators should prioritize administrative de-bureaucratization, e-governance workflow automation, and stable secondary utility infrastructure; (2) Private Sector Executives should implement 360-degree leadership feedback, transparent performance meritocracy, and structured knowledge-sharing protocols to curb autocratic owner-manager behaviors and tribal favoritism; (3) Future Researchers should cross-validate OGIS across other West African regions and examine its predictive validity against objective firm performance metrics.

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